



Steven M. Huffaker, Director

DINGELL-JOHNSON ABSTRACTS

July 1, 2001 to June 30, 2002

F-71-R-26 Regional Fisheries Management Investigations

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Steven M. Huffaker, Director

**FEDERAL AID IN FISH RESTORATION
Job Performance Report**

REGIONAL FISHERIES MANAGEMENT INVESTIGATIONS

F-71-R-26

July 1, 2001 to June 30, 2002

Project	I. Surveys and Inventories
Project	II. Technical Guidance
Project	III. Habitat Management
Project	IV. Population Management
Project	V. Coordination

Prepared by:

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**IDAHO
DEPARTMENT OF FISH AND GAME**

Steve Huffaker, Director

**Federal Aid in Sport Fish Restoration
2001 Annual Performance Report
Program F-71-R-26**

**REGIONAL FISHERIES MANAGEMENT INVESTIGATIONS
Panhandle Region (Subprojects I-A, II-A, III-A)**

PROJECT I.	SURVEYS AND INVENTORIES
Job a.	Mountain Lake Investigations
Job b.	Lowland Lakes Investigations
Job c.	Rivers and Streams Investigations
PROJECT II.	TECHNICAL GUIDANCE
PROJECT III.	HABITAT MANAGEMENT

By

**Ned Horner, Regional Fisheries Manager
Joe DuPont, Regional Fisheries Biologist
Mark D. Liter, Regional Fisheries Biologist**

2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project: I-Surveys and Inventories Subproject: I-A Panhandle Region
Job No.: a Title: Mountain Lakes Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

There were no mountain lake survey related activities in the Panhandle Region during this contract period.

Author:

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-A Panhandle Region
Job No.: b Title: Lowland Lake Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

A midwater trawl was used to estimate the kokanee *Oncorhynchus nerka* population in Coeur d'Alene Lake in July. Trawl results indicated record low numbers of adult kokanee, with the total population of age-3 fish estimated at 25,300, or 3 fish/ha. We estimated 929,000 age-1 and 193,000 age-2 kokanee. The estimated population of age-0 kokanee was slightly over 7 million fish. The standing stock of kokanee was 3.86 kg/ha, compared to the 2000 estimate of 5.8 kg/ha. Kokanee fry collected in the trawl ranged from 30 to 70 mm TL, age-1 kokanee ranged from 80 to 160 mm, age-2 fish ranged from 170 to 220 mm, and age-3 kokanee ranged from 250 to 290 mm. Hydroacoustic surveys confirm that the trawler underestimates the older age-classes of kokanee, but is accurate for age-0.

We counted 38 chinook salmon *O. tshawytscha* redds in the Coeur d'Alene River drainage and 36 in the St. Joe River. We estimated an additional four chinook salmon redds in Wolf Lodge Creek, based on fish captured and passed above the weir. All redds were left undisturbed to provide natural production. Due to lack of availability, no age-0 chinook salmon were stocked in Coeur d'Alene Lake in 2001.

An additional 195 lake trout *Salvelinus namaycush* were tagged by the Priest Lake volunteer angler. Fish ranged from 310 to 990 mm (TL), with a mean size of 440 mm. All of these fish were tagged near Bartoo Island. A total of 40-tagged lake trout were recaptured in 2001. All had been tagged in Priest Lake between 1986 and 2001. Lake trout were caught from 0 to 22.5 km from their original capture site, with an average distance from original capture of approximately 3 km. Growth, as reported in tag returns, ranged from 0 to 15 cm/year, with an average annual growth of 3.4 cm/year.

We used gill nets to capture lake trout from Upper Priest Lake in June, August and October. We netted and removed a total of 471 lake trout in the three netting efforts. Catches ranged from 78 lake trout in our June effort to 231 fish in October. Standardized catch ranged from 0.83 to 2.2 fish/hr/100m², with no apparent trend or evidence of depletion. Mean catch rate throughout the 2001 effort was 1.8 fish/hr/100m², compared to 0.95 fish/hr/100m² in 1999 and 1.1 fish/hr/100m² in 1998. Size of lake trout ranged from 265 to 930 mm (TL), with a modal size of 510 mm. We incidentally netted seven bull trout *S. confluentus* during the lake trout netting efforts and no known bull trout mortality occurred. The ratio of lake trout to bull trout was 67:1, compared to 21:1 in 1999 and 10:1 in 1997.

We conducted kokanee spawner counts along the shoreline of Priest and Upper Priest Lakes in November. A total of 1,765 kokanee spawners were counted in Priest Lake at five

locations. Ten kokanee redds were observed along the shoreline of Upper Priest Lake. The number of redds observed at each of the five sites on Priest Lake were as follows; Copper Bay 588, Huckleberry Bay 200, Cavaunaugh Bay 523, Hunt Creek beach 232, and Indian Creek beach 222.

We tagged 95 black crappie *Pomoxis nigromaculatus* in Hayden Lake with reward tags to estimate annual black crappie exploitation in 2001. A total of 22 of these tags were returned within one year of initial capture for an uncorrected annual exploitation rate of 23 percent.

We conducted standard lake surveys on Freeman and Blue lakes using procedures outlined in the Standard Lowland Lakes Survey Manual. Largemouth bass *Micropterus salmoides* were the most abundant species in the sample based on number, and were the most abundant game species based on sample weight in both lakes. Game species comprised 100% of the sample in the Blue Lake survey with the catch consisting of largemouth bass, yellow perch *Perca flavescens*, black crappie, pumpkinseed *Lepomis gibbosus*, tiger muskie *Esox lucius x E. masquinongy* and channel catfish *Ictalurus punctatus*. In Freeman Lake, game species comprised 92% of the sample based on number and 38% of the sample based on weight. Tench *Tinca tinca* were the only non-game species collected comprising 8% of the catch by number and 45% of the catch by weight.

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-A Panhandle Region
Job No.: c-1 Title: Rivers and Streams Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

In July 2001, a total of 65 transects in the St. Joe and Coeur d'Alene rivers were snorkeled to estimate trout and whitefish abundance and approximate size distribution. Mean densities of age-1 and older cutthroat trout *Oncorhynchus clarki* and mountain whitefish *Prosopium williamsoni* in the St. Joe River transects were 0.80 and 0.92 fish/100 m², respectively. Densities in the North Fork Coeur d'Alene River were 0.73 cutthroat trout and 3.26-mountain whitefish/100 m². Densities in the Little North Fork Coeur d'Alene River were 0.25 cutthroat trout and 0.03 mountain whitefish/100 m². Both rivers show increasing trends in abundance of cutthroat trout and mountain whitefish following the declines observed after the 1996 flood event.

We used a backpack electrofisher to sample five tributaries on the east side of Priest River/Lake to evaluate the status of the bull trout *Salvelinus confluentus* population. Findings indicate that bull trout abundance and distribution is declining in the Middle Fork East River and Indian Creek. High densities of bull trout (10.4 fish/100 m²) still remain in Uleda Creek, a tributary of the Middle Fork East River. Adult bull trout up to 700 mm in length were sampled from Uleda Creek indicating they have a fluvial or adfluvial life cycle.

We conducted bull trout redd counts in tributaries of Priest River, Pend Oreille Lake, St. Joe River, and Little North Fork of the Clearwater River in September and October to add to the long-term trend data set. We counted 41 redds in the upper Priest Lake drainage, 699 bull trout redds in the Pend Oreille drainage, 40 redds in the St. Joe River drainage, and 18 redds in the Little North Fork of the Clearwater River drainage. Region 2 also conducted bull trout redd counts in the Little North Fork Clearwater River, although at different locations, and counted 39 redds. Improving trends in bull trout redd abundance was not apparent for any of the basins evaluated in 2001. The number of redds counted in the Priest, Pend Oreille, and Little North Fork of the Clearwater drainages were above the index stream means, whereas counts in the St. Joe River drainage were about average.

Butte, Canyon, Foehl and Sawtooth creeks, tributaries of the Little North Fork Clearwater River, were surveyed to assess the distribution of fishes and other fauna and habitat attributes that may influence their distribution. A total of 1 bull trout, 118 westslope cutthroat trout *O. clarki lewisi*, 34 rainbow trout *O. mykiss*, 6 rainbow/cutthroat trout hybrids, 564 sculpins *Cottus sp.*, 167 tailed frog juveniles *Ascaphus truei*, and 17 Idaho giant salamander *Dicamptodon aterrimus* were sampled during this study. Based on these findings it did not appear bull trout populations resided in Butte, Canyon, Foehl or Sawtooth creeks. However, in an ongoing telemetry study,

bull trout were found to ascend and spawn in Butte and Canyon creeks. Poor electrofishing efficiency due to low conductivity and deep swift water probably account for the inability to detect bull trout in these streams. Low densities of salmonids were sampled in all streams except Butte Creek. Low densities appear to be a factor of unproductive waters and poor sampling efficiency.

Cutthroat trout were found to be strongly associated with cold, small streams that had high amounts of large woody debris (LWD), whereas rainbow trout selected larger stream reaches with less LWD, closer to the main river. This niche separation helps explain why westslope cutthroat trout and rainbow trout have been able to coexist for thousands of years with minimal hybridization. The habitat attributes associated with cutthroat trout make them susceptible to land management activities such as logging and road building that often takes place in the upper portions of watersheds.

Authors:

Joe DuPont
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Ned Horner
Regional Fisheries Manager

2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-A Panhandle Region
Job No.: c-2 Title: Rivers and Streams Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Genetic analysis was completed on 55 westslope cutthroat trout *Oncorhynchus clarki lewisi* samples from the St. Joe River and 36 westslope cutthroat trout samples from the Upper Priest Lake. In addition, genetic analysis was completed on 136 bull trout *Salvelinus confluentus* samples collected from the St. Joe River and nine locations in the Upper Priest Lake basin.

Of the 55 cutthroat trout samples analyzed from the St. Joe River, all exhibited both mtDNA and nDNA banding patterns of westslope cutthroat trout. No introgressive hybridization with rainbow trout *O. mykiss* or Yellowstone cutthroat trout *O. clarki bouvieri* was observed. Of the 36 samples from Upper Priest Lake, all exhibited banding patterns indicative of westslope cutthroat trout except one. We believe this sampled was mislabeled, as it appeared to be from some fish other than a westslope cutthroat trout.

Of the 136 bull trout samples analyzed from the St. Joe River and Upper Priest Lake basin, all 136 exhibited both mtDNA and nDNA banding patterns of bull trout. No introgressive hybridization with brook trout *S. fontinalis* was observed.

Bull trout from the St. Joe River and Priest River drainage did show significant differences in the frequencies of their mitochondrial haplotypes between locations, but did not show significant differences at the single nuclear locus examined. Significant allele frequency differences at the HSC 71 locus were not observed among bull trout populations within the Upper Priest Lake basin itself. Larger sample sizes are required before a determination of their genetic distinctiveness or lack thereof can be made with statistical power.

Authors:

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project II: Technical Guidance Subproject: II-A Panhandle Region
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Panhandle Region fisheries management personnel provided private individuals, organizations, public schools, and state and federal agencies with technical review and advice on various projects and activities that affect the fishery resources in northern Idaho. Technical guidance also included numerous angler informational meetings, presentations, and letters, continuation of the Panhandle Region portion of the Idaho Fish and Game 1-800-ASKFISH and website fishing report program, and fishing clinics.

Author:

Ned Horner
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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26

Project III: Habitat Management Subproject: III-A Panhandle Region

Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Fish passage through culverts was evaluated in select watersheds in the Pend Oreille Lake and St. Joe River basins based on information volunteers collected during 1996 and 1997. This data wasn't analyzed until this report period. Twenty culverts were evaluated for fish passage that occurred in fish bearing streams and 17 (85%) of them were considered to violate at least one of the fish passage criteria specified in the Stream Channel Alteration Rules. Fourteen of these culverts occurred in the Pend Oreille Lake basin and three occurred in the St. Joe River basin. Seven other culverts were identified in fish bearing streams, but not enough data was collected to determine if fish passage was a problem.

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DEPARTMENT OF FISH AND GAME**

Steve Huffaker, Director

**Federal Aid in Sport Fish Restoration
2001 Annual Performance Report
Program F-71-R-26**

**REGIONAL FISHERIES MANAGEMENT INVESTIGATIONS
Clearwater Region (Subprojects I-B, II-B, III-B)**

PROJECT I.	SURVEYS AND INVENTORIES
Job a.	Mountain Lake Investigations
Job b.	Lowland Lakes Investigations
Job c.	Rivers and Streams Investigations
PROJECT II.	TECHNICAL GUIDANCE
PROJECT III.	HABITAT MANAGEMENT

By

**Ed Schriever, Regional Fishery Manager
Tim Cochnauer, Regional Fishery Manager
Jody Brostrom, Regional Fishery Biologist
Larry Barrett, Senior Fishery Technician
Patrick Murphy, Fisheries Biologist
Chris Tweedy, Senior Fisheries Technician
Justin Peterson, Fisheries Technician**

2001 ANNUAL JOB PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subject: I-B Clearwater Region
Job: a Title: Mountain Lake Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Eleven mountain lakes were surveyed in the Nez Perce National Forest during July-August 2001. None of the lakes surveyed in 2001 are recommended for stocking with hatchery-reared trout.

Author:

Tim Cochnauer
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2001 ANNUAL JOB PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-B Clearwater Region
Job: b Title: Lowland Lakes Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Clearwater Region fisheries management personnel and conservation officers checked 172 anglers that spent 270 hours fishing lakes, ponds and reservoirs and caught 399 game fish.

Clearwater Region fisheries management personnel used standard lake surveys to sample Elk Creek Reservoir, Mann Lake, Moose Creek Reservoir, Spring Valley Reservoir, Waha Lake, and Winchester Lake. Brook trout *Salvelinus fontinalis* (24.1%), black crappie *Pomoxis nigromaculatus* (50.8%), and yellow perch *Perca flavescens* (32%) were the most abundant species in Elk Creek Reservoir, Mann Lake, and Waha Lake, respectively. Largemouth bass *Micropterus salmoides* was the most abundant species in Moose Creek Reservoir (57.5%), Spring Valley Reservoir (26%), and Winchester Lake (71.1%).

Author:

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2001 ANNUAL JOB PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-B Clearwater Region
Job: c-1 Title: Rivers and Streams Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Clearwater Region fishery management personnel snorkeled or coordinated data collection for 221 streams transects within the Clearwater, Salmon and Snake river drainages to obtain data for the long-term database. One hundred seventy-seven adult chinook salmon *Oncorhynchus tshawytscha* redds were counted in traditional aerial spawning ground counts in the Selway River. Only ground counts were conducted on the Lochsa River and the South Fork of the Clearwater River. Eighty-seven adult chinook salmon redds were counted in the Lochsa River, and 458 were counted on the South Fork of the Clearwater River.

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2001 ANNUAL JOB PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-B Clearwater Region
Job: c-2 Title: Rivers and Streams Investigations-
Native Fish Enhancement

Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Clearwater Region personnel conducted fisheries surveys on three stream sites as part of a cooperative native fish enhancement project with Potlatch Corporation. Multiple-pass electrofishing was conducted on the three different streams to investigate the effectiveness of electrofishing to improve westslope cutthroat trout *Oncorhynchus clarki lewisi* abundance through the removal of introduced brook trout *Salvelinus fontinalis*.

The second year suppression of brook trout was conducted in the headwaters of the WF St. Maries River, and Keeler Creek. We sampled 14 transects, using a one-pass electrofishing removal methodology, for a total of 1,361m of stream surveyed. Altogether, 181 westslope cutthroat trout and 40 brook trout were sampled.

The first year suppression of brook trout was conducted on Flewsie Creek, a tributary of the MF St. Maries River. We sampled 112 transects, using multi-pass electrofishing removal methodology, for a total of 11,200 m of stream surveyed. Altogether, 7,646 brook trout and 429 westslope cutthroat trout were sampled.

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project II: Technical Guidance Subproject: II-B Clearwater Region
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Clearwater Region fishery management personnel provided technical review and advice to private individuals, organizations, state and federal agencies, Indian tribes, and public schools on various projects and activities that affect the fishery resources in north central Idaho. Technical guidance also included numerous angler informational meetings, presentations, and letters.

Author:

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26

Project III: Habitat Management Subproject: III-B Clearwater Region

Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

We developed a plan and funding proposal to install a hypolimnetic aeration system in Winchester Lake. This project has been funded as part of the State of Idaho's Total Maximum Daily Load (TMDL) implementation plan for Winchester Lake. The project will reduce the recycling rate of internal phosphorous and increase dissolved oxygen levels necessary for supporting game fish populations.

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Steve Huffaker, Director

**Federal Aid in Sport Fish Restoration
2001 Annual Performance Report
Program F-71-R-26**

**REGIONAL FISHERIES MANAGEMENT INVESTIGATIONS
Southwest Region—McCall (Subprojects I-C, II-C, III-C)**

PROJECT I.	SURVEYS AND INVENTORIES
Job a.	Mountain Lake Investigations
Job b.	Lowland Lakes Investigations
Job c.	Rivers and Streams Investigations
PROJECT II.	TECHNICAL GUIDANCE
PROJECT III.	HABITAT MANAGEMENT

By

**Dale Allen, Regional Fishery Manager
Paul Janssen, Regional Fishery Biologist
Kimberly A. Anderson, Regional Fishery Biologist
Lauri Hostettler, Fishery Technician
David Teuscher, Regional Fishery Biologist**

2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-C Southwest Region—McCall
Job: a Title: Mountain Lakes Investigation
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

We completed Department standard mountain lake surveys on four lakes in 2001 to assess physical habitat parameters and stocking strategies. We collected only rainbow trout *Oncorhynchus mykiss* from upper and lower Hornet Creek reservoirs (08-103 and 08-104), only westslope cutthroat trout *O. clarki lewisi* from Kimberly Lake #1 (07-243), and westslope cutthroat trout and brook trout *Salvelinus fontinalis* from Kimberly Lake #2 (07-244).

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-C Southwest Region—McCall
Job: b-1 Title: Lowland Lakes Investigations
Contract Period : July 1, 2001 to June 1, 2002

ABSTRACT

We completed holiday shore angler and boat counts on Cascade Reservoir recording the lowest counts made since early 1980s.

Lost Valley and Brundage reservoirs and Little Payette Lake were gillnetted to examine species composition.

We repeated the lake trout *Salvelinus namaycush* population structure work completed in 1994 and 1995 on Payette Lake to evaluate the current regulation of one lake trout over 914.4 mm per day. We sampled fish with short-term gill net sets. Results indicated most lake trout were being harvested soon after reaching the minimum size limit of 914.4 mm. We also found some natural recruitment of lake trout that was not observed in 1994 and 1995. However, natural recruitment appeared to be insufficient to maintain present catch and harvest rates of trophy lake trout. Current catch and harvest rates of trophy fish likely could be maintained for approximately seven years without implementing a regulation change.

We used both empirical data and the Fish Bioenergetics 3.0 model to evaluate the impacts of lake trout stocking on the kokanee *Oncorhynchus nerka* population in Payette Lake. Both methods suggested that lake trout stocking had minimal effects on the kokanee population.

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-C Southwest Region—McCall
Job: b-2 Title: Lowland Lakes Investigations:
Contract Period: July 1, 2001 to June 1, 2002

ABSTRACT

A picket weir trap was constructed on the North Fork Payette River and Lake Fork Creek to intercept northern pikeminnow *Ptychocheilus oregonensis* in the spring of 2001. The trapping efforts were focused on reducing predation on yellow perch *Perca flavescens*. We collected an estimated 14,208 northern pikeminnow and 33,988 adult spawning largescale sucker *Catostomus macrocheilus* using a picket weir and V-entrance trap. Low stream flows and warm water temperatures in 2001 prevented large runs of spawning northern pikeminnow up the tributaries.

We continued yellow perch population monitoring in Cascade Reservoir. The sampling indicated that the population continues to be depressed. We could not document any changes in yellow perch survival. Yellow perch continued to disappear by August of their second year.

Authors:

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management
Project I: Surveys and Inventories Subproject: I-C Southwest Region—McCall
Job: c Title: Rivers and Streams Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

The 2001 kokanee *Oncorhynchus nerka* spawning run in the North Fork Payette River above Payette Lake was estimated to be 30,144 fish with a total biomass of 7,551 kg.

We completed standard Idaho Department of Fish and Game stream surveys on seven streams, five in the Weiser River drainage and two in the Big Creek drainage (Salmon River). Specifically we surveyed Beaver Creek, Brush Creek, Dewey Creek, East Fork Weiser River and East Fork Pine Creek in the Weiser River drainage and Cabin Creek and Rush Creek in the Big Creek drainage. We found salmonids in all streams surveyed. Bull trout *Salvelinus confluentus* were collected from Dewey Creek and the upper section of the East Fork Weiser River.

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project II: Technical Guidance Subproject: II-C Southwest Region—McCall
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

McCall Subregion fishery management personnel responded to requests and opportunities for technical input. Comments were provided to state and federal agencies on proposed activities for which they have regulatory authority. Advice and technical assistance were provided to private businesses and the public on activities associated with fish or having impacts on fish populations or fish habitat. The major topics of involvement included stream channel alterations, Idaho Outfitters and Guides licensing, private pond permits, and land management planning. We provided data and technical advice to an increased number of fisheries consultants.

Regional fishery personnel continued participation on a technical advisory committee (TAC) for the Big Payette Lake Water Quality Council and the Cascade Reservoir TAC. We have begun working with the Weiser River Watershed Advisory Group on the TMDL process for the Weiser River.

Fishery staff devoted several man-months to the drafting of the Salmon and Boise-Payette-Weiser Sub Basin Summaries for the Northwest Power Planning Council. Staff developed two funding proposals in the Salmon Sub Basin and one in the Boise-Payette-Weiser Sub basin.

WestRock Resort is proposed for the west side of Cascade Reservoir and could potentially have large fish and wildlife impacts in Valley County. We provided technical review on several components of the proposal.

We also gave numerous presentations to schools, sporting groups, and civic organizations. We answered many questions from the angling public on fishing opportunities, regulations, techniques, and specific waters. We maintained fishing reports for the Department Internet Homepage.

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project III: Habitat Management Subproject: III-C Southwest Region—McCall
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

McCall area fishery personnel participated in restoration, maintenance, and enhancement of fish habitat and water quality studies. This participation included membership on several technical advisory committees for state and federal planning efforts. Many proposed land management activities required Department review to assure fish habitat consideration. Other natural resource agencies requested contributions to planning documents regarding fishery resources and habitat.

The development of community fishing ponds increases fish habitat, angler opportunity, and overall participation in the sport. The Department continued development of fishing ponds in the communities of Council and Cascade. Both ponds were constructed within city parks and have strong community support. Landscaping and final construction cleanup was completed spring 2001 in Cascade at Fischer Pond. In Council, the constructed pond had a water seepage problem. Construction of a bentonite-lined trench downstream of the seep will hopefully remedy the problem. No final landscape work was accomplished at Council because of lack of funds.

Work continued on riparian and instream habitat improvement projects on private lands within the Little Salmon River drainage. McCall fishery personnel cooperated with USFWS, NRCS, and BLM to administer one Wetland Restoration Project that will recover 250 acres of wetland and five miles of stream. Department volunteers and reservists joined with landowners, students from New Meadows and Boise high schools, and the local Trout Unlimited chapter to revegetate the streambanks on three separate ranches, for a total contribution of 567 volunteer hours.

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**Federal Aid in Sport Fish Restoration
2001 Annual Performance Report
Program F-71-R-26**

**REGIONAL FISHERIES MANAGEMENT INVESTIGATIONS
Southwest Region—Nampa (Subprojects I-D, II-D, III-D)**

PROJECT I.	SURVEYS AND INVENTORIES
Job a.	Mountain Lake Investigations
Job b.	Lowland Lakes Investigations
Job c.	Rivers and Streams Investigations
PROJECT II.	TECHNICAL GUIDANCE
PROJECT III.	HABITAT MANAGEMENT

By

**Brian J. Flatter, Regional Fishery Biologist
Kurtis Plaster, Senior Fishery Technician
Jeff C. Dillon, Regional Fishery Manager**

2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-D Southwest Region—Nampa
Job No.: a Title: Mountain Lakes Investigation
Period Covered: July 1, 2001 to June 30, 2002

ABSTRACT

No mountain lake sampling was conducted in the Southwest Region in 2001.

Author:

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Regional Fishery Manager

2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-D Southwest Region—Nampa
Job No.: b Title: Lowland Lakes Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Crane Creek Reservoir was sampled with a multiple gear lowland lake sampling strategy, which included experimental gill nets and trap nets. White crappie *Pomoxis annularis*, brown bullhead *Ameiurus nebulosus*, and channel catfish *Ictalurus punctatus* were the only game fish captured. Non-game species captured were common carp *Cyprinus carpio* and bridgelip sucker *Catostomus columbianus*, which represented 6% of the total catch. White crappie made up 79% of the total catch. The mean length, catch-per-unit-effort (CPUE), and mean condition factor for white crappie was very similar to previous surveys.

Deadwood Reservoir and Sage Hen Reservoir were sampled with gill nets only. Twenty-nine fish were collected in Deadwood Reservoir in July. Game fish caught included westslope cutthroat trout *Oncorhynchus clarki lewisi*, mountain whitefish *Prosopium williamsoni*, and redband trout *O. mykiss*. No kokanee *O. nerka* were collected. Gillnetting in Deadwood Reservoir typically occurs in the fall, therefore few comparisons can be made to previous data. Sampling was moved to July in an attempt to better monitor kokanee populations. In Sage Hen Reservoir, 148 fish were collected. Captured game fish included 65 hatchery rainbow trout *O. mykiss* and 83 wild rainbow (redband) trout. Total catch, and catch composition in 2001 were similar to that found in 1994.

Two pairs of gill nets were set overnight at Claytonia Pond in June 2001 to monitor game fish and to document the presence or absence of common carp. No common carp were observed or collected.

Electrofishing was used to sample Crane Falls Lake, Horseshoe Bend Mill Pond, Indian Creek Reservoir, and West Sawyer's Pond. In Crane Falls, the mean length of largemouth bass *Micropterus salmoides* was similar to previous years, but CPUE by number was 56% lower than recorded in 1998 and the lowest recorded since 1994. The mean length of bluegill *Lepomis macrochirus* was slightly larger than previous samples but the CPUE by number was less than 40% of sampling in 1998.

Horseshoe Bend Mill pond was sampled with electrofishing gear to evaluate the fishery following pond reconstruction and stocking in 2000. Twenty-one largemouth bass and 13 bluegill were collected. Several hundred YOY bluegill and largemouth bass were observed.

Largemouth bass and bluegill populations in Indian Creek Reservoir continued to improve from 1996 to early 2001, but the reservoir received virtually no runoff in 2001. With the

reservoir expected to go dry, regional crews electrofished and removed 2,229 largemouth bass and 2,786 bluegill in April 2001. Mean length of largemouth bass was 300 mm, 7% larger than recorded in 1999. The CPUE for largemouth was down 51% from 1999. With fewer largemouth bass present, recruitment of bluegill appeared to improve. The mean length of bluegill (160 mm) was very similar to previous years, but bluegill <150 mm were present in higher densities than observed in previous samples. On June 15, 2001 the reservoir was opened to salvage fishing. Only a small pool remained by fall.

In 1999, West Sawyer's Pond was donated to the Department from a private landowner. Electrofishing conducted in May 2001 indicated that the pond contained bluegill, largemouth bass, pumpkinseed *Lepomis gibbosus*, and brown bullhead. Largemouth bass and bluegill up to 468 mm and 192 mm, respectively, were collected.

A creel survey was conducted at C.J. Strike Reservoir to evaluate angler effort and hatchery rainbow trout harvest during April, May, and June 2001. There were 393 anglers interviewed. Estimated effort for bank anglers was 12,394 hours, and 17,903 hours for boat anglers. The overall hatchery rainbow trout catch rate was 0.03 fish/hr, but this included anglers targeting species other than trout.

Zooplankton samples were taken from Arrowrock, Lucky Peak, and C.J. Strike reservoirs in 2001. A slight increase in the zooplankton quality index (ZQI - a measure that includes zooplankton abundance and size) was observed in Arrowrock Reservoir from 2000 to 2001. A small decrease was observed in the calculated ZQI for Lucky Peak Reservoir. The C.J. Strike ZQI results were considerably higher at all sample sites than in 2000.

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-D Southwest Region—Nampa
Job No.: c Title: Rivers and Streams Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Big Willow and Squaw creeks were electrofished in June 2001 to conduct population estimates for redband trout *Oncorhynchus mykiss*. A total of three sections were electrofished in Big Willow Creek, and a total of six sections were electrofished in the Squaw Creek drainage. Densities of redband trout ranged from 0 to 18 fish/100 m² in Big Willow Creek, and from 0 to 5 fish/100 m² in Squaw Creek. One bull trout *Salvelinus confluentus* was sampled in Squaw Creek.

Seven sites in the Mann Creek drainage were electrofished in July 2001. One site was electrofished in the Keithly Creek drainage. Redband trout were found in all sites. No bull trout were sampled. Densities of redband trout ranged from 11 to 34 fish/100 m² in Mann Creek and 12 fish/100 m² in Keithly Creek.

Snorkeling was conducted in five locations of the North Fork Boise River (NFBR) in July 2001. Two locations were repeats of sites done in 1988 and 1996, three sites were new in 2001. Data from the NFBR was compared against data sets collected prior to and following major landslide events that occurred in early September 1995. Wild redband trout densities were greater than those observed in 1988 and 1996.

A creel census was conducted on the South Fork Boise River (SFBR) between Anderson Ranch Dam and Danskin Bridge (a distance of 19.9 km). The census began in May 2001 and continued through March 31, 2002. A total of 371 anglers were contacted (301 bank anglers and 70 boat anglers). Angler effort and catch was estimated at 29,996 hours and 14,593 fish, respectively. Total effort increased 66% since a similar 1988 survey.

A fish trap was operated in the Kirby Dam fish ladder in August to document bull trout migration patterns. A total of 17 fish were collected, including 12 juvenile bull trout.

Deadwood River upstream of Deadwood Reservoir was surveyed for fall chinook salmon *Oncorhynchus tshawytscha* redds in October. Five complete and one possible redds were counted, and one live fish was observed. No carcasses were encountered. Fewer redds and live fish were observed in 2001 than in previous years.

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project II: Technical Guidance Subproject: II-D Southwest Region—Nampa
Period Covered: July 1, 2001 to June 30, 2002

ABSTRACT

Regional fishery personnel continue to respond to a large number of public requests for fishing and other more technical information. We worked closely with the Environmental Staff biologist to provide information and comments on a wide variety of projects in the Southwest Region. These include habitat alterations and enhancements, road projects, urban development, and hydropower relicensing. Fishery staff participated in local watershed advisory groups, the white sturgeon *Acipenser transmontanus* technical committee, and the southwest Idaho bull trout *Salvelinus confluentus* recovery team. We worked with local governments on a number of fish pond development and permit issues. We provided review and technical comments on Bureau Of Reclamation (BOR) bull trout mitigation efforts related to the Arrowrock Dam valve replacement project.

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26

Project III: Habitat Management Subproject: III-D Southwest Region—Nampa

Period Covered: July 1, 2001 to June 30, 2002

ABSTRACT

In the spring of 2001, 70 plastic habitat structures were placed in the Caldwell Rotary Pond. In addition, approximately 350 apple treetops were placed in the general vicinity of the plastic habitat.

Apple treetops and Christmas trees were placed in Redtop Pond in February and March of 2001. On December 19, 50 live cottonwood tree cuttings were planted at Redtop Pond. The pond supports largemouth bass *Micropterus salmoides*, bluegill *Lepomis macrochirus*, channel catfish *Ictalurus punctatus*, and brown bullhead *Ameiurus nebulosus*.

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**IDAHO
DEPARTMENT OF FISH AND GAME**

Steve Huffaker, Director

**Federal Aid in Sport Fish Restoration
2001 Annual Performance Report
Program F-71-R-26**

**REGIONAL FISHERIES MANAGEMENT INVESTIGATIONS
Magic Valley Region (Subprojects I-E, II-E, III-E)**

PROJECT I.	SURVEYS AND INVENTORIES
Job a.	Mountain Lake Investigations
Job b.	Lowland Lakes Investigations
Job c.	Rivers and Streams Investigations
PROJECT II.	TECHNICAL GUIDANCE
PROJECT III.	HABITAT MANAGEMENT

By

**Douglas J. Megargle, Regional Fishery Manager
Charles D. Warren, Regional Fishery Biologist
Karen A. Frank, Fisheries Technician**

2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-E Magic Valley Region
Job: a Title: Mountain Lakes Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Mountain lakes were not surveyed in the Magic Valley Region during 2001.

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-E Magic Valley Region
Job: b Title: Lowland Lakes Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Kokanee *Onchorhynchus nerka* in Anderson Ranch Reservoir were monitored with nighttime midwater trawl samples and spawning run trend counts. Total population estimates of kokanee for the entire reservoir were 33,702 ± 23,245 age-0+ fish, 64,570 ± 61,034 age-1+ fish, and 28,736 ± 18,606 age-2+ fish. Low reservoir water levels and poor water quality are believed to be the cause of a partial fish kill in the reservoir and restricted kokanee access into the South Fork Boise River resulting in a count of only eight adult kokanee during the trend monitoring survey of spawning fish.

An experimental common carp *Cyprinus carpio* rotenone project was completed in Bruneau Sand Dunes State Park. The large south pond within the park was shocked to determine pre-treatment common carp numbers. Other fish species captured included bluegill *Lepomis macrochirus*, largemouth bass *Micropterus salmoides*, and pumpkinseed *L. gibbosus*. Common carp were fed non-toxic feed for 10 days prior to the treatment. Rotenone-laced fish feed was then dispersed into the four feeding enclosures. Only one common carp was killed.

A lowland lake survey was completed on Carey Lake. The sampling effort included four sinking gill nets, two trap nets and 40 minutes of nighttime electrofishing. Results indicate numerous bluegill, largemouth bass, brown bullhead *Ameiurus nebulosus*, and yellow perch *Perca flavescens*. Small numbers of pumpkinseed and rainbow trout *O. mykiss* were also sampled. No previously stocked channel catfish *Ictalurus punctatus* were found.

Brown trout *Salmo trutta* redds were counted as part of an annual survey on the Big Wood River to document trends in the Magic Reservoir population. Within the standard transect, a total of 111 redds were counted, which is below the 15 year average count of 157 redds.

Three nighttime gill nets were set at Mormon Reservoir during the spring to evaluate rainbow trout carryover. A total of 152 rainbow trout, 5 bridgelip sucker *Catostomus columbianus* and 21 yellow perch were sampled. Carryover was documented.

Daytime temperature and dissolved oxygen profiles were measured at Lower Salmon Falls Reservoir, Upper Salmon Falls Reservoir, Anderson Ranch Reservoir, Oakley Reservoir, Carey Lake and Roseworth Reservoir. Water temperatures reached or exceeded 20°C in the epilimnion when the dissolved oxygen levels dropped to less than 5 mg/l in the thermocline at Anderson Ranch Reservoir and Magic Reservoir.

Salmon Falls Creek Reservoir was sampled with three units of lowland lakes sampling protocols in August. Approximately 76% of the total biomass of fish sampled was largescale sucker *C. macrocheilus*, 16% was smallmouth bass *M. dolomieu* and walleye *Stizostedion vitreum* combined.

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-E Magic Valley Region
Job: c Title: Rivers and Streams Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

A white sturgeon *Acipenser transmontanus* population estimate was completed in the Snake River from Upper Salmon Falls Dam to Shoshone Falls. The Department assisted Idaho Power Corporation (IPC) in this effort. A total of 251 sturgeon, including 27 recaptures, were captured using gill nets, setlines, and angling. Data were compiled, analyzed, and reported by IPC.

Fish population data was collected on Billingsley Creek to provide baseline data prior to the areas inclusion into Idaho Department of Parks and Recreation management. Fish were sampled by electrofishing at three sites to generate salmonid population estimates and species composition summaries. Habitat data were collected in two of three sites.

A population estimate was completed in Stalker Creek and Silver Creek within the Nature Conservancy's Silver Creek Preserve as part of a future monitoring program. In Stalker Creek, game fish captured – in order of prevalence – included brown trout *Salmo trutta*, rainbow trout *Oncorhynchus mykiss*, brook trout *Salvelinus fontinalis*, and mountain whitefish *Prosopium williamsoni*. Brown trout density was estimated at 2,116 fish/km, 91 fish/km, and 159 fish/km for size classes 100-200 mm, 201-350 mm, and >350 mm, respectively. Rainbow trout density was estimated at 1,060 and 41 fish/km for size classes 100-250 mm and >250 mm, respectively. Trout numbers were slightly lower than estimates from the same transect in 1995. In Silver Creek, rainbow trout were the most prevalent sport fish sampled followed by brown trout and brook trout. Rainbow trout densities were 6,312 and 128 for 100-250 mm and >250 mm size classes. Brown trout density was estimated at 2,668, 16, and 62 fish/km for size classes 100-200 mm, 201-350 mm, and >350 mm, respectively.

The Little Wood River was sampled by electrofishing at nine locations between Richfield and Preacher Bridge to determine the success of stocked fingerling rainbow trout (triploid). In 2000, all stocked fish were marked with either adipose fin clips or green grit-dye. Forty-nine trout were sampled including six that were marked (12%).

The Snake River at King Hill was sampled by electrofishing for the annual North American Water Quality Assessment program with the United States Geological Survey. A total of 151 fish were sampled. Species sampled included nine nongame fish species, mountain whitefish, and smallmouth bass *Micropterus dolomieu*. Common carp *Cyprinus carpio* and largescale sucker *Catostomus macrocheilus* dominated the biomass (95%).

A temporary weir was installed in October near the mouth of the South Fork Boise River to trap and radio tag migrating bull trout *Salvelinus confluentus* as part of a reservoir entrainment study. High flows and debris destroyed the weir after one week of trapping. Six bull trout were collected and tagged (PIT) and only one was provided with a radio tag. This fish did not pass through Anderson Ranch Dam.

Authors:

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project II: Technical Guidance Subproject: II-E Magic Valley Region
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Magic Valley Region fishery management personnel furnished verbal and written comments of technical guidance to other agencies, consultants, and private individuals and organizations. Fishing information was provided to anglers in the forms of brochures, angler guides, public meetings, news releases, telephone, email, and in person.

Information was provided to the regional Environment Staff Biologist, Idaho Department of Water Resources (IDWR) and private landowners on stream alteration projects on the Big Wood River, Silver Creek, Snake River, Parker Gulch, Wine Creek and Camas Creek.

Regional fishery personnel attended meetings and commented on Snake River sturgeon management, Billingsley Creek acquisition by Idaho Department of Parks and Recreation, Mormon Reservoir fishery and weed control, effects of a natural slide in Salmon Falls Creek to Bureau of Land Management and IDWR, fishing access on Silver Creek, Connor Pond development, parking area development at Magic Reservoir, Raft River TMDL, impacts of elk feed sites on bull trout *Salvelinus confluentus*, and Subbasin Planning documents.

Author:

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project III: Habitat Management Subproject: III-E Magic Valley Region
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Magic Valley fisheries personnel performed habitat surveys on Billingsley Creek to determine habitat conditions prior to the area incorporation into the Idaho State Parks Department and to document stream conditions prior to a stream habitat enhancement project completed by a local landowner.

A cooperative habitat enhancement project was completed at Salmon Falls Creek Reservoir. Magic Valley fisheries personnel assisted Idaho Walleye Unlimited (Twin Falls Chapter) in the placement of juniper strings to enhance the available fish structure. Approximately 50 juniper strings, consisting of 15-20 trees per string, were placed in the reservoir to provide spawning structure and cover for forage fish species.

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DEPARTMENT OF FISH AND GAME**

Steve Huffaker, Director

**Federal Aid in Sport Fish Restoration
2001 Annual Performance Report
Program F-71-R-26**

**REGIONAL FISHERIES MANAGEMENT INVESTIGATIONS
Southeast Region (Subprojects I-F, II-F, III-F)**

PROJECT I.	SURVEYS AND INVENTORIES
Job b.	Lowland Lakes Investigations
Job c.	Rivers and Streams Investigations
PROJECT II.	TECHNICAL GUIDANCE
PROJECT III.	HABITAT MANAGEMENT

By

**Richard Scully, Regional Fishery Manager
David Teuscher, Regional Fishery Biologist
Chad Rawlins, Fishery Technician**

2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-F Southeast Region
Job: b Title: Lowland Lakes Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

General lowland lake surveys were completed on Blackfoot, Oneida, Alexander, and Chesterfield reservoirs. Data from the surveys showed that Utah chub *Gila atraria* dominated the fish community in Chesterfield and Blackfoot reservoirs. The relative species composition in Oneida Reservoir has changed markedly since the 1980s. Yellow perch *Perca flavescens* declined while common carp *Cyprinus carpio* and walleye *Stizostedion vitreum* abundance increased. Yellow perch and common carp dominated the catch in Alexander Reservoir.

During the seven-month creel survey on Blackfoot Reservoir, anglers fished an estimated 54,831 hours (7.5 h/ha). Anglers caught a total of 8,811 trout (1.2 trout/ha). Yellowstone cutthroat trout *Oncorhynchus clarki bouvieri* made up 25% (2,162 fish) of the total catch. Anglers caught 6,649 rainbow trout *O. mykiss*, of which 91% were harvested. Using the mean stocking effort during the previous four years, overall return of rainbow trout stocked as catchables was 2.0% by number and 15.4% by weight. For fingerling plants, 0.3% were caught by number and 63.7% by weight.

Stocking catchable rainbow trout in Blackfoot Reservoir is prohibitively expensive. Between 1998 and 2001, annual stocking effort averaged 1,590,000 sub-catchables (fry and fingerlings) and 56,000 catchables. Total trout mass stocked averaged 21,555 kg. Assuming a cost of \$3.86/kg (\$1.75/lb) for trout produced, the current stocking program for Blackfoot Reservoir costs about \$83,202 per year. Estimated cost by release group was \$36,346 for catchables and \$46,857 for subcatchables. Cost per fish caught by release strategy was an estimated \$32.15 for catchables and \$8.49 for fingerlings.

In 2001, we initiated a monitoring program for yellow perch in Blackfoot Reservoir. Yellow perch were illegally introduced sometime during the 1990s. A bottom trawl was used to monitor yellow perch abundance. The trawling survey was completed on October 15, and yellow perch were caught in every trawl (n = 12). Catch of yellow perch ranged from 7 to 564 per trawl with a mean of 142. Aerial densities ranged from 73 to 5,907 yellow perch/ha, with a mean of 1,506.

To reduce Utah chub abundance, Chesterfield Reservoir and its major tributary were treated with 3 ppm rotenone concentration. A summary of treatment water included: 800 m of unnamed stream originating at Warm Springs, 3,700 m of the Portneuf River above the normal high water mark of the reservoir, 9,500 m of the Portneuf River that is normally inundated by the reservoir, and 3.5 ha of the reservoir.

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2001 ANNUAL PERFORMANCE REPORT

State: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-F Southeast Region
Job: c Title: Rivers and Streams Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Total cutthroat trout *Oncorhynchus clarki* passage at the adult migration trap on the Blackfoot River was 4,747. Female cutthroat trout dominated the run at 3,147. Mean total length for spawners was 475 mm (S.D. = 41 mm) for females and 507 mm (S.D. = 47 mm) for males. A total of 37 rainbow trout *O. mykiss* and/or rainbow X cutthroat trout hybrids were collected at the trap. Lengths of those fish ranged from 330 to 550 mm. Rainbow trout made up 0.8% of the trout catch at the trap. In two adult migration traps on Spring and Diamond creeks, rainbow trout comprised 0.2% of the catch.

A total of 128 rainbow trout were removed from 54 km of the Blackfoot River. The removal project was initiated to reduce the potential for introgression between the native Yellowstone cutthroat trout *O. clarki bouvieri* and hatchery stocked rainbow trout. A total of 51 man-days (408 h) of effort were expended on the project for an estimated 3.2 h/rainbow trout removed.

Authors:

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2001 ANNUAL PERFORMANCE REPORT

State: Idaho Program: Fisheries Management F-71-R-26

Project II: Technical Guidance Subproject: II-F Southeast Region

Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

We provided input to the Regional Environmental Staff Biologist on activities affecting fish and anglers. We coordinated with personnel of various agencies on hydropower, mining, road building, stream alteration, grazing allotments, fill/excavation, and other projects. Southeast Region fisheries personnel worked with anglers to improve rapport and open communication with the public.

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1999 ANNUAL PERFORMANCE REPORT

State: Idaho Program: Fisheries Management F-71-R-26
Project III: Habitat Management Subproject: III-F Southeast Region
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Idaho Department of Fish and Game employees and Southeast Idaho Fly Fisher volunteers maintained two miles of riparian corridor fence along reaches of the upper Portneuf River. Staff also conducted regular repair to this fence and removed trespass livestock as needed.

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DEPARTMENT OF FISH AND GAME**

Steve Huffaker, Director

**Federal Aid in Sport Fish Restoration
2001 Annual Performance Report
Program F-71-R-26**

**REGIONAL FISHERIES MANAGEMENT INVESTIGATIONS
Upper Snake Region (Subprojects I-G, II-G, III-G, IV-G)**

PROJECT I.	SURVEYS AND INVENTORIES
Job a.	Mountain Lake Investigations
Job b.	Lowland Lakes Investigations
Job c.	Rivers and Streams Investigations
PROJECT II.	TECHNICAL GUIDANCE
PROJECT III.	HABITAT MANAGEMENT

By

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Dan Garren, Regional Fishery Biologist
William C. Schrader, Senior Fishery Research Biologist
Damon Keen, Assistant Fish Hatchery Manager**

2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-G Upper Snake Region
Job No.: a Title: Mountain Lakes Investigations
Contract Period: July 1 2001 to June 30 2002

ABSTRACT

Idaho Department of Fish and Game fisheries and U. S. Forest Service personnel surveyed a total of 13 mountain lakes. All samples included angling, gillnetting or a combination of these methods to assess the population characteristics and relative abundance of salmonid species found in these waterbodies. At least one trout species (cutthroat trout *Oncorhynchus clarki*, rainbow trout *O. mykiss*, brook trout *Salvelinus fontinalis* or hybrid rainbow x cutthroat trout) was found in 12 of the 13 lakes sampled. Mean size of fish sampled was greater for lakes that had not been stocked recently. Natural reproduction of brook trout was found in 25% of the mountain lakes sampled.

Authors:

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2001 ANNUAL PERFORMANCE REPORT

State of : Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-G Upper Snake Region
Job No. : b Title: Lowland Lake Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

We used experimental gill nets to assess fish populations and relative abundance of fish species in Henrys Lake during May 2001. These nets captured brook trout *Salvelinus fontinalis*, Yellowstone cutthroat trout *Oncorhynchus clarki bouvieri*, hybrid rainbow trout *O. mykiss* x Yellowstone cutthroat trout and Utah chub *Gila atraria*. Catch rates on brook trout and hybrid trout show a slight decline over levels recorded in 2000, while Yellowstone cutthroat trout and Utah chub both show increases over 2000 levels. Dissolved oxygen levels were monitored in the lake to assess the possibility of a winterkill event. Dissolved oxygen concentrations remained above levels considered necessary for trout survival throughout the lake, and no unusual winterkill was observed during 2000-2001. The 2001 spawning operations at Henrys Lake produced 1,560,114-eyed cutthroat trout eggs and 376,662 eyed hybrid trout eggs. Cutthroat trout in the Hatchery Creek run averaged 438 mm and hybrid trout averaged 482 mm. We conducted a creel survey on Henrys Lake from May 26 through October 31. Creel clerks interviewed 777 parties representing 1,527 anglers. Harvest composition was 35% cutthroat trout, 58% hybrid trout, and 7% brook trout. Catch rate was 0.56 fish/h and harvest rate was 0.11 fish/h. Ten percent of both brook trout and cutthroat trout stocked are marked with a fin clip to estimate hatchery contributions to the lake. Creel clerks observed fin-clips on 15% of cutthroat trout and 20% of brook trout observed in the creel, which indicates hatchery production sustains the fishery in Henrys Lake.

We used experimental gill nets to assess fish populations in Island Park Reservoir. Nets were set in standard locations used each spring. Catch rates on all game fish (rainbow trout, brook trout, kokanee *O. nerka* and mountain whitefish *Prosopium williamsoni*) and all nongame fish with the exception of Utah sucker *Catostomus ardens* declined, continuing a trend that began in 1998.

Gill nets were set in Mud Lake during May to determine if a winterkill event occurred during 2000-2001. Nets were fished for a period of four hours each, which documented the presence of both Utah sucker and Utah chub. Additional sampling was deemed unwarranted, as the presence of live fish suggest that a total winterkill did not occur.

In May 2001, we used streamside observation and electrofishing to search for the presence of any fish following the 2000 chemical treatment of Golden Lake and the Thurmon Creek drainage in Harriman State Park. On May 7, 2001, a large rainbow trout was discovered on a redd in West Thurmon Creek near its confluence with Golden Lake. There were five large spawning rainbow trout captured in West Thurmon Creek, and more redds were discovered. No brook trout were detected in any stream. A total of 6,700 age-1 Yellowstone cutthroat trout

were stocked into Golden Lake on June 13, 2001 and another 8,000 age-0 Yellowstone cutthroat trout were stocked in Golden Lake and tributaries in October 3, 2001.

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-G Upper Snake Region
Job No.: c-1 Title: Rivers and Streams Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Electrofishing surveys were conducted on Birch Creek, Medicine Lodge Creek and Little Lost River as well as the Mack's Inn and Coffee Pot rapids sections of the Henrys Fork Snake River to detect the presence of whirling disease *Myxobolus cerebralis*. Sampling consisted of single-pass backpack electrofishing on Birch Creek, Medicine Lodge Creek and Little Lost River to collect a target of 60-65 fish for analysis. Henrys Fork sampling was conducted by a private group. Fish were sent to the Eagle Fish Health Laboratory for analysis. Results indicated the presence of whirling disease in the Little Lost River, Birch Creek and Medicine Lodge Creek as well as both sections of the Henrys Fork.

The Stone Bridge section of the Henrys Fork Snake River was also sampled to assess the potential impacts of whirling disease, which has been documented in this area. Sampling consisted of a single electrofishing run, with two boats running concurrently. All fish encountered were identified, weighed and measured before being released. Length frequencies were compared to previous years' samples. Statistical analysis indicated a difference in length frequencies between sample years; however, no missing year classes were identifiable based on observations of length frequencies. Therefore, based on this limited information, impacts of whirling disease on the trout population in this reach of the Henrys Fork appear to be minimal.

Six temperature-sensing thermographs were placed in the Willow Creek drainage to evaluate summer trout habitat in these areas. Thermographs were placed in Willow Creek at Clowards Crossing, Grays Lake Outlet confluence, High Bridge and Pole Bridge, and in the Grays Lake outlet at Willow Creek confluence and Outlet Ridge Bridge. Thermographs were in operation from mid-July through October and recorded temperatures greater than 20°C in all locations.

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-G Upper Snake Region
Job: c-2 Title: Rivers and Streams Investigations -
South Fork Snake River

Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

In the South Fork Snake River, a total of 1,338 trout were captured during two days of electrofishing at the Conant section in October 2001. Trout species composition and relative abundance were cutthroat trout *Oncorhynchus clarki* (58%), rainbow *O. mykiss* and hybrid rainbow x cutthroat trout (25%), and brown trout *Salmo trutta* (16%). No lake trout *Salvelinus namaycush* or kokanee *O. nerka* were caught. Cutthroat trout relative abundance was second lowest since records began in 1982, whereas rainbow and hybrid trout relative abundance was second highest on record. Brown trout relative abundance has varied from 7% to 21% since 1982, and there is no apparent trend.

Mean total length was 312 mm for cutthroat trout, 304 mm for rainbow and hybrid trout, 311 mm for brown trout, and 310 mm for all species combined. Quality stock density (QSD) was 1.8% for cutthroat trout, 16.9% for rainbow and hybrid trout, 17.6% for brown trout, and 8.2% for all species combined. The cutthroat trout QSD has declined to the lowest on record, reflecting fewer fish ≥ 406 mm. No recapture run was conducted because of low flows.

Trout Unlimited volunteers helped salvage approximately 1,048 fish in the dewatered south channel at Twin Bridges on October 27 and 117 fish in the Heise side channel on November 20, 2001. Most fish at Twin Bridges were brown trout (236), followed by cutthroat trout (86), mountain whitefish *Prosopium williamsoni* (84), and juvenile fish of these taxa (642). An additional seven rainbow and hybrid trout were removed. Cutthroat and brown trout were salvaged at Heise.

Authors:

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project II: Technical Guidance Subproject: II-G Upper Snake Region
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Upper Snake Region fisheries management personnel provided private individuals, organizations, public schools, and state and federal agencies with technical review and advice on various projects and activities that affect the fishery resources in the Upper Snake and sink drainages of Idaho. Technical guidance also included numerous angler informational meetings, presentations, and letters, continuation of the Upper Snake Region portion of the 1-800-ASK-FISH program, and fishing clinics. Additionally, because of the low water conditions, Regional fisheries staff provided updates to local new media and the Idaho Department of Fish and Game website on drought conditions and the effects on regional fisheries and boat access sites.

Author:

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project III: Habitat Management Subproject: III-G Upper Snake Region
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Regional personnel assisted with or conducted a range of habitat improvement activities in 2001. Routine maintenance and repair operations were conducted on Henrys Lake riparian fence and irrigation diversion fish screens, riparian fences on Sellars Creek and Teton River tributaries, and irrigation diversion screens on Burns, Palisades, and Rainey creeks. New construction projects included a permanent fish weir and trapping facility on Pine Creek and installation of a box culvert on Tex Creek Bridge to improve fish passage.

Author:

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**IDAHO
DEPARTMENT OF FISH AND GAME**

Steve Huffaker, Director

**Federal Aid in Sport Fish Restoration
2001 Annual Performance Report
Program F-71-R-26**

**REGIONAL FISHERIES MANAGEMENT INVESTIGATIONS
Salmon Region (Subprojects I-H, II-H)**

PROJECT I.	SURVEYS AND INVENTORIES
Job a.	Mountain Lake Investigations
Job b.	Lowland Lakes Investigations
Job c.	Rivers and Streams Investigations
PROJECT II.	TECHNICAL GUIDANCE
PROJECT III.	HABITAT MANAGEMENT

By

**Tom Curet, Regional Fishery Manager
Arnie Brimmer, Regional Fishery Biologist
Bob Esselman, Regional Fishery Biologist
Kimberly Andrews, Fishery Technician**

2001 ANNUAL PERFORMANCE REPORT

State Of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-H Salmon Region
Job: a Title: Mountain Lake Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

The Idaho Department of Fish and Game stocked 55 alpine mountain lakes in the Salmon Region via airplane and one by backpack during the summer of 2001. In the Salmon–Challis National Forest, 2,600 golden trout *Oncorhynchus aquabonita* were stocked in 6 lakes, 2,900 Arctic grayling *Thymallus arcticus* were stocked in 10 lakes, 20,250 westslope cutthroat trout *O. clarki lewisi* were stocked in 27 lakes, 2,500 triploid Hayspur rainbow trout *O. mykiss* were stocked in 4 lakes, and 3,100 viable diploid Hayspur rainbow trout were stocked in 8 lakes. The Sawtooth Wilderness Area was stocked with a total of 1,515 golden trout in two lakes, 1,700 Arctic grayling in three lakes, and 890 westslope cutthroat trout in one lake.

Department personnel surveyed a total of 173 mountain lakes in the Sawtooth Wilderness Area and Salmon-Challis National Forests during June, July, and August of 2001. We assessed fishery status visually and/or by angling. We also assessed lake use, natural recruitment potential, and past stocking efforts. The public use areas were in good condition at 156 (86%) of the lakes we surveyed. We determined that fish stocking should be discontinued in 31 lakes (36%) due to a lack of appropriate habitat or because naturally reproducing fish populations were present. However, 92 lakes (62%) we surveyed showed no potential for natural recruitment or showed heavy angling use and should remain on the stocking list. Ninety-three (55%) of the lakes surveyed were fishless and should remain so to provide refugia for native fauna. Twenty four (25%) of the lakes we surveyed had naturally reproducing fish populations.

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2001 ANNUAL PERFORMANCE REPORT

State Of: Idaho Program: Fisheries Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-H Salmon Region
Job: b Title: Lowland Lake Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

We used gill nets to survey the fish communities in Mosquito Flats Reservoir on August 28, 2001. Rainbow trout *Oncorhynchus mykiss* comprised 98% of the catch, followed by brook trout *Salvelinus fontinalis* (1%) and bull trout *S. confluentus* (1%).

The zooplankton community in Mosquito Flats Reservoir was sampled on August 28, 2001 to determine the status of zooplankton resources for fish forage. Zooplankton Ratio Index and Zooplankton Quality Index estimates for the reservoir were 0.16 and 0.23, respectively. These data suggest that competition for food may be occurring and stocking should be adjusted accordingly.

The Williams Lake zooplankton community was sampled in August to determine the lake's potential in relation to fish yield. Zooplankton ZPR values ranged from 0.51 to 0.77 and zooplankton ZQI values ranged from 0.65 to 1.40. We found that zooplankton densities are not limiting fish yield in the lake. In March 2002, dissolved oxygen and temperature were sampled as part of an on-going citizens water-monitoring project. We found acceptable oxygen levels (5.0 ppm) to a depth of 2-3 meters and the lake to be unstratified by temperature.

On June 12, 2001, the fish community in Yellowbelly Lake was surveyed via gill nets. Three species of fish were encountered during the survey; brook trout, westslope cutthroat trout *O. clarki lewisi*, and sucker *Catostomus sp.* Brook trout comprised 57%, sucker 41%, and cutthroat trout 2% of the total catch, respectively.

On June 21 and June 22, 2001 the fish community in Jimmy Smith Lake was surveyed with two experimental mesh gill nets, one floating and one sinking. Rainbow trout made up 100% of the catch. The nets were fished a total of 16.5 diel hours and had a capture rate of 6.85 fish/hour. Fish length data demonstrates multiple year classes suggesting natural reproduction.

On June 21 and 22, 2001, the fish community in Herd Lake was surveyed via gill nets. Rainbow trout made up 100% of the catch. The nets were fished a total of 32.6 diel hours and had a capture rate of 0.92 fish/hr. A look at data over time shows that year class strengths are variable.

Authors:

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Tom Curet
Regional Fishery Manager

2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fishery Management F-71-R-26
Project I: Surveys and Inventories Subproject: I-H Salmon Region
Job: c Title: Rivers and Stream Investigations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Project personnel conducted rainbow trout *Oncorhynchus mykiss* spawning ground surveys on the Upper Lemhi River and Big Springs Creek (tributary to the Lemhi River) to monitor the effects of fishing regulation changes and habitat improvement projects sponsored by the Upper Salmon Basin Watershed Project. We counted a total of 556 redds on April 25, 2001.

During summer 2001, Idaho Department of Fish Game, Bureau of Land Management, U.S. Forest Service, Department of Environmental Quality and Chadwick Consultants sampled 84 tributary streams of the upper Salmon River basin to determine fish species composition, relative abundance and size distribution. Rainbow trout were found in 48% of the tributary streams surveyed and had total lengths ranging from 89 to 177 mm. Westslope cutthroat trout *O. clarki lewisi* were found in 43% of the tributary streams surveyed and had total lengths ranging from 85 to 345 mm. Bull trout *Salvelinus confluentus* were found in 30% of the streams surveyed and had total lengths ranging from 79 to 180 mm. Hybrid rainbow/cutthroat trout were found in 13% of the tributary streams surveyed. The following species were found in less than 20% of the surveyed streams: brook trout *S. fontinalis* (total lengths ranging from 103 to 172mm) and juvenile chinook salmon *O. tshawytscha* (total lengths ranging from 87 to 92mm).

Since 1995, Idaho Fish and Game personnel have electrofished and removed 26,063 brook trout from Valley Creek to open habitat for native fishes. In 2001, no brook trout were removed. To reestablish native fishes, we have stocked 103,517 native bull trout, westslope cutthroat trout and rainbow trout/westslope cutthroat trout hybrids from adjacent watersheds.

Members of the Shoshone Bannock Indian Tribes snorkeled in Valley Creek and found that brook trout densities have declined substantially since we began reduction efforts. The last two seasons (2000 and 2001) have demonstrated an increase in numbers of native fish. Throughout the drainage, native fishes are present in low numbers in areas that previously contained only brook trout. We believe that it will take more time before significant increases in native fish populations are apparent.

Authors:

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Arnie Brimmer
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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fishery Management F-71-R-26

Project II: Technical Guidance Subproject: II-H Salmon Region

Contract Period: July 1, 2000 to June 30, 2001

ABSTRACT

During 2001, project staff provided technical assistance, as time allowed, to all requesting state, federal and tribal agencies. We submitted comments to agencies and private entities concerning outfitter/guide special use permits, tribal salmon fishing, stream habitat through private lands, subdivision impacts, stream alterations, grazing allotments, applications for installation of instream structures, bank stabilization, burying fiber optic telecommunications cable, stabilization of mine tailings, fish screening, timber sales, prescribed burns, walk and wade permits, boat ramp construction, insecticide treatment of mountain pine beetle trees, applications for irrigation diversions, hydro applications, road and bridge construction, requests for information on annual grant development programs, permits for discharging natural materials into streams, consultations concerning Endangered Species Act (ESA) issues, bridge construction and channel alterations, applications for stream restoration projects, proposals to place fill material into wetlands for irrigation system projects, water right applications, and Lemhi Agreement and Attorney General office interaction. Regional personnel were an integral part of the collaboration effort with the Upper Salmon Basin Model Watershed Project to implement on the ground habitat improvement measures, stream reconnects and fish migration flows. We also conducted on-site inspections of proposed, on-going and completed projects.

Department personnel participated in angler informational meetings, school presentations, multi-agency and private landowner collaborative groups, and the ASKFISH program. Of the estimated 45,000 anglers that fish in the Salmon Region, approximately 90% live outside the area. Because these anglers are not familiar with our waters, we respond to over 2,500 requests for basic information on fishing opportunities, techniques, regulations and area specifics.

Authors:

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2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-26
Project III: Habitat Management Subproject: III-H Salmon Region
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Project staff coordinated efforts with Upper Salmon Basin Watershed Project (formerly the Lemhi Model Watershed Project) to plan habitat improvement projects throughout the Region. These projects included the Little Morgan, Falls, Kinnikinic, Holeman, and Hawley creek mainstem reconnects, and the Junior Baker conservation easement on the East Fork Salmon River. Project staff also worked on the proposed development of a fishing pond near Stanley, upgrades to the dam at Mosquito Flats Reservoir, and worked with private landowners, Idaho State University, and the Idaho Department of Environmental Quality to identify remedial actions in an effort to address water quality issues in Williams Lake.

Author:

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**IDAHO
DEPARTMENT OF FISH AND GAME**

Steve Huffaker, Director

**Federal Aid in Sport Fish Restoration
2001 Annual Performance Report
Program F-71-R-26**

REGIONAL FISHERIES MANAGEMENT INVESTIGATIONS

PROJECT IV. LAKE REHABILITATION

By

**Bill Hutchinson, Assistant Bureau Chief
Charles E. Corsi, State Fishery Manager
William D. Horton, Anadromous Fishery Coordinator
Fred E. Partridge, Resident Fishery Coordinator**

2001 ANNUAL PERFORMANCE REPORT

State of: Idaho

Program: Fishery Management F-71-R-26

Project IV: Lake Rehabilitation

Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

An experimental effort to remove common carp *Cyprinus carpio* from the larger Bruneau Sand Dunes Pond using rotenone treated bait was conducted during September 7-19, 2001. Four 0.03 ha frames were placed in the 30 ha pond to contain pretreatment bait and the treated pellets. Bait pellets were placed in frames daily from September 7-17 and treated pellets on September 18. Success was marginal with only one common carp verified to have been killed. Low common carp densities, cool water temperature and frame design may have contributed to the poor success of the project.

To reduce Utah chub *Gila atraria* abundance, Chesterfield Reservoir and its major tributary were treated with 3 ppm rotenone concentration by Southeast regional fishery personnel. A summary of treatment water included: 800 m of a unnamed stream originating at Warm Springs, 3,700 m of the Portneuf River above the normal high water mark of the reservoir, 9,500 m of the Portneuf River that is normally inundated by the reservoir, and the remaining 3.5 ha of water in the reservoir.

In May 2001, Upper Snake regional fishery personnel used streamside observation and electrofishing to search for the presence of any fish following the 2000 chemical treatment of Golden Lake and the Thurmon Creek drainage in Harriman State Park. On May 7, 2001, a large rainbow trout *Oncorhynchus mykiss* was discovered on a redd in West Thurmon Creek near its confluence with Golden Lake. There were five large spawning rainbow trout captured in West Thurmon Creek, and more redds were discovered. A total of 6,700 age-1 Yellowstone cutthroat trout *O. clarki bouvieri* were stocked into Golden Lake on June 13, 2001 and another 8,000 age-0 Yellowstone cutthroat trout were stocked in Golden Lake and tributaries on October 3, 2001. No brook trout *Salvelinus fontinalis* were detected in any stream.

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**IDAHO
DEPARTMENT OF FISH AND GAME**

Steve Huffaker, Director

**Federal Aid in Sport Fish Restoration
2001 Annual Performance Report
Program F-71-R-26**

REGIONAL FISHERIES MANAGEMENT INVESTIGATIONS

PROJECT V. REGIONAL COORDINATION AND ASSISTANCE

By

**Bill Hutchinson, Assistant Bureau Chief
Charles E. Corsi, State Fishery Manager
William D. Horton, Anadromous Fishery Coordinator
Fred E. Partridge, Resident Fishery Coordinator**

2001 ANNUAL PERFORMANCE REPORT

State of: Idaho

Program: Fishery Management F-71-R-26

Project V: Regional Coordination and Assistance

Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

The State Fishery Manager and the Resident Fishery Coordinator provided program guidance, coordination, and assistance to fisheries management personnel in the Department's seven regions. They also prepared and submitted grants for Federal Aid in Sport Fish Restoration, consulted with and provided reports on listed species to the U.S. Fish and Wildlife Service on Sections 6 and 10 of the Endangered Species Act.

Coordination and assistance was also provided through annual work plan meetings, a three-day Fishery Manager Coordination meeting, Region-Fishery Bureau Coordination meetings, numerous small meetings, and review and publication of Federal Aid reports. Interstate management coordination included meetings with bordering fish and wildlife agencies, other Idaho state agencies, the U.S. Fish and Wildlife Service, and the Columbia Basin Fish and Wildlife Authority-Resident Fish Committee. Comments were provided to the U.S. Fish and Wildlife Service, Bureau of Land Management and U.S. Forest Service regarding listed and petitioned fish species.

The Bureau of Fisheries also coordinated the issuance of 185 permits for fishing tournaments. Mandatory report forms for these tournaments have been filed for future trend analysis. Sixty-one scientific collecting permits were issued to approximately 213 individuals for the study of aquatic species. Most investigators receiving collecting permits are resource agency biologists; however, university students and professors, utility companies, timber companies, Indian tribes, and consultants also received permits. Reports from these permits are used for fish population information, species distribution data, Endangered Species Act accounting, and general fisheries management information.

Authors:

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Anadromous Fishery Coordinator



Steven M. Huffaker, Director

**FEDERAL AID IN FISH RESTORATION
Job Performance Report**

**FISHERY RESEARCH SUPERVISION
Project I**

F-73-R-24

July 1, 2001 to June 30, 2002

Prepared by:

**Steven P. Yundt
Fisheries Research Manager**

ANNUAL PERFORMANCE REPORT

State of: Idaho Grant: F-73-R-24, Fishery Research
Project No. 1 Title: Fishery Research Supervision
Contract Period: July 1, 2001 to June 30, 2002

OBJECTIVE

1. To annually provide administrative and technical support, direct field operations, and planning for each of the Idaho Department of Fish and Game (Department) fishery research projects (15) to produce:
 - a) a work plan
 - b) a project statement
 - c) a report, and
 - d) a project review
2. To provide technical training and continuing education for the Department's fishery staff (45) in procedures, technical writing, and statistical design and analysis.
3. To provide technical edits, peer review, and publications of 41 to 50 fishery activities and findings of the Department for permanent record.
4. To maintain the Department report resource reference area and a computerized report database.
5. To provide office space and equipment storage for field staff at the Nampa Fisheries Research Center.

ADMINISTRATION AND PLANNING

Direct supervision was provided to five Principal Fishery Research Biologists, one Senior Fishery Technician. Indirect supervision was provided to sixteen Fishery Research Biologists and six Senior Fishery Technicians.

Sport Fish Restoration, Bonneville Power Administration (BPA), US Fish & Wildlife Service Lower Snake River Compensation Plan (LSRCP), and University grants and contracts to support research and special projects were prepared, submitted, and/or administered (Table 1). Individual study review, work plan, and study design meetings were conducted for many of the projects.

Work continues to respond to issues related to Endangered Species Act (ESA) petition or listing of Westslope *Oncorhynchus clarki lewisi*, Yellowstone *O. c. bouvieri*, and Bonneville cutthroat *O. c. utah* trout, bull trout *Salvelinus confluentus*, Kootenai River white sturgeon *Acipenser transmontanus*, and burbot *Lota lota*. Work involved participation in the white sturgeon and bull trout recovery plan development and implementation processes; providing comments to petitions related to listing Westslope, Yellowstone, Bonneville cutthroat trout, and

burbot, providing legal support related to litigating the westslope cutthroat ESA decision to not list the species as threatened at this time; and developing geographic information system tools to describe and develop maps of fish species distribution.

COORDINATION

The annual Department of Fish and Game fishery manager meeting was attended to coordinate fish research and management activities.

Endangered Species Act comments and coordination were conducted pertaining to Yellowstone, Westslope, and Bonneville cutthroat, as well as bull trout. Participated in range-wide assessments for Yellowstone, Bonneville cutthroat trout, and westslope cutthroat trout.

PUBLICATIONS

Numerous annual reports and research briefs were reviewed, edited, prepared by word processing specialists for printing, and submitted to funding sources.

RESOURCE REFERENCE AREA

The Report Reference Area and Fisheries Report Catalog System were maintained and copies of reports provided in response to requests.

SPORT FISH RESTORATION COORDINATION

The submission of annual grant agreements was coordinated. Developments in Sport Fish Restoration Program rules and policies were communicated to potentially affected Department personnel. Sport Fish Restoration funding levels among bureaus was coordinated during the state budget preparation process.

Author:

Steve Yundt
Fishery Research Manager



PROJECT 4: HATCHERY TROUT EVALUATIONS

Grant # F-73-R-24

Report Period July 1, 2001 to June 30, 2002



**Joseph R. Kozfkay
Fishery Research Biologist**

**Douglas J. Megargle
Senior Fishery Research Biologist**

ANNUAL PERFORMANCE REPORT
SUBPROJECT #1: IMPROVING VULNERABILITY TO ANGLING OF RAINBOW TROUT A
SELECTIVE BREEDING EXPERIMENT

State of: Idaho Grant No.: F-73-R-24 Fishery Research
Project No.: 4 Title: Hatchery Trout Evaluations
Subproject #2: Improving Vulnerability of Rainbow
Trout—A Selective Breeding Experiment
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Tag returns from catchable size rainbow trout *Oncorhynchus mykiss* indicated that selective breeding for increased vulnerability to angling produced no measurable benefits in terms of increasing total harvest and decreasing time to harvest when compared to normal hatchery trout. Seven hundred tags were returned out of the 6,389 tags that were stocked. Three hundred sixty-five tags were returned from the vulnerable group and 335 from the normal group. First year return rate for the vulnerable group ranged from 3.0% to 26.0% and averaged 11.4%. First year return rate for the normal group ranged from 2.5% to 24.8% and averaged 10.5%. First year return rates between groups were not statistically different. The vulnerable group had a tendency to return to the creel more quickly. The mean time to harvest was 46.5 d for the vulnerable group and 50.4 d for the normal group. However, this difference was not statistically significant either. Over 50% of the tags returned were from fish caught within 50 days after stocking, and over 85% were from fish caught within 100 days after stocking.

Author:

Joseph Kozfkay
Fishery Research Biologist

**ANNUAL PERFORMANCE REPORT
SUBPROJECT #2: STERILE TROUT EVALUATIONS**

State of: Idaho Grant No.: F-73-R-24 Fishery Research
Project No.: 4 Title: Hatchery Trout Evaluations
Subproject #2: Sterile Trout Evaluations
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Increased growth rates, improved survival, and genetic protection of wild stocks have been suggested as possible benefits of stocking triploid (i.e., sterile) fish. I examined relative growth and survival of triploid and diploid rainbow trout in high mountain lakes. Comparisons of catch, catch per unit effort (CPUE), and mean lengths from the pilot study lakes to other lake surveys indicated that the diploid and triploid groups stocked in 1999 were not fully recruited to our sampling gears during 2001. Mean length of the diploid group was slightly longer (5 mm) than the triploid group. In contrast, a large weight difference existed, with the mean weight of the diploid group exceeding that of the triploid group by 21 grams. Stocking of 16 additional high lakes with mixed sex diploid and triploid fingerling rainbow trout occurred in late summer 2001. Lakes will be sampled initially in 2004. During lake surveys prior to stocking, the gill net mesh size a fish was captured in showed a positive, significant relationship to fish length. For triploid induction monitoring at Hayspur Fish Hatchery, sample size determination calculations revealed that sample size and accuracy are related in a negative exponential fashion, and that 13 samples are needed for a 3% error bound on the overall induction estimate. Experimental thermal shock treatments on Henrys Lake hybrids produced highly variable induction and low survival rates. Induction rates ranged from 17.2% to 100%. Although induction rates exceeding 80% occurred for individual replicates within the 26°C and 27°C treatments, higher mean rates occurred in the 28°C treatments. Mean survival rate increased at higher treatment temperatures. The highest mean survival rates of 24.3% and 25.0% occurred at the 28°C treatments. In the reverse hybrid cross experiment, induction rates were 100%, but mean survival was less than acceptable.

Author:

Joseph R. Kozfkay
Senior Fishery Research Biologist

**ANNUAL PERFORMANCE REPORT
SUBPROJECT #3: FISH HEALTH AND PERFORMANCE**

State of: Idaho

Grant No.: F-73-R-24, Fishery Research

Project No.: 4

Title: Hatchery Trout Evaluations

Subproject #3: Fish Health and Performance
Study

Contract Period: July 1, 2000 to June 30, 2001

ABSTRACT

We compared the performance (relative tag returns) of Kamloops rainbow trout catchables from four of Idaho Department of Fish and Game's largest production hatcheries. Additionally, we examined fish health prior to stocking to determine if prestock fish health was related to post-stock performance. Fish health was evaluated using an organismic index, autopsy-based assessment. Jaw-tagged rainbow trout from Nampa, Hagerman-Riley Creek, Hagerman-Tucker Springs, and American Falls hatcheries were stocked concurrently in 16 lakes and reservoirs located throughout south-central Idaho in 1999 and 2000. In all time periods evaluated, returns were significantly different among hatcheries. The disparity of returns among hatcheries suggests the hatchery environment can affect the performance of stocked trout; however, the differences among hatcheries were inconsistent. This suggests some hatchery influences were neither predictable nor hatchery specific. Generally, American Falls Hatchery trout provided relatively high first year returns and exceptionally high carryover. Nampa Hatchery trout performed well in 1999 but relatively poorly in 2000; therefore, the overall comparative performance of Nampa trout was inconclusive. Hagerman trout consistently provided 11-12% returns, which on average, is lower than the other hatcheries. An explicit explanation for the lower average returns of Hagerman hatchery was not determined, but rearing trout at low densities may provide better returns of stocked trout. The hatchery source for catchable trout was a significant source of variation in stocked trout returns among the waters examined, but most of the variation in returns was explained by water specific influences. Prestock fish health and the relative abundance of large zooplankton were unrelated to catchable returns.

Authors:

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Senior Fishery Research Biologist



Steven M. Huffaker, Director

**FEDERAL AID IN FISH RESTORATION
Job Performance Report**

LAKE AND RESERVOIR RESEARCH

F-73-R-24

Project 5

July 1, 2001 to June 30, 2002

Prepared by:

Arthur E. Butts, Fisheries Research Biologist
David Teuscher, Regional Fisheries Biologist

2001 ANNUAL PERFORMANCE REPORT

State of: Idaho Program: Fisheries Management F-71-R-24
Project 5: Title: Lake and Reservoir Research
Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

Idaho Department of Fish and Game has recently begun using hydroacoustics as a means to estimate fish densities, abundance, and behavior and to develop bathymetric maps of water bodies. In 2001, hydroacoustic surveys for population estimates were conducted at American Falls Reservoir, Anderson Ranch Reservoir, and twice at Cascade Reservoir with variable success. Although abundance estimates were not obtained at all reservoirs, the four surveys provided additional information on how environmental, seasonal, diel, and fish behavioral effects may influence the success of a survey. A better understanding of the applicability of hydroacoustics in situations where fish densities are extremely high or where the fish assemblage is composed of overlapping species was also attained.

Authors:

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Steven M. Huffaker, Director

**FEDERAL AID IN FISH RESTORATION
Job Performance Report**

**REDBAND AND YELLOWSTONE CUTTHROAT TROUT
INVESTIGATIONS
Project 6**

F-73-R-24

July 1, 2001 to June 30, 2002

By

**Daniel J. Schill, Principal Fisheries Research Biologist
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ANNUAL PERFORMANCE REPORT

State of: Idaho

Grant No.: F-73-R-24, Fishery Research

Project No.: 6

Title: Redband and Yellowstone
Cutthroat Trout Investigations

Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

This report describes initial work from a multi-year effort to evaluate desert redband trout status in Idaho. In general, life history and distribution/abundance data are lacking for desert redband trout streams in Idaho and elsewhere. Such data can be useful in evaluating risk of population extinction from demographic and stochastic factors. We collected redband trout using backpack electrofishing gear in 14 study streams during 2001. Fish were collected to determine appropriate aging structures, model effects of conductivity on growth, and develop maturity schedules for redband across the range of high desert environments in Idaho. Only a subsample of analyzed data from the latter issue is presented in this progress report. A total of 648 redband trout were sampled during collection efforts. During lab necropsy, a variety of structures were removed from these fish including otoliths, scales, heads (for whirling disease analysis), hearts, gills, ovaries, and testes. Maturity status for each fish was also evaluated. For fish of known sex, we developed a "maturity transition point" (MTP) between immature and mature fish within study streams by relating fish length to maturity via logistic regression. Maturity transition point for what appears to be a resident population in 1.5 m wide Crab Creek was 107 mm for males and only 125 mm for females. Maturity transition point for redband trout residing in the East Fork Jarbidge River was considerably larger at 155 mm and 169 mm, respectively. The MTP estimates for the remaining 11 streams will be reported by this project in the upcoming year along with development of a multiple-regression model that will allow its prediction across the landscape based on landscape level parameters. In addition to life history structure collection and analysis, temperature data for periods ranging from March to November were collected at 30 sites including the 14 study streams above in 2001. Results of this temperature monitoring effort are presented. Temperature data for the entire summer warm-water period were successfully recorded at all but four locations. This temperature database will be extended into future years and used to build predictive models relating to fish growth, maturity schedules, and physiological parameters.

Authors:

Daniel J. Schill
Principal Fisheries Research Biologist

Elizabeth R.J. Mamer
Fisheries Technician

F. Steven Elle
Senior Fisheries Technician



Steven M. Huffaker, Director

**FEDERAL AID IN FISH RESTORATION
Job Performance Report**

FISH HEALTH ADMINISTRATION

F-75-R-17

July 1, 2001 to June 30, 2002

Prepared by:

**Keith Johnson, Fish Pathologist Supervisor
Douglas Burton, Resident Fish Pathologist
A. Douglas Munson, Anadromous Fish Pathologist**

ANNUAL PERFORMANCE REPORT

State of: Idaho

Grant: F-75-R-17

Title Fish Health Administration

Period Covered: July 1, 2001 to June 20, 2002

ABSTRACT

This report contains a description of the activities of the Eagle Fish Health Laboratory, operated by the Idaho Department of Fish and Game, for the grant period. The primary charge of this program is to monitor, inspect, and improve the health of fish raised at 11 resident hatcheries, 11 anadromous hatcheries and satellites, and Eagle Hatchery, which rears Endangered Species Act-listed salmon captive broodstocks. Results of these diagnostic cases are presented in the text by program and facility. The most significant diseases encountered in the resident and anadromous programs were bacterial coldwater disease, bacterial kidney disease, infectious hematopoietic necrosis virus, furunculosis, and bacterial gill disease. Bacterial kidney disease also caused considerable loss in one group of chinook captive broodstock. Mortality in groups of Lemhi River chinook captives due to infestations with the copepod parasite *Salmonicola californiensis* was controlled with a combination of manual removal and gastric intubation of Ivermectin. The Idaho Department of Fish and Game fisheries managers, researchers, hatcheries, and Eagle Fish Health Laboratory pathologists utilized the wet laboratory during the year.

Wild salmonids from five of seven regions of the state were examined for the parasite *Myxobolus cerebralis*, the causative agent of whirling disease. The only new detections of whirling disease this year were from tributaries of drainages determined to be positive in prior years. We initiated research to determine the seasonal infectivity of *M. cerebralis* in the river water supplies of both Sawtooth and Pahsimeroi hatcheries. The staffs of both the Eagle Fish Health Laboratory and Eagle Hatchery supported this research.

The Eagle Fish Health Laboratory staff remained active participants in regional and national fish health issues. This included administering the Investigational New Animal Drug program through the United States Fish and Wildlife Service and the University of Idaho. Examples of additional liaison activities are included in the text.

Authors:

Keith Johnson
Fish Pathologist Supervisor

Douglas Burton
Resident Fish Pathologist

A. Douglas Munson
Anadromous Fish Pathologist



Steven M. Huffaker, Director

**FEDERAL AID IN FISH RESTORATION
Job Performance Report**

Project 9. University Studies

F-73-R-24

July 1, 2001 to June 30, 2002

Prepared by:

**Steven P. Yundt, State Fisheries Research Manager
Matthew Campbell, Fisheries Research Biologist**

ANNUAL PERFORMANCE REPORT

State of: Idaho Grant No. F-73-R-24
Project No: 9 TITLE: University Studies
Sub Title: Assessment of genetic population structure and risk of introgression and hybridization to native Westslope cutthroat trout in the Middle Fork Salmon River drainage.

Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

In response to recent interest in the status of native trout populations and Endangered Species Act petitions to list westslope cutthroat trout *Oncorhynchus clarki lewisi* as threatened throughout its range, the Idaho Department of Fish and Game (IDFG) provided funding through the University of Idaho Cooperative Fishery Research Unit to conduct a study to determine the level of hybridization and introgression between native westslope cutthroat trout and native redband/rainbow/steelhead *O. mykiss gairdneri* in the Middle Fork Salmon River drainage. Genetic fin samples were collected by angling from the first 60 *Oncorhynchus* samples collected from 4, 4, and 5 sites from the Middle Fork Salmon River tributaries Indian, Marble, and Big Creek. Sample sites were distributed from headwaters to the mouths of Indian, Marble, and Big Creeks, and included mainstem as well as tributary sites. Samples will be processed during the coming year.

INTRODUCTION:

In response to westslope cutthroat trout *Oncorhynchus clarki lewisi* population declines throughout Idaho, the IDFG is interested in assessing the extent of introgressive hybridization with native and non-native (hatchery introduced) rainbow trout *O. mykiss gairdneri* and *O. mykiss*, respectively, and with Yellowstone cutthroat trout *O. c. bouvieri* within the Middle Fork Salmon River (MFSR) drainage, with the hope of identifying and conserving remaining genetically pure populations found within the MFSR and to identify possible managements units for use in future westslope cutthroat trout conservation plans.

Native trout populations within the MFSR are composed of redband/rainbow/ steelhead, westslope cutthroat trout, and bull trout *Salvelinus confluentus*. Stocking of hatchery reared rainbow trout and Yellowstone cutthroat trout has been limited to high elevation, headwater lakes in some MFSR tributaries. Many MFSR tributaries have no stocking history and are presumed pure.

In order to assess the level of introgressive hybridization that has occurred as a result of high lake stocking, it is important to document the level of introgressive hybridization that occurs naturally between native westslope cutthroat trout and native redband/rainbow/steelhead.

The objective of this study was to determine the extent of hybridization and introgression between native westslope cutthroat trout and native redband/rainbow/steelhead. Indian, Marble, and Big creeks were selected for sampling due to the absence or near absence of high lakes with a hatchery stocking history.

METHODS:

Fish were collected by angling with flies. A sample of fin was removed from the first 60 *Oncorhynchus mykiss* or *lewisii* captured at each sample site and stored in 100% ethanol at room temperature.

RESULTS:

Sixty fish fin samples were collected from upper, middle, and lower Indian Creek, and Little Indian Creek; from upper and middle Marble, and Trail and Big Cottonwood creeks; and from upper, middle and lower Big Creek, Rush and Cabin creeks.

Authors:

Steve Yundt
Fishery Research Manager

Matt Campbell
Fishery Research Biologist



Steven M. Huffaker, Director

**FEDERAL AID IN FISH RESTORATION
Job Performance Report**

Fishing Access

F-76-D- 18

July 1, 2001 to June 30, 2002

Prepared by:

**Tom Parker
Bryan Helmich
Gary R. (Sam) McNeill, Don Beck
Jerry Deal, Dennis Hardy
Mark Fleming, Dean Grissom
Paul Wackenhut
Steve Schmidt, Jim Moore
Greg Painter**

**Statewide
Panhandle Region
Clearwater Region
Southwest Region
Magic Valley Region
Southeast Region
Upper Snake Region
Salmon Region**

**FEDERAL AID IN FISH RESTORATION
PERFORMANCE REPORT**

JOB TITLE: Fishing Access - Statewide Administration
GRANT NUMBER: F-76-D-18
PROJECT LEADER: Tom Parker
PROJECT PERIOD: July 1, 2001 to June 30, 2002

SALARIES AND WAGES

These funds were used for statewide administration of the fishing access program. This includes budget administration, preparation of Federal Aid plans and reports, and inspection of projects statewide to ensure compliance with access requirements for persons with disabilities and five-year plan objectives. During this grant period the project leader was assigned temporarily to another nonfederal aid project for part of the year.

OPERATIONS, MAINTENANCE, AND CAPITAL OUTLAY

Statewide administration provided oversight of the fishing access programs and funded regional operations and development projects in FY02.

Fences, boundary signs	\$4,434	
Facilities	13,744	
Acquisition	3,620	
Docks	2,100	
Miscellaneous including administrative fees, printing, rentals	345	
Total Costs		\$22,185

SUMMARY OF COSTS

Salary and wages	\$1,602	
Operations	22,185	
Property developments and site developments	9,408	
Total Costs		\$33,195

**FEDERAL AID IN FISH RESTORATION
PERFORMANCE REPORT**

JOB TITLE: Fishing Access - Panhandle Region
GRANT NUMBER: F-76-D-18
PROJECT LEADER: Bryan Helmich
ASSISTANT: Tom Fulton
PROJECT PERIOD: July 1, 2001 to June 30, 2002

CAPITAL IMPROVEMENTS

Purchase and/or construct new fishing docks or piers. Construct and/or renovate boat launching ramps. Construct parking areas. Maintain access roads. Install new restrooms. Construct new camping / picnic spaces. Modify existing facilities to make them accessible to persons with disabilities. Maintain adequate signing to direct the public to the access sites and disseminate site specific information. Combine fishing access funds and state funds to maintain and/or improve a shop and related equipment necessary to conduct the aforementioned activities.

New Development Projects:

Site	County	Developments	Costs
None Planned or Completed			

Renovation Projects:

Site	County	Renovations	Costs
Kelso Lake Access	Bonner	Replace two wooden outhouses with a precast cement unit. Surface the surrounding area to meet ADA guidelines.	\$12,000*
Granite Lake Access	Bonner	Install docks purchased in FY01 and remove old docks.	1,500
All 16 Access Sites	Multiple	Begin construction of steel site sign frames and design / order aluminum sign inserts.	2,500
Total Costs			\$16,000
Total Capital Improvements			\$16,000

** Project funded by the Statewide Fishing Access Account.*

OPERATIONS AND MAINTENANCE

Repairs and upkeep included cleaning toilets; controlling weeds; removing refuse; pumping toilet vaults; replacing damaged facilities such as toilets, concrete boat ramps, signs, and parking barriers; rebuilding boat/fishing docks; painting facilities; and engaging in other repairs deemed necessary. Public use was also monitored.

Sixteen (16) public fishing access sites were maintained in the Panhandle Region.

Costs	\$7,907
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SUMMARY OF COSTS

Salaries	\$26,847
Operations and Maintenance	7,907
Capital Improvements	16,000
Overhead	7,691
Total Costs	\$58,445

**FEDERAL AID IN FISH RESTORATION
PERFORMANCE REPORT**

JOB TITLE: Fishing Access - Clearwater Region
GRANT NUMBER: F-76-D-18
PROJECT LEADER: Gary R. (Sam) McNeill
ASSISTANT: Don Beck
PROJECT PERIOD: July 1, 2001 to June 30, 2002

CAPITAL IMPROVEMENTS

New Development Projects:

None.

OPERATIONS AND MAINTENANCE

Repairs and upkeep to include servicing and cleaning toilets; controlling weeds or other unwanted vegetation in parking or camping areas; removal of refuse; pumping out of toilet vaults; replacing damaged facilities such as toilets, concrete boat ramps, signs, and parking barriers; replacing boat/fishing docks; painting facilities; other repairs deemed necessary; and monitoring public use on 21 sites.

Estimated Costs \$8,735

SUMMARY OF COSTS

Salaries	\$25,218
Operations and Maintenance	8,735
Overhead	7,096
 Total Estimated Costs	 \$41,049

**FEDERAL AID IN FISH RESTORATION
PERFORMANCE REPORT**

JOB TITLE: Fishing Access - Southwest Region
GRANT NUMBER: F-76-D-18
PROJECT LEADER: Jerry Deal
ASSISTANT: Dennis Hardy
PROJECT PERIOD: July 1, 2001 to June 30, 2002

CAPITAL IMPROVEMENTS

New Development Projects:

None

Renovation Projects:

Site	County	Renovation	Costs
Lansing Lane	Canyon	Constructed a 6' chain link fence around parking area in an effort to reduce trespass problems on adjoining landowner's property. <i>Funds for this project from the Statewide FY02 Fishing budget.</i>	\$2,892

Handicap Renovations and Improvements:

Site	County	Renovations Planned	Costs
Wilson Ponds	Canyon	Constructed 120' concrete sidewalk with multiple accessible fishing stations. <i>Cost reflects donations of labor by Jobs Corps and \$1,000 from the family of Darrell Dodd as a memorial.</i>	\$5,966
Total Improvements			\$8,858

OPERATIONS AND MAINTENANCE

Routine maintenance operations will be conducted on 44 fishing access areas. Maintenance activities will include, but not be limited to, painting, signing, pumping toilets, vegetation control, refuse cleanup, and maintaining roads and parking areas.

Costs \$16,749

SUMMARY OF COSTS

Salary and Wages	\$58,337
Operations	16,749
Capital Improvements	*8,858
Total Costs	\$83,944

* Includes Statewide Fishing Access funds and other donations.

**FEDERAL AID IN FISH RESTORATION
PERFORMANCE STATEMENT**

JOB TITLE: Fishing Access - Magic Valley Region
GRANT NUMBER: F-76-D-18
PROJECT LEADER: Mark Fleming
PROJECT ASSISTANT: Dean Grissom
PROJECT PERIOD: July 1, 2001 to June 30, 2002

CAPITAL IMPROVEMENTS

New Development Projects:

None

Renovation Projects:

Silver Creek – West Access

Completed buck and rail fence to protect riparian areas and delineate public parking areas. \$5,000

OPERATIONS AND MAINTENANCE

The following maintenance activities were performed: Repairs and upkeep include cleaning toilets; controlling weeds and other unwanted vegetation; removal of refuse; pumping out toilet vaults; replacement of damaged facilities such as toilets, concrete boat ramp logs, signs, and parking barriers; painting facilities; maintaining access roads; and other repairs as they are identified. Monitored public use.

Twenty-one (21) public fishing access sites were maintained in the Magic Valley Region.

Estimated Costs	\$2,462
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SUMMARY OF COSTS:

Salaries and Wages	\$21,039
Operations	2,462
Overhead	5,288
State funds	(5,000)*
Total Estimated Costs	\$28,789

*From statewide account

**FEDERAL AID IN FISH RESTORATION
PERFORMANCE REPORT**

JOB TITLE: Fishing Access - Southeast Region
GRANT NUMBER: F-76-D-18
PROJECT LEADER: Paul Wackenhut
PROJECT PERIOD: July 1, 2001 to June 30, 2002

CAPITAL IMPROVEMENTS

New Development Projects:

Site	County	Developments	Costs
Mike's Place	Caribou	No additional fencing has been constructed on the property boundary, but materials were purchased (other funds) which may be used to complete this boundary establishment in the fall of 2002.	0
Bear River	Franklin	No additional access sites have been acquired.	0
Total Costs			\$0

Renovation Projects:

Site	County	Renovations	Costs
Black Canyon	Caribou	Fencing and the stile were not repaired.	0
East Fork Rock Creek	Power	The site was inspected in the fall and visited twice in the spring/summer. Signing was replaced to control use. Our lease arrangement with Department of Lands is due to be renewed. We have corresponded with Department of Parks and Recreation to explore the possibility of co-management. Power Co. has also been instrumental in the maintenance of this site. No changes have been made in the level of development.	0

Blackfoot River WMA	Caribou	An additional quarter mile of barbed wire/net wire fencing was replaced w/ buck and rail by the Naval Reserve Seabees (operating funds) in fall 2001.	0
Region-wide		A tour was conducted of all sites again in the fall of 2001 and signage needs were assessed. Total needs were tallied over the winter and an order was placed with Correctional Industries and funded by the statewide account. Signs were sorted and distributed to the various counties and the state Department of Transportation for placement. Some signage has also been placed by regional personnel.	\$1827 (statewide funds)
		Total Costs	\$1,827
		Total Capital Improvements	\$1,827

OPERATIONS AND MAINTENANCE

Fishing access areas (28) were maintained in all counties in the Southeast Region through cooperative agreements with each of the seven counties. Through separate addenda with five of the counties (Bingham, Caribou, Franklin, Oneida, and Power) Department funds are provided to assist with the cost of routine maintenance and portable toilet rental. Most sites were inspected in the fall by Department personnel. All sites were visited at various times throughout the year on a less formal basis. Much of the maintenance on fishing access sites is provided by Department personnel or volunteer groups through the statewide Adopt-A-Wetland program. Maintenance generally consists of replacing signage, providing sanitary facilities, and control of noxious weeds and litter. Regional operating funds were used to repair and improve an approach to an access on the Portneuf River where there has been a problem with a railroad crossing. There has been correspondence between the Department, BLM, Bingham County and some private interests regarding an additional public fishing access along the Snake River near Shelley. We will also be corresponding with some private landowners in the vicinity of Dike Lake (Caribou County) to secure public fishing access to the shore of that small lake. An attempt is being made to acquire an additional fishing access along the Portneuf River (Caribou County). This may be in the form of an easement or fee title. The Performance report for FY'01 and Project Statement for FY'03 were completed and forwarded to the state office.

Total Costs	\$8,111
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SUMMARY OF COSTS

Salaries and Wages	\$11,928
Operations	8,111
Capital Improvements (other statewide funds)	1,827
Overhead	4,188
Total Costs	\$26,054

**FEDERAL AID IN FISH RESTORATION
PERFORMANCE REPORT**

JOB TITLE: Fishing Access - Upper Snake Region
GRANT NUMBER: F-76-D-18
PROJECT LEADER: Jim Moore
PROJECT PERIOD: July 1, 2001 to June 30, 2002

NARRATIVE

BACKGROUND

The purpose of the Fishing Access Project is to maintain fishing access sites in the Upper Snake Region to be safe, sanitary and usable areas for the enjoyment of the fishing public. To ensure continued improvements of fishing areas throughout the region, and whenever possible to acquire new areas for the benefit of the fishing public.

CAPITAL IMPROVEMENTS

New Development Projects:

A new perimeter fence and site sign was constructed at Stennett Access on the Big Lost River.

Renovation Projects:

The entrance road at Trail Creek Pond was graveled and graded.

OPERATIONS AND MAINTENANCE

Thirty-five (35) public fishing sites were maintained in the Upper Snake Region. Salary for Regional Wildlife Habitat Manager 1 month, Utility Craftsman 4 months and Temporary Aide 6.78 months.

Portable toilets were rented for Sand Creek Ponds and for Fall River Access.

Roads were graded at Sand Creek Ponds, Cartier and Kaufman Access Areas.

Weeds were mowed and or sprayed on all areas.

CAPITAL IMPROVEMENTS

New Development Projects:

Site	Renovations	Costs
Stennett Access	Fence and Site sign	\$1,500
	Total Costs	\$1,500

Renovation Projects:

Site	Renovations	Costs
Trail Creek Pond	Road graveled and graded	\$1,000
	Total Costs	\$1,000

OPERATIONS AND MAINTENANCE

Thirty-five (35) public fishing sites will be maintained in the Upper Snake Region. Salary for Regional Wildlife Habitat Manager 1 month, Utility Craftsman 4 months and Temporary Aide 6.78 months.

Costs \$18,986

SUMMARY OF COSTS

Salaries	\$35,696
Capital Improvements	2,500
Operations and Maintenance	18,986
Overhead	11,951
Total Costs	\$69,133

**FEDERAL AID IN FISH RESTORATION
PERFORMANCE REPORT**

JOB TITLE: Fishing Access - Salmon Region
GRANT NUMBER: F-76-D-18
PROJECT LEADER: Greg Painter
PROJECT PERIOD: July 1, 2001 to June 30, 2002

CAPITAL IMPROVEMENTS

*New Development Projects:

Site	County	Renovations	Costs
Hayden Ponds		Removed building and site rehabilitated	\$500.00
Blue Mountain Pond*		Planted pondside vegetation and Installed associated irrigation system	\$2,903.59
Total Costs			\$3,403.59

Renovation Projects:

Site	County	Renovations	Costs
None			

OPERATIONS AND MAINTENANCE

Twenty-four (24) fishing access areas were maintained in the Salmon Region. Existing structures, signs, and fences were repaired or replaced as needed. Refuse was cleaned up, toilets cleaned, and roads maintained and improved. Part of the development and maintenance is paid for through a co-op arrangement and other access programs.

Total Costs \$1,980.00

SUMMARY OF COSTS

Salaries and Wages	\$8,437
Operations	1,980
Overhead	2,177
Total Costs	\$12,594

*funded through statewide fishing access account



Steven M. Huffaker, Director

**FEDERAL AID IN FISH RESTORATION
Job Performance Report**

Motorboat Access

F-77-B-17

July 1, 2001 to June 30, 2002

Prepared by:

**Tom Parker
Bryan Helmich
Gary R. (Sam) McNeill, Don Beck
Jerry Deal, Dennis Hardy
Mark Fleming, Dean Grissom
Paul Wackenhut
Steve Schmidt, Jim Moore
Greg Painter**

**Statewide
Panhandle Region
Clearwater Region
Southwest Region
Magic Valley Region
Southeast Region
Upper Snake Region
Salmon Region**

**FEDERAL AID IN FISH RESTORATION
PERFORMANCE REPORT**

JOB TITLE: Motorboat Access – Statewide Administration
GRANT NUMBER: F-77-B-17
PROJECT LEADER: Tom Parker
PROJECT PERIOD: July 1, 2001 to June 30, 2002

SALARIES AND WAGES:

These funds were used for statewide administration of the motorboat access program. This includes budget administration, Federal Aid reports, and inspection of project statements to ensure compliance with access requirements for persons with disabilities and five-year plan objectives. During this grant period the project leader was temporarily assigned to a different Nonfederal aid project for part of the year.

OPERATIONS, MAINTENANCE, AND CAPITAL OUTLAY

Statewide administration provided oversight of the motorboat access program and funded regional operations and development projects in FY02.

Surveys, fences, signs	\$2,865	
Facilities, utilities	44,213	
Boat ramps, and docks	61,820	
Rest rooms	37,972	
Publications	7,680	
Maintenance (per diem, general office, insurance)	3,631	
Total Costs		\$158,181

SUMMARY OF COSTS:

Salaries and wages	\$2,632	
Operations	83,675	
Property improvements and site developments	77,176	
Total Costs		\$163,483

**FEDERAL AID IN FISH RESTORATION
PERFORMANCE REPORT**

JOB TITLE: Motorboat Access - Panhandle Region
GRANT NUMBER: F-77-B-17
PROJECT LEADER: Bryan Helmich
ASSISTANT: Tom Fulton
PROJECT PERIOD: July 1, 2001 to June 30, 2002

CAPITAL IMPROVEMENTS

Purchase an/or construct new boat docks and piers. Construct and/or renovate boat launches. Install dock approach ramps. Install new rest rooms. Construct new camping / picnic spaces. Modify existing facilities to make them accessible to persons with disabilities. Maintain adequate signing to direct the public to motorboat access sites and disseminate site specific information. Combine motorboat access funds and state funds to maintain and/or improve a shop and related equipment necessary to conduct the aforementioned activities.

New Development Projects:

Site	County	Developments	Costs
Panhandle Regional Office	Kootenai	Complete construction of a shop used for motorboat access related maintenance and development activities. Address safety issues and equipment needs.	\$15,000
Total Costs			\$15,000

Renovation Projects:

Site	County	Renovations	Costs
Spirit Lake Access	Kootenai	Replace two wooden outhouses with a precast cement unit. Surface the surrounding area to meet ADA guidelines.	\$12,000*
Cocolalla Lake Access	Bonner	Replace two wooden outhouses with a precast cement unit. Surface the surrounding area to meet ADA guidelines.	\$12,000*
Pringle Park Access	Bonner	Replace two wooden outhouses with a precast cement unit. Surface the surrounding area to meet ADA guidelines.	\$12,000*

Garfield Bay Access	Bonner	Install new docks purchased in FY01.	500
Morton Slough Access	Bonner	Install traffic control barriers.	2,000
Twin Lakes Access	Kootenai	Repair boat launch.	500
All 26 Access Sites	Multiple	Begin construction of steel site sign frames and design / order aluminum sign inserts.	5,000
Total Costs			\$44,000
Total Capital Improvements			\$59,000

** Projects funded by the Statewide Motorboat Access Account.*

OPERATIONS AND MAINTENANCE

Repairs and upkeep included cleaning toilets; controlling weeds; removing refuse; pumping toilet vaults; replacing damaged facilities such as toilets, concrete boat ramps, signs, and parking barriers; rebuilding boat docks; painting facilities; and engaging in other repairs deemed necessary. Public use was also monitored.

Twenty-six (26) public boating access sites were maintained in the Panhandle Region.

Costs \$39,023

SUMMARY OF COSTS

Salaries	\$45,596
Operations and Maintenance	39,023
Capital Improvements	59,000
Capital Outlay	3,500
Overhead	17,940
Total Costs	\$165,059

**FEDERAL AID IN FISH RESTORATION
PERFORMANCE REPORT**

JOB TITLE:	<u>Motorboat Access – Clearwater Region</u>
GRANT NUMBER:	<u>F-77-B-17</u>
PROJECT LEADER:	<u>Gary R. (Sam) McNeill</u>
ASSISTANT:	<u>Don Beck</u>
PROJECT PERIOD:	<u>July 1, 2001 – June 30, 2002</u>

CAPTIAL IMPROVEMENTS

New Development Projects:

Site	County	Developments	Costs
Snake River			
Lime Point	Nez Perce	Install toilet, install 5 fires rings	Not Attempted
Clearwater River			
North Fork	Clearwater	Constructed concrete boat ramp	\$ 9,000
Greer	Nez Perce	Installed handicapped accessible vault toilet Shifted from Gibbs Eddy to Greer site	\$11,000
		Total Development Costs	\$20,000

Renovation Projects:

Site	County	Developments	Costs
Clearwater River			
Lenore	Nez Perce	Replaced old toilet	\$11,000
Button Beach	Idaho	Renovate concrete boat ramp	Not Attempted
		Total Renovation Costs	\$11,000
		Total Capital Improvements	\$31,000

OPERATIONS AND MAINTENANCE

Repairs and upkeep to include cleaning toilets; controlling weeds or other unwanted vegetation; removal of refuse; pumping out toilet vaults; replacement of damaged facilities such as toilets, concrete boat ramps, signs, and parking barriers, rebuilding boat docks; pointing facilities; and other repairs deemed necessary. Monitoring public use on 28 sites.

Maintenance Costs	\$24,106
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SUMMARY OF COSTS

Salaries	\$54,647
Operations and Maintenance	24,106
Capital Improvements (other funds)	31,000
Overhead	23,000
Total Costs	\$133,053

**FEDERAL AID IN FISH RESTORATION
PERFORMANCE REPORT**

JOB TITLE: Motorboat Access - Southwest Region
GRANT NUMBER: F-77-B-17
PROJECT LEADER: Jerry Deal
ASSISTANT: Dennis Hardy
PROJECT PERIOD: July 1, 2001 to June 30, 2002

CAPITAL IMPROVEMENTS

New Development Projects:

None.

Renovation Projects:

Site	County	Renovations	Costs
Little Payette Lake	Valley	Replace older temporary boat ramp with a wider poured concrete ramp. Removed failed wooden boat docks and will replace with new three section steel model purchased and on site. Work on docks should be completed by November 2002.	\$15,622
Paddock Reservoir	Washington	Install new three section steel model boat docks at boat ramp installed by Washington County in 2000, construct a concrete bulkhead and attach existing three sections of wooden docks at IDFG boat ramp located near dam. Project not completed due to lack of time and funding for docks.	\$0.00
Total Costs			\$15,622

Handicap Renovations and Improvements:

Site	County	Renovation	Costs
Little Payette Lake	Valley	Replaced older outhouse with new accessible concrete unit. Funds from Statewide FY02 Boating Access Budget	\$11,500
Horsethief Reservoir	Valley	Replaced older outhouse with new accessible concrete unit. Funds from Statewide FY02 Boating Access Budget	\$10,900

Paddock Reservoir	Washington	Replaced older outhouses with two new accessible concrete units. Funds from encumbered FY01 Boating Access Budget	\$19,700	
Indian Creek Reservoir	Ada	Replaced older outhouse with new accessible concrete unit. Funds from encumbered FY01 Boating Access Budget.	\$9,700	
		Total Renovation Costs	\$51,800	\$12,000
		Total Improvements	\$67,422	\$38,700

OPERATIONS AND MAINTENANCE

Routine maintenance operations will be conducted on 24 boating access areas. Maintenance activities will include, but not be limited to, painting, signing, pumping toilets, vegetation control, refuse cleanup, and maintaining roads and parking areas.

Costs	\$92,637
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CAPITAL OUTLAY

Installed service body on new fleet vehicle, replaced older CPU.

Costs	\$8,567
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SUMMARY OF COSTS

Salaries and Wages	\$70,534
Operations	92,637
Capital Improvements	*75,989
 Total	 \$239,160

* Includes Statewide Motorboat Access funds and other encumbered funds

**FEDERAL AID IN FISH RESTORATION
PERFORMANCE REPORT**

JOB TITLE: Motorboat Access - Magic Valley Region
GRANT NUMBER: F-77-B-17
PROJECT LEADER: Mark Fleming
PROJECT ASSISTANT: Dean Grissom
PROJECT PERIOD: July 1, 2001 to June 30, 2002

CAPITAL IMPROVEMENTS

New Development Projects:

None

Renovation Projects:

Site	Actual Costs
Bell Rapids (Cost share w/NPS to install additional boat docks and improve access for physically challenged)	\$11,000

Installed two boat docks and one ADA fishing dock at Bell Rapids Access Area. The National Park Service provided \$15,000 funding towards completion of this project via Cooperative Agreement No. 1443-CA9608-98-002. The total cost of materials and installation was \$26,000. This includes an eight-year warranty on materials and design (including anchoring system). This project was completed during December of 2001.

OPERATIONS AND MAINTENANCE

Repairs and upkeep include cleaning toilets; controlling weeds or other unwanted vegetation; removal of refuse; pumping out toilet vaults; replacement of damaged facilities such as toilets, concrete boat ramp logs, signs, and parking barriers; painting facilities; maintaining access roads; and other repairs deemed necessary. Monitor public use. Each access site will be thoroughly inspected by the regional habitat manager and utility craftsman in the coming year to evaluate the current conditions and determine work needed. Conservation officers and the regional fisheries manager will also be requested to add input for work needed at each access site.

Thirteen (13) public boating access sites will be maintained in the Magic Valley Region.

Estimated Costs	\$11,363
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SUMMARY OF COSTS:

Salaries and Wages	\$17,279
Operations	10,260
Overhead	6,196
Capital Expenses	(11,000)*
Total Estimated Costs	\$33,735

*From statewide account

**FEDERAL AID IN FISH RESTORATION
PERFORMANCE REPORT**

JOB TITLE: Motorboat Access - Southeast Region
GRANT NUMBER: F-77-B-17
PROJECT LEADER: Paul Wackenhut
PROJECT PERIOD: July 1, 2001-June 30, 2002

CAPITAL IMPROVEMENTS

New Development Projects:

Site	County	Developments	Costs
Pingree	Bingham	Monitoring has continued but no changes have been made to the site beyond normal maintenance.	0
McTucker	Bingham	The work to dredge gravel from the base of the ramp to the main channel was completed in October, 2001 by Bingham Co. public works. All costs except administration of the final reporting to the regulatory agencies was contributed by Bingham Co. as in-kind contribution. Approximately 300 cubic yards of gravel was removed to facilitate use of the ramp at low water levels. There are currently no plans to further upgrade the facility.	0
Total Costs			\$0

Renovation Projects:

Site	County	Renovations	Cost
McTucker	Bingham	See "Developments – McTucker"	
West Ramp, Sportsmans Park (Am. Falls Res.), Oregon Trail Crossing, Snake R.	Power	In 2000 a grant was secured to assist with the funding of several sets of plastic docks to be distributed in 4 counties. Additional funding to satisfy final costs for this 4 county grant supported project was provided by Bannock Co. (\$498). Department personnel corresponded with all parties involved to assure that all funding was pooled and forwarded to the vendor. In May 2002, the balance (10 docks) of the total dock	0

Site	County	Renovations	Cost
		order (26 docks) was delivered and set up in Power Co.	
Porterville Bridge (Snake River)	Bingham	Funding (\$20,000) has been secured to complete this boat ramp renovation (re-alignment, widening, parking area improvement) from the statewide account. Bingham Co. will provide in kind work and contract remaining construction. Necessary permits are being obtained and the project will be completed in the early fall of 2002.	0
Poison Cr. (Blackfoot Res.)	Bingham	Funding (\$8,000) has been secured to renovate this ramp (replace the existing structure) from the statewide account. Bingham Co. will provide in-kind work and contract remaining construction. Necessary permits and other notification are being handled. The project will be completed in the fall of 2002.	0
Condie Reservoir	Franklin	Funding (\$8,000) has been secured to renovate this ramp (lengthen the existing ramp) from the statewide account. Franklin Co. will provide in-kind work and contract remaining construction. Necessary notification and permits are being handled by Franklin Co. also.	0
Region-wide		A tour was conducted of all sites again in the fall of 2001 and signage needs were assessed. Total needs were tallied over the winter and an order was placed with Correctional Industries and funded by the statewide account. Signs were sorted and distributed to the various counties and the state Department of Transportation for placement. Some signage has also been placed by regional personnel.	\$4,422 (statewide funds)

Site	County	Renovations	Cost
		Total Costs	\$4,422
		Total Capital Improvements	\$4,422

OPERATIONS AND MAINTENANCE

Thirty-nine boating access areas were maintained in all counties in the Southeast Region through cooperative agreements with each of the seven counties. Separate addenda in place with five of the counties (Bingham, Caribou, Franklin, Oneida, and Power) provide for payment from Department funds to help cover routine maintenance and portable toilet rentals. Additional agreement addenda were secured to cover the planned projects mentioned above. Most sites were inspected in the fall by Department personnel. All sites were visited at various times throughout the year on a less formal basis. Revisions to the Department "Idaho Sportsman's Access Guide" were forwarded to the state office in October. The Southeast Idaho Recreational Task Force met in December 2001 to consider recent accomplishments and upcoming needs. The meeting was hosted by the Department in the regional office and attended by 10 representatives of counties and other agencies. Minutes of the meeting were typed and distributed by the Department subsequent to the meeting. Power County and the BLM were contacted to arrange grading of the approach to Snake River Vista on the Snake River. Additional signage was placed at Condie Reservoir (Franklin County) to alleviate trespass on the neighboring landowner. There have been several meetings and other correspondence regarding access to Twin Lakes Reservoir in Franklin County. The Department and Franklin County agreed to allow the irrigation company operating the reservoir to hire a manager and begin charging a use fee on a one-year trial basis. The Performance report for FY01 and Project Statement for FY03 were completed and forwarded to the state office.

Total Costs	\$15,515
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SUMMARY OF COSTS

Salaries and Wages	\$28,870
Operations	15,515
Capital Improvements (other statewide funds)	4,422
Overhead	9,276
Total Costs	\$58,083

FEDERAL AID IN FISH RESTORATION PERFORMANCE REPORT

JOB TITLE: Motorboat Access - Upper Snake Region
GRANT NUMBER: F-77-B-17
PROJECT LEADER: Jim Moore
PROJECT PERIOD: July 1, 2001-June 30, 2002

NARRATIVE

BACKGROUND

The Motorboat Access project in the Upper Snake Region strives to maintain motorboat access areas in a safe, sanitary and usable condition. The project is also directly in charge of implementation of needed improvement and reconstruction projects. The project is staffed by a Utility Craftsman position for 4 months, Regional Wildlife Habitat Manager 1 month, and Temporary Aide 9.01 months.

CAPITAL IMPROVEMENT

All ground work and half of the concrete work at Mackay Reservoir was completed. The remaining concrete will be poured during the fall of 2002. Palisades Creek boat ramp was repaired, road graded and parking area graveled. At Menan Buttes a new perimeter fence was constructed including pedestrian walk through.

RENOVATION PROJECTS

During the year, seven new boat docks were constructed for use throughout the region. Geo web material was purchased for a stream bank stabilization project planned for the fall of 2002 at Warm Slough boat ramp.

OPERATIONS AND MAINTENANCE

Twenty-three (23) public boating access areas were maintained in the Upper Snake Region.

All areas were serviced on a weekly or more often basis, with trash pickups, rest room cleaning and general inspections.

Rest rooms were painted at Harrops Bridge, Mud Lake 'South' and Palisades Creek.

Road sides and parking areas were mowed as part of the routine maintenance schedule.

Weeds were sprayed as required.

CAPITAL IMPROVEMENTS

New Development Projects

Site	County	Renovations	Costs
Palisades Creek	Bonneville	Repair boat ramp.	\$3,000
Mackay Reservoir	Custer	Ramp upgrade.	5,000
Menan Buttes	Jefferson	Fence & Pedestrian entrance	3,000
Total			\$11000

Renovation Projects:

Site	County	Renovations	Costs
Upper Snake Region	As needed	Build replacement docks	5000
Warm Slough	Madison	Geo web for bank stabilization	1000
Total Costs			\$6,000

OPERATIONS AND MAINTENANCE

Twenty-three (23) public boating access areas will be maintained in the Upper Snake Region. Salary for Utility Craftsman 4 months, Regional Wildlife Habitat Manager 1 month, and Temporary Aide 4.51 months.

Costs \$16,344

SUMMARY OF COSTS

Salaries	\$40,099
Capital Improvements	11,000
Operations and Maintenance	16,344
Renovation	6,000
Overhead	14,911
 Total Costs	 \$88,354

**FEDERAL AID IN FISH RESTORATION
PERFORMANCE REPORT**

JOB TITLE: Motorboat Access - Salmon Region
GRANT NUMBER: F-77-B-17
PROJECT LEADER: Greg Painter
PROJECT PERIOD: July 1, 2001-June 30, 2002

CAPITAL IMPROVEMENTS

New Development Projects:

None.

Renovation Projects:

None.

OPERATIONS AND MAINTENANCE

Repair and upkeep to include cleaning toilets, controlling weeds, removal of refuse, pumping toilet vaults, signing, parking barriers, and painting.

Four (4) public boating access sites was maintained in the Salmon Region.

Costs	\$5556
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SUMMARY OF COSTS

Salaries	\$8,566
Operations and Maintenance	5,556
Capital Equipment	0
Overhead	2,951
Total Costs	\$17,073



Steven M. Huffaker, Director

**FEDERAL AID IN FISH RESTORATION
Job Performance Report**

AQUATIC EDUCATION PROGRAM

F-87-AE

Project 4

July 1, 2001 to June 30, 2002

Prepared by:

**David A. Cannamela, Superintendent
M-K Nature Center**

ANNUAL PERFORMANCE REPORT

State of: Idaho

Grant No.: F-87-AE

Project No.: 4

Title: Aquatic Education

Contract Period: July 1, 2001 to June 30, 2002

ABSTRACT

The Idaho Department of Fish and Game (IDFG) generated a minimum of \$157,897 in matching dollar value for the Federal Aquatic Education grant (Grant number [F-87-AE](#)) in Fiscal Year 2002 (July 1, 2001-June 30, 2002). This amount is about six percent more than the required amount (\$154,102). The State's portion of the match was generated through a number of Aquatic Education programs and activities conducted statewide by Idaho Department of Fish and Game personnel. Activities included fishing clinics, Project WILD, the Nose-to-Nose program, informal classroom presentations, media activities, and events and operations associated with the Idaho Department of Fish and Game's Morrison Knudsen Nature Center (MKNC), and support for conducting Idaho Salmon and Steelhead Days. The majority of the match was generated through fishing clinics (\$50,836) and MKNC activities (\$55,364, which does not include \$32,461 in state funding). Volunteer dollar equivalents accounted for 50 percent of the match (\$78,785), donations accounted for 23 percent of the match (\$36,651), and state funding accounted for 27 percent of the match (\$32,461 for funding MKNC personnel plus a \$10,000 contribution to Idaho Salmon and Steelhead Days).

The majority of our aquatic education funding was used to:

- conduct approximately 80 fishing "clinics" of various types;

- conduct several rod loaner programs;

- provide the aquatic portions of Project WILD to 350 teachers during eleven workshops;

- operate, maintain, and improve the MKNC, including conducting educational programs and producing educational exhibits;

- provide funding and personnel to conduct Idaho Salmon and Steelhead Days;

- produce Idaho fish identification placemats;

- produce fishing regulations pamphlets;

- produce at least 106 fish-related news releases;

- produce 18 fish-related video news releases;

- produce about 175 radio "spots", including shows, announcements, etc.;

provide coordination, services, and products for TV spots;
provide about 80 fish-related school presentations;
develop and produce a web magazine for the IDFG website;
maintain and improve the IDFG website.

Author:

David Cannamela, Superintendent
Nature Center



Steven M. Huffaker, Director

**FEDERAL AID IN FISH RESTORATION
Job Performance Report**

ANADROMOUS FISH MANAGEMENT PROGRAM

F-88-C-2

July 1, 2001 to June 30, 2002

Prepared by:

**Sharon W. Kiefer
Anadromous Fish Manager**

ANNUAL PERFORMANCE REPORT

State of: Idaho Grant: F-88-C-2, Anadromous Fish Management
Project No. 1 Title: Anadromous Fish Management
Contract Period: July 1, 2001 to June 30, 2002

OBJECTIVES

1. To provide management direction and oversight to research and hatchery programs designed to enhance sport-fishing opportunities for salmon and steelhead.
2. Provide technical and policy input into intergovernmental river management forums designed to enhance the survival of spawning, rearing and migrating salmon and steelhead.
3. Conduct salmon and steelhead sport fisheries that maximize angling opportunities within the constraints of wild fish conservation and recovery.
4. Coordinate activities among state, tribal and federal management entities.
5. Educate the public and policy makers regarding the importance of salmon and steelhead sport fishing and the best options to secure sustainable fisheries and recover ESA listed wild fish runs.

ABSTRACT

The Anadromous Fish Manager (Manager) and the Anadromous Fish Coordinator (Coordinator) provided management, direction, and oversight to implement a selective fishery for hatchery spring chinook in Idaho in 2002. A selective hatchery summer chinook fishery was also completed in 2001 and initiated in 2002 during the contract period. Substantial instate regional coordination was required to develop and implement monitoring for harvest share and wild fish impacts. There was additional fishery and monitoring coordination with the states of Washington and Oregon because two of the spring chinook fisheries in 2002 were conducted in border waters. Fishery implementation also required significant coordination and communication with National Marine Fisheries Service for fishery authorization and inseason modification and reporting. Hatchery oversight directed fish recycling into fisheries, broodstock programs, and outplants of surplus adults for natural production. Tribal coordination occurred to share harvest information and develop options for surplus hatchery adults in 2001 and 2002. In 2001, the Manager participated in a regional process to develop options for substantial surplus hatchery chinook, supported by the Pacific States Marine Fisheries Commission. This process was completed during the grant period. The use of hatchery chinook for adult outplants was reduced in 2002 due to lower runsize so instate coordination was sufficient for implementation. Public education about aspects of the 2002 spring chinook fishery was provided via agency website, press releases, and news media.

Similar activity took place for 2001-2002 steelhead fishery.

The Manager with the assistance of the Harvest Research Biologist, participated in negotiation with the Region's States, Tribes, USFWS and NMFS, to develop a 2001 Fall Management Agreement pursuant to U.S. v Oregon to effect Columbia River fall fisheries and related fall chinook, coho, and steelhead production agreements in Idaho. Staff also participated in continued implementation of the 2001 3-Year Spring Management Agreement. Negotiation to develop a long-term, new, Columbia River Fish Management Plan (CRFMP) continued with the Manager assigned to a "core-group" to complete products for US v Oregon policy review. The Harvest Research Biologist and the Natural Production Staff Biologist played key roles in assimilating and analyzing information for a Snake River steelhead escapement analysis to guide goal development for a new CRFMP.

The Migration Staff Biologist and the Manager participated in several forums to provide technical comment and policy support to enhance survival of Idaho spring and summer juvenile migrants and returning adults. Participation in key governmental forums included Fish Passage Advisory Committee (FPAC), Technical Management Team (TMT), and various Corps of Engineer committees (such as System Configuration Team [SCT]). Technical and policy support was provided to the State Implementation Team (IT) member. Substantial coordination occurred with the Region's states, tribes, and the USFWS to develop common strategies for inseason migration survival.

Anadromous Management staff reviewed, analyzed, and developed comments, in conjunction with State of Idaho, to documents affecting survival and recovery of Idaho salmon and steelhead including comments on the Implementation Plan for the Federal Columbia River Power System Biological Opinion (State of Idaho, September 28, 2001). Development of comments required substantial coordination with state policy personnel. In addition, staff assisted with development of subbasin assessments and submission of project proposal under the auspices of the NWPPC Provincial Review.

The Natural Production Staff Biologist continued work on primary spawner-recruit analyses to judge effectiveness of recovery management actions and to educate public and policy makers about effectiveness of recovery strategies. The Natural Production Staff Biologist also participated on the Interior Columbia Basin Technical Recovery Team during the contract period.



Steve Huffaker, Director

**Federal Aid in Sport Fish Restoration
2001 Annual Performance Report
Program FW-7-T-8**

TECHNICAL ASSISTANCE

- | | |
|----------------------|--|
| SUBPROJECT I | STATEWIDE TECHNICAL ASSISTANCE |
| Job 1. | Statewide Supervision and Coordination |
| SUBPROJECT I | FISHERY PROGRAM COORDINATION |
| Job 2. | Water Quantity Investigations |
| SUBPROJECT I | STATEWIDE TECHNICAL ASSISTANCE |
| Job 2. | Statewide Supervision and Coordination |
| SUBPROJECT II | STATEWIDE TECHNICAL ASSISTANCE |
| Job 1. | Panhandle Region Technical Assistance |
| Job 2. | Clearwater Region Technical Assistance |
| Job 3. | Southwest Region Technical Assistance |
| Job 4. | Magic Valley Region Technical Assistance |
| Job 5. | Southeast Region Technical Assistance |
| Job 6. | Upper Snake Region Technical Assistance |

BY

**Scott Grunder, Fishery Program Coordinator
Cindy Robertson, Fishery Staff Biologist
Ray Hennekey, Environmental
Jerome Hansen, Environment Staff Biologist
Robert C. Martin, Environmental Staff Biologist
Mike McDonald, Environmental Staff Biologist
Jim J. Mende, Environmental Staff Biologist
Don Kemner, Environmental Staff Biologist**

JOB PERFORMANCE REPORT

State of: Idaho Name: STATEWIDE TECHNICAL ASSISTANCE
Project: FW-7-T-8 Title: Statewide Supervision and Coordination
Subproject: 1 Job No.: 1
Period Covered: July 1, 2001 to June 30, 2002

ABSTRACT

During the contract period, the Idaho Department of Fish and Game (IDFG) continued consulting with Idaho Power Company (IPC) for the relicensing of hydroelectric facilities on the Snake River. This includes the Middle Snake projects, C.J. Strike, Malad, and Hells Canyon. The IDFG submitted relevant comments to the Federal Energy Regulatory Commission (FERC) and IPC. IDFG staff also participated in relicensing efforts for PacifiCorp's Bear River projects and Avista Corporation's Spokane River projects. Of note, a settlement agreement was reached with PacifiCorp on their Bear River projects. It establishes significant funding for the restoration, enhancement, and protection of Bonneville cutthroat trout in the Bear River drainage.

As in the last contract year, in coordination with the Office of the Idaho Attorney General, the IDFG has reviewed a number of preliminary applications for permit to develop hydropower on Idaho rivers, streams, and canals. We intervened in many of these proposals since we believe these projects could adversely impact fish, wildlife, and riparian resources.

The fishery program coordinator served his first full year as the fisheries biologist representative on the Idaho Forest Practices Act Advisory Committee. Modest changes to the current rules were deemed acceptable by the interdisciplinary committee to protect fish and wildlife habitats.

Author:
Scott A. Grunder
Fishery Program Coordinator

JOB PERFORMANCE REPORT

State of: Idaho Name: FISHERY PROGRAM
COORDINATION

Project: FW-7-T-8 Title: Water Quantity Investigations

Subproject: I Job No.: 2

Period Covered: July 1, 2001 to June 30, 2002

ABSTRACT

During the project period, I participated in ongoing negotiations with state, federal, private, and tribal representatives to resolve ESA concerns in the Salmon and Clearwater river basins. I also represented the Idaho Department of Fish and Game (IDFG) in continuing in the Snake River Basin Adjudication and state instream flow proceedings.

Author:

Cindy Robertson
Fishery Staff Biologist

JOB PERFORMANCE REPORT

State of: Idaho Name: STATEWIDE TECHNICAL ASSISTANCE
Project: FW-7-T-8 Title: Panhandle Region Technical Assistance
Subproject: II Job No.: 1
Period Covered: July 1, 2001 to June 30, 2002

ABSTRACT

The Environmental Staff Biologist for the Panhandle Region of the Idaho Department of Fish and Game provided technical assistance on over 500 occasions during the reporting period.

Author:

Ray Hennekey
Environmental Staff Biologist

JOB PERFORMANCE REPORT

State of: Idaho Name: STATEWIDE TECHNICAL ASSISTANCE
Project: FW-7-T-8 Title: Clearwater Region Technical Assistance
Subproject: II Job No.: 2
Period Covered: July 1, 2001 to June 30, 2002

ABSTRACT

Technical assistance was provided on about 441 occasions on proposals, issues, and developments that might affect fish and wildlife resources in the Clearwater Region. Assistance included document review, written and verbal response, site visits, meetings, and internal and external consultation. Primary activities included Clearwater sub-basin planning activities, Clearwater Elk Initiative, U.S. 95 expansion and associated terrestrial and wetland mitigation actions, continued development of the Long Gulch wetland/fishing site, and the Camas Prairie Railroad abandonment/stream restoration effort. Programmatic efforts continued with input and site visits to Idaho Department of Water Resources/U.S. Corps of Engineers (COE) stream alteration proposals and dredging applications, other Idaho Transportation Department highway projects, Idaho Department of Lands (IDL) timber sales and other land management activities, county and community development issues, and assisting with fisheries and wildlife monitoring and public meetings. During the course of FY2002, the Environmental Staff Biologist (ESB) began supervising the Senior Wildlife Technician position in the Clearwater Region. The Senior Wildlife Technician will be involved in a variety of activities, including Pheasant Initiative and wildlife depredation activities in Latah County, coordination with the Latah Natural Resources Conservation Service office, and access and other habitat issues.

Authors:

Jerome Hansen
Environmental Staff Biologist

Wildlife - Jay Crenshaw, Sam McNeil, Steven Nadeau, George Pauley, Jim White, Miles Benker, Rita Dixon, James Teare
Fisheries - Ed Schriever, Jody Brostrom, Larry Barrett, Chris Claire, and Tim Cochnauer

JOB PERFORMANCE REPORT

State of: Idaho Name: STATEWIDE TECHNICAL ASSISTANCE
Project: FW-7-T-8 Title: Southwest Region Technical Assistance
Subproject: II Job No. 3
Period Covered: July 1, 2001 to June 30, 2002

ABSTRACT

During the reporting period covered by this report, the Southwest Regional Environmental Staff Biologist provided comments, technical reviews, and support on approximately 470 occasions to federal and state agencies, local governments, individuals, and private organizations. Assistance included both written and verbal conveyance of anticipated effects to fish and wildlife populations or their associated habitats and recommendations to minimize or mitigate impacts.

Author:

Robert C. Martin
Environmental Staff Biologist

JOB PERFORMANCE REPORT

State of: Idaho Name: STATEWIDE TECHNICAL ASSISTANCE
Project: FW-7-T-8 Title: Magic Valley Region Technical
Assistance
Subproject: II Job No.: 4
Period Covered: July 1, 2001 to June 30, 2002

ABSTRACT

During the period July 1, 2001 through June 30, 2002, the Magic Valley Region environmental staff biologist provided technical review, comment, and support on approximately 326 occasions to federal and state agencies, local governments, and individual and private organizations. Technical assistance provided by the environmental staff biologist addressed direct and indirect impacts to fish and wildlife populations and/or habitats. Stream channel alterations, water rights, water quality working groups, hydropower reviews, urban development, and public land livestock grazing constituted the majority of the workload. All activities were coordinated and reviewed with the appropriate regional staff and state office personnel for accuracy, thoroughness, and adherence to Idaho Department of Fish and Game (IDFG) policy.

Author:

Mike McDonald
Environmental Staff Biologist

JOB PERFORMANCE REPORT

State of: Idaho Name: STATEWIDE TECHNICAL ASSISTANCE
Project No.: FW-7-T-8 Title: Southeast Region Technical Assistance
Subproject No.: II Job No.: 5
Period Covered: July 1, 2001 to June 30, 2002

ABSTRACT

The Southeast Region Environmental Staff Biologist (ESB), with support from wildlife, fisheries and habitat staff, provided technical assistance to public and private organizations in the form of field inspections, meeting attendance, project document reviews, and verbal and written response on about 150 occasions. The four largest issues in the Southeast Region during FY 2001 included the Bear River Hydroelectric Projects re-licensing, Northwest Power Council Provincial Reviews - Subbasin Summary, several large Idaho Department of Transportation projects and the continuation of the amendment process on the Curlew National Grasslands plan. Underlying these issues is the potential ESA listing of the sage grouse and possible resubmission of the petition for ESA listing of Bonneville cutthroat trout. In addition, human population expansion from the Wasatch Front in Utah continues to impact winter range and other important wildlife habitats in southern counties. The Department continues to review proposed subdivisions and provide recommendations to cities/counties to protect important wildlife habitats. Finally, numerous Watershed Advisory Groups (WAG's) and several Basin Area Groups (BAG's) meetings, from the Senate Bill 1284 process, were attended.

Author:

Jim J. Mende
Environmental Staff Biologist

JOB PERFORMANCE REPORT

State of: Idaho Name: STATEWIDE TECHNICAL ASSISTANCE
Project FW-7-T-8 Title: Upper Snake Technical Assistance
Subproject: II Job No.: 6
Period Covered: July 1, 2001 - June 30, 2002

ABSTRACT

During the contract period, the Upper Snake Region environmental staff biologist (ESB) provided comment, technical review, and support on approximately 279 occasions to federal and state agencies, local governments, individuals, and private organizations. Assistance included both written and verbal conveyance of anticipated effects to fish and wildlife populations, their associated habitats, implications to hunting and fishing, and recommendations to minimize or mitigate impacts.

Significant activities that required extensive amounts of time included: participation with the stream channel alteration proposals; 404 wetland alteration proposals; coordination of hydropower-related reviews; new water rights and transfers; reservoir and river flow management; transportation projects; Bonneville Power Administration's sub-basin summaries and fish and wildlife mitigation proposals; and other private, state, and federal land management activities. Activities were coordinated and reviewed with the appropriate regional staff and state office personnel for accuracy, thoroughness, and adherence to Idaho Department of Fish and Game (IDFG) policies.

Non-technical assistance (paid for with license dollars) was provided to IDFG projects. Non-technical assistance included: trapping mule deer for a fawn survival study; spawning fish at Henrys Lake; conducting a sage grouse lek route; trapping sage grouse for a sage grouse study; trapping and moving nuisance moose; conducting prey species abundance surveys; hunting check stations; and conducting a fish survey on the Henrys Fork River. These activities are not accounted for in the technical assistance results section.

Author:

Don Kemner
Environmental Staff Biologist