

ANNUAL REPORT
FISCAL YEAR 1990

National Fish Hatchery

Station

Hagerman, Idaho

City, State

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INTRODUCTION

The Hagerman National Fish Hatchery (NFH) is located along the Snake River, about 30 miles northwest of Twin Falls, Idaho at a point three miles south and two miles east of Hagerman, Idaho. The hatchery was authorized by 46 Stat. 371 on May 21, 1930 and was established in 1931. Construction of the physical facilities commenced in 1932 and fish production began in 1933. The primary goal of the hatchery was the production of rainbow trout for stocking in Idaho, eastern Oregon and northern Nevada.

In the late 1970's the hatchery became part of the Lower Snake River Fish and Wildlife Compensation Plan which was authorized by the Water Resources Development Act of 1976, Public Law 94-587. This plan was designed to help mitigate the losses caused by the construction of four dams on the lower Snake River. For its part in the compensation plan, the hatchery's primary production goal was changed from rainbow to steelhead trout. The U. S. Fish and Wildlife Service entered into an agreement with the U. S. Army Corps of Engineers and the Idaho Department of Fish and Game (IDFG) to annually rear 340,000 pounds of summer steelhead trout at 4 to 5 fish per pound at Hagerman National Fish Hatchery. To implement the new production goals, the hatchery was rebuilt and expanded by the Corps of Engineers from June 1982 through April 1984.

Hagerman NFH has an agreement with Dworshak NFH to produce about 200,000 rainbow trout at 5 to 6 inches in length for release in Dworshak Reservoir, Idaho. This agreement is to offset lost production at Dworshak NFH due to IHN virus problems, and to reduce the chances of IHN-infected fish being stocked in Dworshak Reservoir.

Major facilities include 102 concrete raceways, two hatchery-rearing buildings with a total of 66 rearing tanks, an administration-visitor facility building, a combination shop-four stall garage, four residences, an oil-paint building, and two general storage buildings.

The hatchery's water supply is spring fed at a constant 59°F with a flow rate of approximately 30,000 gallons per minute. Water rights, under Idaho law, are both statutory and constitutional. Water rights for the hatchery total 31,957 gpm from 6 different sources. They include Riley Creek, Brailsford Ditch, Bickel Ditch, Spring No. 17, Spring No. 13, and miscellaneous springs and seeps. The State of Idaho is in the process of completely adjudicating water rights in the Snake River basin, which will further refine the hatchery's water rights within a few years.

STATION OPERATIONS

Item II of the Service's Fishery Statement of Responsibilities and Roles is "to seek and provide for mitigation of fishery resources adversely impacted by federal water development projects". Hagerman NFH's two production programs for fiscal year 1990 (FY90), steelhead trout for the Lower Snake River Compensation Plan and rainbow trout for Dworshak Reservoir, are in complete compliance with Item II.

Fish Culture Operations - Steelhead Trout

The steelhead production goal of Hagerman NFH is 340,000 lbs of smolts between 4 to 5 fish/lb. Hagerman NFH also has an agreement with Dworshak NFH for the production of steelhead fingerlings around 30 fish/lb. This added production is to offset the IHN virus mortalities that occur at Dworshak NFH during the early stages of fish rearing. All costs for the added production are reimbursed to Hagerman NFH by Dworshak NFH.

Broodyear 1989 steelhead eggs were received from March through June 1989. Eggs received included 1,491,956 "A" strain from the Sawtooth State Fish Hatchery (IDF&G) and 2,596,814 "B" strain from Dworshak NFH. There were 1,626,432 "B" strain fingerlings (48,995 lbs) returned to Dworshak NFH during FY89. Excess "A" strain steelhead were transported by the Washington Department of Fisheries to Lyons Ferry State Fish Hatchery, Washington during September (FY89) and October 1989. Excess "A's" totaled 238,255 (3,550 lbs) for FY89 and 93,023 (2,900 lbs) for FY90.

Survival from eyed-eggs to distribution was 88.0% and 80.2% for "A" and "B" strain steelhead, respectively. From the end of February through April, occasional outbreaks of bacterial gill disease caused moderate fish mortalities. Affected raceways were treated on two consecutive days with 6.5 ppm Chloramine-T for 1 hour with good success.

Broodyear 1990 steelhead eggs were received from March through June 1990. Eggs received included 695,521 "A" strain from Sawtooth State Fish Hatchery (IDF&G), 883,304 "A" strain from Pahsimeroi State Fish Hatchery (IDF&G), and 2,450,469 "B" strain from Dworshak NFH. A total of 949,745 "B" strain fingerlings (22,715 lbs) were returned to Dworshak NFH during July and August 1990. Excess "B" strain fingerlings totaling 540,733 (16,465 lbs) were distributed to the East Fork Salmon River, Idaho, in September 1990.

Survival of broodyear 1990 from eyed-eggs to September 30, 1990 was 93.2% and 88.5% for "A" and "B" strain steelhead, respectively. In June, one raceway of "B" steelhead contracted IHN virus and had heavy mortalities. The fish in that raceway were destroyed in an attempt to prevent the further spread of the virus. Two weeks later the virus appeared in the adjoining raceways with moderate to heavy mortalities. After fish mortalities in the infected raceways had dropped to near normal, all raceways that tested positive for IHN virus were distributed as excess to the East Fork Salmon River, below the fish trap.

Feed conversion for all steelhead lots in FY90 was 1.28 at a feed cost/lb of weight gain of \$0.33. The average cost/lb of steelhead feed was \$0.26.

Distribution - Steelhead Trout

Distribution of production steelhead smolts occurred between April 4 and May 1, 1990. Distribution went smoothly with the release of 1,439,266 smolts at 4.24 fish/lb and a total weight of 339,520 lbs (99.9% of production goal by weight). Of this, 981,764 were "A" strain smolts

(224,165 lbs) and 457,502 were "B" strain smolts (115,355 lbs). "A" strain smolts were released in the Salmon and Little Salmon Rivers, Idaho. "B" strain smolts were planted in the Little Salmon and East Fork Salmon Rivers, Idaho. Mortalities during hauling equaled 2,308 fish. Steelhead distribution required 59 trips with a total of 27,276 miles, of which, 4 trips and 2,016 miles were driven by IDF&G drivers.

Fish Culture Operations - Rainbow Trout

Hagerman NFH has an agreement with Dworshak NFH to produce 100,000 Arlee strain and 100,000 Shasta strain rainbow trout, 5 to 6 inches in length, for release in Dworshak Reservoir, Idaho. All costs are reimbursed to Hagerman NFH by Dworshak NFH. Eggs were received from Ennis NFH, Montana, totalling 157,097 Arlee strain on December 27, 1989, and 168,831 Shasta strain on January 3, 1990. Excess rainbow trout were transferred to Hagerman State Fish Hatchery, Idaho, in February 1990. Excess fish totaled 10,197 Arlee strain (61 lbs) and 23,575 Shasta strain (91 lbs).

Survival rate from eyed-egg to distribution was 78.9% and 78.1% for Arlee and Shasta strains, respectively. Combined feed conversion for both strains was 0.99 at a feed cost/lb of fish gain of \$0.29. The average cost/lb of fish feed was \$0.29.

Distribution - Rainbow Trout

A total of 113,817 Arlee (7,400 lbs) and 108,209 Shasta (6,950 lbs) strain rainbow trout were released in Dworshak Reservoir from May 8 to 10, 1990. The rainbow trout averaged 5.1 inches in length. Distribution required 4 trips and 3,182 miles for completion. Mortalities during hauling equaled 28 fish. Distribution trucks were driven onto an Army Corps of Engineer barge for transport out into the reservoir for fish releases.

Experiments/Studies - Diet Test

A study was conducted at Hagerman NFH comparing fish growth between fish fed the Hagerman steelhead diet (contract feed) and a new commercial salmon diet (BioSponge salmon grower). Parameters examined included feed conversion, feed cost/lb of fish gain, and condition factors.

Four raceways (2 control and 2 test), averaging about 22,600 "A" strain steelhead each, were used. Fish averaged around 5.0 inches in length with 21.85 fish/lb at the start. Amount of food fed each raceway was calculated by adjusting the hatchery constant to reach a release size of 4.50 fish/lb (8.4 inches) by April 1, 1990. The study ceased on March 21, 1990, with each raceway being inventoried and random fish samples removed for condition factors.

Feed conversion of fish fed BioSponge salmon grower was better than the control group, 1.05 vs. 1.16. This better conversion, though, was offset by the higher cost/lb of fish gain of the BioSponge, \$0.34 vs. \$0.28 for BioSponge and contract feed, respectively. There was very little difference between groups when comparing growth and condition factor.

Further studies with this new commercial feed may be warranted. Fish should be fed the diet earlier in their development, tagged, and adult returns compared.

Experiments/Studies - Large Growth Study

The purpose of this study is to test whether large steelhead smolts have a higher return rate as adults than normal production smolts. "A" strain steelhead from the same egg take were split into 2 groups of 5 raceways each. The control group contains 16,628 fish/raceway and will be raised to a length of 8.43 inches (4.50 fish/lb). The test group contains 12,000 fish/raceway and will be raised to a length of 9.94 inches (2.75 fish/lb). Fish in both groups have received coded wire tags. Both groups should have similar density indexes and load factors at the time of release. The fish are scheduled to be released in mid-April 1991.

Training

Hagerman NFH actively participated in the Region One Fishery Employee Development Program. Fiscal Year 1990 participants were Kathy Clemens, Richard Bottomley and Edward Stege. Additional training received by hatchery staff included:

Dave Bruhn Manager	Pre-Retirement Counselling	8/28-30/90	Reno, NV
	CGS session on "Emerging Small Businesses"	1/9/90	Portland, OR
Richard Bottomley Fishery Biologist	dBase III Plus	1/18 - 2/13/90	Twin Falls, ID
Edward Stege Fishery Biologist	Introduction to Fish Health	9/10-14/90	Gresham, OR
	Lotus 1-2-3, Level 1	6/26 - 7/12/90	Twin Falls, ID
Bea Martindale Fisheries Program Assistant	WordPerfect	4/12 - 5/17/90	Twin Falls, ID
Brian Clifford Animal Caretaker	Coldwater Fish Culture	3/5-16/90	Bozeman, MT

Official Visitors

Official visitors to the station included:

Bud Ainsworth, Idaho Dept. of Fish and Game, Filer, ID
Rick Alsager, Idaho Dept. of Fish and Game, Stanley, ID
Danny Baker, Idaho Dept. of Fish and Game, Wendell, ID
Dave Cannemela, Idaho Dept. of Fish and Game, Eagle, ID
Kathy Clemens, U. S. Fish and Wildlife Service, Ahsahka, ID
Travis Coley, U. S. Fish and Wildlife Service, Ahsahka, ID
Congressmen Larry Craig, Washington, D. C.
Ed Crateau, U. S. Fish and Wildlife Service, Boise, ID
Dan Diggs, U. S. Fish and Wildlife Service, Portland, OR
Stefan Dobert, Video Contractor, Boise, ID
Chuck Eggleston, U. S. Fish and Wildlife Service, Portland, OR
Dan Herrig, U. S. Fish and Wildlife Service, Boise, ID
Steven Huffaker, Idaho Dept. Fish and Game, Boise, ID
Paul Kucera, Nez Perce Tribe, Lapwai, ID
Dave Langford, U. S. Fish and Wildlife Service, Portland, OR

Heung Ku Lee, Korea Feed Association, Seoul, Korea
Jae-Yong Lee, Ministry of Agriculture, Forestry & Fisheries, Seoul, Korea
Joe Leintz, U. S. Fish and Wildlife Service, Ahsahka, ID
Jerry Mowery, Idaho Dept. of Fish and Game, Wendell, ID
Rob Ochs, U. S. Fish and Wildlife Service, Portland, OR
Wayne Olson, U. S. Fish and Wildlife Service, Ahsahka, ID
Tom Rogers, Idaho Dept. of Fish and Game, Boise, ID
Scott Spaulding, Sho/Ban Tribes, Fort Hall, ID
Kenny Whang, American Soybean Association, Seoul, Korea
Robert Winfree, U. S. Fish and Wildlife Service, Hagerman, ID
Steve Yundt, Idaho Dept. of Fish and Game, Boise, ID

STATION CYCLICAL MAINTENANCE/CONSTRUCTION

<u>Item</u>	<u>Cost</u>
Retaining wall on Spring 17	20,651
Steel siding for hatchery I and paint/oil buildings	9,680
Fabricate 3 fuel tanks for fish transport unit generators	375
Modification of new feed truck	955
Work on water service building	<u>3,351</u>
TOTAL	\$35,012

FUTURE OUTLOOK

In recent years, bacterial gill disease outbreaks have occurred in the steelhead section of the hatchery on the 2nd and 3rd decks. Outbreaks usually occur in the last 2 to 3 months before distribution, when load factors are the greatest. To try to solve this environmental problem, the number of fish/raceway was increased by 10% on the 1st deck (first pass water), while decreasing by 10% on the 3rd deck. If bacterial gill disease problems continue to exist, hatchery production goals may have to be decreased to ensure a healthy smolt at the time of release.

Dworshak NFH is in the process of receiving a new intake water line from Dworshak Reservoir. It is hoped that with this new water, the rainbow trout program will eventually be returned to Dworshak NFH. This would help alleviate the water shortage in Hagerman's steelhead section just before distribution.

Hagerman valley has had a population explosion of black crown night herons and great blue herons. As surrounding hatcheries erect bird exclosures, increasing bird predation pressure is put on the National Fish Hatchery. We are in the process of evaluating various bird exclosure designs and options. Some type of bird exclosure will probably be erected in 1991.

REVIEW OF FISH RELEASES COMPARED WITH GOALS OF COLUMBIA RIVER FISH MANAGEMENT PLAN

The Columbia River Fish Management Plan, dated November 9, 1987, includes fish release goals for Hagerman: (1) 500,000 steelhead "A" smolts at Sawtooth hatchery; (2) 93,500 "A" smolts to the Little Salmon River; (3) 500,000 "B" smolts at the East Fork Salmon River trap; and (4) 93,500 "B" smolts to the Little Salmon River.

Actual releases, as listed on pages two and three of this report, deviated considerably from the Columbia River Plan. The annual steelhead program fluctuates due to availability of eggs and program adjustments. Until such time as adequate eggs are annually available from the Salmon River adult returns, it is anticipated that Hagerman's steelhead production will not match the goals of the Columbia River Plan.

FISH AND FISH EGG DISTRIBUTION SUMMARY

Fiscal Year: 1990

Station: Hagerman, ID NFH

Species	Fish or Fish Egg Number	Fish		Management Area	State	Agency
		Total Weight	Length			
1	2	3	4	5	6	7
SIT	93,023	2,900	4.4	Lyons Ferry SFH	WA	STG
RBT	33,772	152	2.1	Hagerman SFH	ID	STG
SIT	949,745	22,715	4.0	Dworshak NFH	ID	COE
RBT	222,026	14,350	5.1	Clearwater Nat'l Forest	ID	COE
SIT	301,156	69,220	8.5	Sawtooth Nat'l Forest	ID	INT
SIT	805,178	79,365	6.4	Challis Nat'l Forest	ID	INT
SIT	399,848	89,605	8.5	Salmon Nat'l Forest	ID	INT
SIT	473,817	117,795	8.8	Payette Nat'l Forest	ID	INT
Total	3,278,565	396,102				

HATCHERY PRODUCTION SUMMARY (Intensive Culture)

Station: Hagerman, ID NFH		Period Covered: October 1, 1989 through September 30, 1990											
Species/Strain and Lot Number	Fish on Hand Last Day of Period										To Date This Fiscal Year		
	Number	Weight	Length	D.I.	F.I.	Weight Gain	Feed Expended		Conversion	Percent Survival			
							Pounds	Costs					
1	2	3	4	5	6	7	8	9	10	11			
STT/B	-0-	-0-	-0-	-0-	-0-	22,381	36,128	8,734.92	1.61	82.1			
9-DW-36	-0-	-0-	-0-	-0-	-0-	25,384	40,784	9,941.61	1.61	82.5			
STT/B	-0-	-0-	-0-	-0-	-0-	46,335	63,259	15,356.69	1.37	92.4			
9-DW-37	-0-	-0-	-0-	-0-	-0-	199,051	257,227	62,898.14	1.29	88.3			
STT/B	-0-	-0-	-0-	-0-	-0-	7,415	6,882	2,030.68	.93	97.7			
9-DW-38	-0-	-0-	-0-	-0-	-0-	7,001	7,413	2,178.91	1.06	89.3			
STT/A	-0-	-0-	-0-	-0-	-0-	33,680	38,498	11,751.96	1.14	87.2			
9-UID-39	-0-	-0-	-0-	-0-	-0-	7,076	7,954	2,458.63	1.12	100.4			
RBT/ARLEE	-0-	-0-	-0-	-0-	-0-	22,021	22,769	7,411.40	1.03	95.9			
RBT-ARD-89-ENN	-0-	-0-	-0-	-0-	-0-	14,618	14,656	4,587.08	1.00	97.8			
RBT/SHASTA	-0-	-0-	-0-	-0-	-0-								
RBT-SSD-89-ENN	-0-	-0-	-0-	-0-	-0-								
STT/B	138,571	6,345	4.983	.08	.28								
STT-CRW-90-DWD-1	148,443	5,709	4.702	.13	.49								
STT/B	392,082	12,534	4.421	.14	.48								
STT-CRW-90-DWD-2	561,267	14,812	4.147	.12	.44								
STT/B													
STT-CRW-90-DWD-3													
STT/A													
STT-SAW-90-ID-1													
Totals/Averages													

(CONT'D)

FISH HEALTH ACTIVITIES SUMMARY
 NATIONAL FISH HATCHERY

Fiscal Year: 1990

Station: Hagerman, ID NFH

1 Problem/Incident/Activity	2 Species	3 Therapeutic Treatment	4 Results/Comments
Myxobacteria/Experimental	Steelhead Trout	Chloramine-T 6.5ppm/hour. Two treatments per raceway.	Very successful-reduced mortality.
Egg Disinfection	Steelhead Trout Rainbow Trout	Argentyn 100 ppm for 10 minutes.	Routine disinfection.

Chemical Summary:

Chemical: Argentyn Purpose: Egg Disinfection Total Amount Used: 4.3 gallons Total Cost: \$ 84.57
Chloramine-T Myxobacteria/Experimental 279 lbs. 1,672.44
Propoly Aqua Fish Distribution 130 gallons 1,816.93

Station: Hagerman, ID NFH

OPERATIONS/MAINTENANCE COST DATA

Fiscal Year: 1990

Funding Source				
Operations (Fisheries) (4710) 1	Cyclical Maintenance (Fisheries) 2	Quarters Maintenance (8610) 3	Other Funding 4	
275,010				
14,327				
3,487				
7,106				
0				
0				
0				

1. Salaries, Permanent (Including Benefits):

2. Salaries, Temporary (Including Benefits):

3. Operating Costs:

A. Utilities

1. Telephone

2. Electricity

3. Heating Oil

4. Natural Gas

5. Other

B. Vehicle Maintenance

1. Distribution Vehicles

Total Mileage: 37,879

OPERATIONS/MAINTENANCE COST DATA

Fiscal Year: 1990

Station: Hagerman, ID NFH

	Funding Source			
	Operations (Fisheries) (4710) 1	Cyclical Maintenance (Fisheries) 2	Quarters Maintenance (8610) 3	Other Funding 4
861				
10,020				
133,460				
2,189				
380				
0				
544				
10,018				

3. B. Vehicle Maintenance (continued)

2. Non-Distribution Vehicles

Total Mileage: 35,184

C. Fuel for Vehicles/Equipment

D. Supplies

1. Fish Food

2. Chemicals/Drugs

3. Fertilizer

4. Tags and Tagging Supplies

5. Office Supplies/Custodial/Other Supplies

E. Travel

OPERATIONS/MAINTENANCE COST DATA

Fiscal Year: 1990

Station: Hagerman, ID NFH

	Funding Source			
	Operations (Fisheries) (4710) 1	Cyclical Maintenance (Fisheries) 2	Quarters Maintenance (8610) 3	Other Funding 4
3. F. Moving Expense	36,922			
G. Miscellaneous (List)	0			
4. Operations (Total: Lines 1, 2, 3A-G)	494,324			
5. Vehicles/Equipment Purchased (Over \$1,000)	0			
6. Cyclical Maintenance	37,394			
7. Quarters Maintenance	0		7,120	
8. Total Maintenance (Total: Lines 5, 6, and 7)	37,394			
9. Column Totals (Total: Lines 4 and 8)	531,718		7,120	

\$ 538,838

10. Total Expenditures (Add Totals of Column 1-4)

REPORT OF STATION PERSONNEL

Fiscal Year: 1990

Station: Hagerman, ID NFH

Part I - Permanent Personnel (FTE's: 8.0)

Name Of Employee	Functional Title	Grade	Period Worked	Remarks
David S. Bruhn	Supv. Fishery Biologist	12	89/10/1 - 90/9/30	
Harry T. Shaw	Supv. Fishery Biologist	11	89/10/1 - 90/9/30	
Edward H. Stege	Fishery Biologist (Mgmt)	7	90/3/11 - 90/9/30	
Beatrice M. Martindale	Fisheries Program Asst.	6	89/10/1 - 90/9/30	
M. J. Kirsch, Jr.	Maintenance Worker	8	89/10/1 - 90/9/30	
Michael G. Jackbosen	Motor Vehicle Operator	8	89/10/1 - 90/9/30	
Samuel D. Martindale	Motor Vehicle Operator	8	89/10/1 - 90/9/30	

Part II - Temporary Personnel (FTE's: .7)

Name Of Employee	Functional Title	Grade	Period Worked	Remarks
Buddy L. Compher	Animal Caretaker	2	90/8/7 - 90/9/30	
Dan Feil	Animal Caretaker	2	89/10/1 - 90/8/12	
Evan Gridley	Motor Vehicle Operator	8	90/4/3 - 90/5/1	
Fred W. Featherston	Motor Vehicle Operator	8	90/4/3 - 90/5/1	

REPORT OF STATION PERSONNEL

Fiscal Year: 1990

Station: Hagerman, ID NFH

Part I - Permanent Personnel (FTE's:)				
Name Of Employee	Functional Title	Grade	Period Worked	Remarks
Brian P. Clifford	Animal Caretaker	5	89/10/1 - 90/9/30	
Richard Bottomley	Fishery Biologist (Mgmt)	7	89/10/1 - 90/6/16	
Kathleen Clemens	Fishery Biologist (Mgmt)	9	89/10/1 - 89/11/5	
Part II - Temporary Personnel (FTE's:)				
Name Of Employee	Functional Title	Grade	Period Worked	Remarks

FIVE YEAR HATCHERY PRODUCTION SUMMARY

Station: Hagerman, ID NFH

		Fiscal Year				
		19 90	19 89	19 88	19 87	19 86
I. Fish Production Data						
Intensive Culture:						
Fish Weight Gain (pounds)		404,599	383,773	375,297	371,107	378,949
Fish Numbers		2,151,246	1,743,604	1,976,914	2,087,180	1,835,763
Percent Survival		92.2	94.1	94.7	94.1	87.3
Feed Conversion		1.27	1.33	1.22	1.15	1.19
Extensive Culture:						
Fish Weight Gain (pounds)						
Fish Numbers						
Percent Survival						
Pounds per Acre						
II. Broodstock Production Data:						
Number of Females Spawmed						
Number of Eggs						
Number of Fish						
III. Management Data:						
Full-Time Equivalents		8.0	8.3	8.6	8.9	9.3
Operational Costs		494,324	493,335	449,250	506,540	441,819
Vehicle/Equipment Costs (Items over \$1,000)		0	14,037	14,235	29,948	11,600
Cyclical Maintenance Costs		37,394	12,475	55,100	36,123	24,300
Quarters Costs		7,120	6,268	6,851	7,100	6,500

FISH AND FISH EGG DISTRIBUTION SUMMARY

Fiscal Year: 1990

Station: HAGERMAN NFH, ID

Species	Fish or Fish Egg Number	Fish		Management Area	State	Agency
		Total Weight	Length			
Steelhead	93,023	2,900	4.4	LYONS FERRY	WA	State Government
Rainbow trout	108,209	6,950	5.0	CLEARWATER N	ID	Corps of Engineers
Steelhead	949,745	22,715	4.0	DWORSHAK NFH	ID	Fish and Wildlife Service
Rainbow trout	23,575	91	2.0	HAGERMAN SFH	ID	State Government
Steelhead	540,733	16,465	4.4	CHALLIS NATI	ID	International
Steelhead	200,295	45,940	8.5	CHALLIS NATI	ID	Lower Snake River Compensation P
Steelhead	80,465	19,400	8.7	PAYETTE NATI	ID	Lower Snake River Compensation P
Steelhead	64,150	16,960	8.9	CHALLIS NATI	ID	Lower Snake River Compensation P
Steelhead	393,352	98,395	8.8	PAYETTE NATI	ID	Lower Snake River Compensation P
Rainbow trout	113,817	7,400	5.1	CLEARWATER N	ID	Corps of Engineers
Rainbow trout	10,197	61	2.3	HAGERMAN SFH	ID	State Government
Steelhead	301,156	69,220	8.5	SAWTOOTH NAT	ID	Lower Snake River Compensation P
Steelhead	399,848	89,605	8.5	SALMON NATIO	ID	Lower Snake River Compensation P