

ANNUAL REPORT

FISCAL YEAR 1995

Hagerman National Fish Hatchery  
Station

Hagerman, Idaho  
City, State

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Project Leader

12/18/95  
Date

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## INTRODUCTION

The Hagerman National Fish Hatchery (NFH) is located along the Snake River, about 30 miles west 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 1932. 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 (LSRCP); which was authorized by the Water Resources Development Act of 1976, Public Law 94-587. This plan was designed to mitigate for fish and wildlife losses caused by 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 resident rainbow trout to steelhead trout. The U. S. Fish and Wildlife Service entered into an agreement with the U. S. Army Corps of Engineers and Idaho Department of Fish and Game (IDFG) to annually rear 340,000 pounds of summer steelhead trout at 4 to 5 fish per pound (8 inches) at Hagerman NFH. To implement the new production goals, the hatchery was rebuilt and expanded, at a cost of \$7.0 million, by the Corps of Engineers from June 1982 through April 1984.

There are 102 outside raceways at the hatchery. Of these, 66 are devoted to Compensation Plan steelhead trout production and 36 are reserved for other programs which the Fish and Wildlife Service deems appropriate. Other major facilities include 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 storage building, and two general storage buildings.

The hatchery's water supply is spring-fed at a constant 59 degrees Fahrenheit with a flow rate of approximately 30,000 gallons per minute. Water rights, under Idaho law, are both statutory and constitutional. A total of 17 spring sources are identified on the Fish and Wildlife Service property; several of which are dedicated for the adjacent Hagerman Lab.

## STATION OPERATIONS

As part of the Lower Snake River Compensation Plan, the Hagerman NFH provides partial mitigation for summer steelhead losses due to the construction of four federal dams on the lower Snake River. Within this overall framework, specific goals and objectives for the hatchery's steelhead production are established through a high degree of interagency coordination. An adult return goal of 13,600 fish above Lower Granite Dam has been established for the Hagerman NFH program.

A variety of basin-wide efforts have been implemented to coordinate anadromous hatchery production programs. These activities will continue to affect certain aspects of the production program, such as numbers and strains reared, time and size at release, and location of release. This will be particularly important as it relates to affects on recovery plans for anadromous species listed or proposed for listing under the Endangered Species Act (ESA).

### Fish Culture Operations

#### Brood Year 1995

The Brood Year (BY) 1995 production goal for Hagerman NFH was 1,380,000 smolts at a target size of 5.0 fish per pound (170-220 mm). To meet this goal, eyed steelhead trout eggs were received from IDFG's Sawtooth and Oxbow state fish hatcheries during late May and early June, 1995. All eggs were "A" strain steelhead trout. A total of 343,000 were Pahsimeroi stock, 679,465 Oxbow (Hell's Canyon) stock, and 562,513 were Sawtooth stock. Approximately 98% of both Pahsimeroi and Sawtooth eggs hatched successfully, while 96% of the Oxbow eggs hatched successfully.

Coldwater Disease was responsible for low level mortalities of steelhead fry during June 1995. No treatment was necessary, as mortalities quickly returned to normal levels.

During July, August, and September, 1,525,680 fingerlings were moved into outdoor raceways. All fish were vaccinated for ERM (Yersinia ruckeri) at size range of 100-150 fish per pound, with the exception of 56,000 Oxbow fingerlings that were established as a control group.

IDFG began adipose fin clipping of BY95 fish on September 25, 1995.

#### Brood Year 1994

The hatchery received 1,555,857 eyed, A-strain steelhead trout eggs from IDFG for BY94; one lot each of Pahsimeroi, Sawtooth and Oxbow stocks. Overall survival from egg to distribution ranged from 89-93%. Feed conversion was 1.2, and the average cost per pound of gain was 26.8 cents. Fish were started on Rangen's soft moist diet. At 200 fish per pound, they were switched to Silver Cup Salmon diet. At 30 fish per pound, they were finished on the Hagerman Steelhead contract diet supplied by Nelson and Sons of Murray, UT.

Adipose fin clipping was supervised by personnel from IDFG and completed on October 20, 1994. There were 1,425,323 ad clips counted. Clipping took 13 working days and averaged 109,640 fish per day.

A surplus of 184,272 unmarked fish, averaging 32.33 fish per pound, were trucked to Brownlee Reservoir. An additional 81,638 unmarked fish, averaging 34.74 fish per pound, were trucked to Salmon Falls Creek Reservoir. Both loads were shipped on October 19, 1994. All surplus fish were A-strain Oxbow stock steelhead trout.

Periodic disease inspection by the Dworshak Fish Health Center, during December 1994, detected low levels of Y. ruckeri from fish in 3 raceways. Though treated with Romet-30, these fish continued to exhibit low level mortality associated with ERM and eventually spread this disease to adjacent raceways. Other affected raceways were treated with either Romet-30 or Terramycin. Distribution of affected fish was postponed until infections subsided.

#### **Distribution**

Distribution of BY94 steelhead smolts was completed on April 28, 1995. A total of 1,151,544 smolts weighing 243,182 pounds, and averaging 4.7 fish per pound, were released. All steelhead released had adipose fins clipped. The distribution process required 23 working days, 49 trips, and distribution trucks logged approximately 20,000 miles.

Acclimation studies at Sawtooth SFH received 674,405 fish from March 28 through April 7, 1995. There were 400,504 fish released between April 10-28, 1995 in the Little Salmon River at Warm Springs Bridge. An additional 76,635 fish were hauled direct to the Salmon River below Sawtooth SFH on April 17, 1995.

#### **Experiments and Special Studies**

Coded-wire tagging (CWT) of BY94 smolts was supervised by IDFG personnel and completed on November 19, 1994. Three groups of Sawtooth stock (9 raceways) were marked for acclimation and direct release studies conducted at Sawtooth SFH. Three raceways (61,820 fish) were marked for two weeks of acclimation and a volitional vs forced release from Sawtooth SFH. Three raceways (61,872 fish) were marked for two weeks of acclimation and hauling to Torreys Hole below Sawtooth SFH. Additionally, three raceways (60,294 fish) were marked for direct release below the Sawtooth SFH.

Two groups of Pahsimeroi stocks were marked for acclimation and direct release studies. Three raceways (64,011 fish) were marked for acclimation at Sawtooth SFH while three raceways (42,710 fish) were marked for direct release into the Little Salmon River at Warm Springs Bridge.

Additionally, one group of Oxbow stock, three raceways (43,751 fish), were marked for direct release into the Little Salmon River at Warm Springs Bridge.

A total of 332,637 marked fish (CWT) were released for the acclimation and contribution studies in April 1995. The CWT fish did not have a left ventral fin clip as had been done in the past.

Passively induced tags (PIT) were inserted into 1800 fish that were also marked with CWTs.

### Official Visitors

Joe Chapman	Idaho Department of Fish & Game, Hagerman, ID
Jerry Chapman	Idaho Department of Fish & Game, Wendell, ID
Tom Rogers	Idaho Department of Fish & Game, Boise, ID
Dave Cannamela	Idaho Department of Fish & Game, Boise, ID
Dean Rhine	Idaho Department of Fish & Game, Lewiston, ID
Rich Holman	Idaho Department of Fish & Game, Wendell, ID
Dave Parrish	Idaho Department of Fish & Game, Jerome, ID
Bill Gorgen	Idaho Department of Fish & Game, Jerome, ID
Dan Diggs	Fish & Wildlife Service, Portland, OR
Rob Blacker	Fish & Wildlife Service, Malheur NWR, OR
Carla Burnside	Fish & Wildlife Service, Malheur NWR, OR
Ed Crateau	Fish & Wildlife Service, Boise, ID
Ken Peters	Fish & Wildlife Service, Ahsahka, ID
Randy Schmeller	Fish & Wildlife Service, Portland, OR
Joe Krakker	Fish & Wildlife Service, Boise, ID
Chuck Dunn	Fish & Wildlife Service, Portland, OR
David Leith	Fish & Wildlife Service, Longview, WA
Kathy Clemens	Fish & Wildlife Service, Portland, OR
Ray Jones	Fish & Wildlife Service, Ahsahka, ID
Susan Birch	Fish & Wildlife Service, Boise, ID
Alyson Beck-Hass	Fish & Wildlife Service, Boise, ID
Joan Mietl	Fish & Wildlife Service, Boise, ID
Jerry Williams	Fish & Wildlife Service, Boise, ID
Gary Fornshell	University of Idaho, Twin Falls, ID
Ernie Brannon	University of Idaho, Moscow, ID
Charlie Smith	Rangen's Inc., Buhl, ID
Laurie Fowler	Rangen's Inc., Buhl, ID
Chris Peterschmit	Rangen's Inc., Buhl, ID
Doug Ramsey	Rangen's Inc., Buhl, ID
Jim Dubois	Department of Justice, Denver, CO
B. Scott-Brier	Office of the Regional Solicitor, Portland, OR
Chris Nelson	Silver Cup Inc., Murray, UT
Ron Thomasson	Fish & Wildlife Service, Portland, OR
James Ward	National Park Service, Hagerman, ID
Dan Yore	Buckeye Ranch, Riley Creek water user, Hagerman, ID
Karl Dreher	Director, Idaho Department of Water Resources
Dave Shaw	Adjudication Bureau Chief (IDWR),
John Simpson	Rosholt, Robertson & Tucker, Twin Falls, ID
Steve Lanich	Staffer, Senator George Miller, CA
Leo Ray	Idaho Fish Breeders, Hagerman, ID

## Training

Paul Hayduk, GS-7 Fishery Biologist (trainee),	Coaching Skills for Managers, Twin Falls, ID Writing Short Informational Reports, OPM Correspondence Introduction to fish Health, LaCrosse, WI Business Writing for Results, Pryor Resources, Boise Sex, Drugs & OSHA in the Workplace, Twin Falls, ID
Robert Burns	Sex, Drugs & OSHA in the Workplace, Twin Falls, ID Fire Fighting Refresher Training, Hagerman, ID Coaching Skills for Managers, Twin Falls, ID Water Measuring Devices, IDWR, Hagerman, ID Administrative Training, FWS, Boise, ID
Brian Clifford Motor Vehicle Operator	Mid-Career Pre-Retirement, Reno, NV Fire Fighting Refresher Training, Hagerman, ID
Mike Jacobson Motor Vehicle Operator	Water Measuring Devices, IDWR, Hagerman, ID Fire Fighting Refresher Training, Hagerman, ID
Bryan Kenworthy Project Leader	Conducting Effective Meetings, Portland, OR NEPA, Boise, ID FOIA, Boise, ID HIV in the Workplace, Portland, OR Sex, Drugs & OSHA in the Workplace, Twin Falls, ID Administrative Training, FWS, Boise, ID
Jim Kirsch Maintenance Worker	Fall & Spring Electrical Apprentices Course, Twin Falls, ID Water & Wastewater for Operators, Idaho Falls, ID Fire Fighting Refresher Training, Hagerman, ID
Bea Martindale Fisheries Program Assistant	Sex, Drugs, & OSHA in the Workplace, Twin Falls, ID Administrative Training, FWS, Boise, ID
Linda McCaughey Office Automation Clerk	Administrative Training, FWS, Boise, ID Sex, Drugs & OSHA in the Workplace, Twin Falls, ID
Eric Willet	Sex, Drugs & OSHA in the Workplace, Twin Falls, ID Fire Fighting Refresher Training, Hagerman, ID

Rob Burns, Assistant Hatchery Manager and Paul Hayduk, Fishery Biologist Trainee, toured several aquaculture facilities in the Magic Valley. In addition to fish rearing facilities, a tour of the Clear Springs Trout Company's Research Lab and Rangen's feed mill were made.

## Other Items of Interest

### Water Rights

Under the Memorandum of Understanding with the University of Idaho for operation of the Hagerman Lab, the Service will maintain ownership of the water rights servicing the lab. The Hagerman NFH staff will be responsible for measuring and reporting flows from those springs.

Division of Engineering staff reviewed the status and condition of the hatchery and lab's water measuring devices. They initiated this effort to meet an 1995 Idaho Department of Water Resources (IDWR) directive to install approved flow measuring devices and report flow and water use to IDWR. Several sites identified as deficient, by either needing a flow measuring device or requiring a modification, will be corrected.

Efforts to reach a negotiated settlement with the Brailsford Ditch Association (BDA) regarding the management of water in the Len Lewis Spring continued to consume resources. The main issue concerns period of use. Assistance in mediating a settlement was sought from former hatchery manager, Dave Bruhn and Water District 36a chairman, John LeMoyné. Although the parties were able to air their concerns through this effort, no solution was achieved. Additionally, the Service offered two draft agreements to the BDA for their consideration. One of the proposals, installation of a pump-back system, was presented for consideration at a Settlement Conference convened by the Snake River Basin Adjudication Court. Although communication with the BDA has been strained at times, they did not call for water from the Len Lewis Spring this year until April 24. This allowed the hatchery to complete production of the 1994 brood year without interruption. A very wet 1994 spring season most likely alleviated the irrigators need for water.

### Personnel

Montie Peterson and Anila Allred retired under the Voluntary Separation Incentive Program (buy-out), June 1995.

Paul Hayduk transferred to Idaho Fisheries Resource Office, Ahsahka, Idaho in March as part of his Region 1 Fisheries Biologist Trainee rotational assignment.

Rob Burns filled the Assistant Manager's position in October.

Eric Willet filled the Animal Caretaker's position in January.

Linda McCaughey filled the permanent part-time position of Office Automation Clerk.

### Aquaculture Liaison

This collateral duty involved participation with the Idaho Aquaculture Association (IAA). IAA directed its efforts at resolving issues relevant to aquifer recharge, fish health and nutrition, Hagerman Lab operation, managing hatchery effluent to meet state and federal guidelines, and NPDES permit renewal.

### Interagency/Intra Agency Coordination and Cooperation

Hatchery Evaluation Team (HET) team efforts focused on developing a five year plan. Two hatchery coordination meetings were held during the year.

Mike Peterson was appointed as the student intern under the cooperative agreement with the College of Southern Idaho, Fisheries Technology Program, and the Idaho Aquaculture Association.

The Division of Realty conducted an appraisal of real property resulting in an increase in the value of the property. A check for \$9,851.00 was presented to the Gooding County Clerk's office as part of the Service's revenue sharing program in lieu of taxes.

Several meetings were held to discuss feasibility of constructing a wetland on hatchery property. Attendees included staff representing the Northside Canal Co., Gooding County Soil Conservation District, Natural Resources Conservation Service, Idaho Department of Fish and Game, and Buhl High School students. Issues regarding the Canal Company's needs and the diversion of water are yet to be resolved.

Carla Burnside, Archeologist, Malheur NWR, conducted an assessment of sites proposed for the constructed wetland project. Members of the Buhl High School Biology II class, cooperators in the project, participated by assisting with soil sampling and data recovery. Artifact evidence was found at the lower site. It was evident, however, that the site had been looted and may have minimal value for future data gathering.

Karen Lindsay, a University of Utah Fish and Wildlife Service, Cooperative Education student, assigned to Jackson Hole NFH, was detailed here for the week of March 27 to assist with fish distribution.

Doug Munson, IDFG Pathologist, conducted a fish health examination on a sample of steelhead smolts selected from a group of fish that had been experiencing mortality due to ERM. IDFG anadromous hatchery supervisor, Tom Rogers, requested this exam in order to compare fish health between fish being held for acclimation at Sawtooth State Fish Hatchery and those fish held at Hagerman NFH for direct release into the Salmon River.

Bryan Kenworthy, Rob Burns, and Paul Hayduk attended the Northwest Fish Culture Conference held in Sun River, Oregon.

Mike Jacobson, Brian Clifford, and Eric Willet attended a Service sponsored workshop for fish culturists in Pendleton, Oregon. Mike presented a video he recorded of the Hagerman NFH operation.

The Annual Fish Nutrition Workshop, held in Twin Falls this year, included a visit to the Hagerman Lab as part of the aquaculture industry tour agenda.

The hatchery bunk house was made available for several weeks to volunteers working for the National Park Service, Hagerman Fossil Beds.

## Outreach

A variety of outreach efforts were conducted in FY95.

For National Fishing Week, the hatchery and Friends in Recreation Opportunities Group (FROG) co-sponsored lunch, a casting contest, and a day of supervised fishing at Oster Lakes for approximately 20 disabled people from around the Magic Valley. The pleasant weather and excitement associated with catching fish made for a memorable experience for all participants.

Rob Burns, Bea Martindale, and Bryan Kenworthy provided assistance to the Boise Ecological Services Office, LSRCP office, Law Enforcement, and Dworshak NFH in staffing a Fish and Wildlife Service information exhibit at the Western Idaho State Fair. The exhibit included the Road to Recovery display and the LSRCP Fisheries display. Other display items included a gray wolf pelt, plaster wolf track casts, grizzly bear track cast, Utah Valvata snail samples, pictures of endangered plants and candidate species of Idaho, a taxidermy wall mount of a bull trout and chinook salmon, and Cargo for Conservation items. Informational handouts included 250 teacher packets, 200 species fact sheets, 1,500 coloring packets, 600 Idaho Wolf Updates and LSRCP hatchery brochures. Fair board figures show that approximately 212,000 people passed by the booth and/or stopped to pick up information to take with them.

New highway directional signs, designed and built by the Corps of Engineers, were installed.

The Buhl and Hagerman school districts continued to utilize the hatchery as an environmental learning center.

The Service volunteer program was utilized to further outreach efforts.

Troop 107 Boy Scouts volunteered time in removing trash from Oster Lake #1.

Bob and Libby Beckett, of San Diego CA, volunteered as Hatchery Hosts during August; greeting tourists and providing pertinent information about the hatchery, the Service's mission, and the Hagerman Valley.

## Safety

During FY1995, the hatchery focused resources in several areas relevant to safety.

### Employee Occupational Safety and Health:

In addition to providing staff training on "Sex, Drugs, and, OSHA, the Magic Valley Regional Medical Center (MVRMC) conducted a "mock" OSHA inspection of the hatchery. MVRMC provided a report noting deficiencies in compliance. Corrective action has been initiated.

Fire Safety and Prevention:

Because of a potential danger for wildland fire at Hagerman NFH, Rod Blacker, Fire Management Officer, Malheur NWR was called upon to assess the hatchery's fire protection program. During the year, several fires occurred on property adjacent to the hatchery heightening the awareness for wildland fire. Issues discussed involved fuels control, firebreaks, employee training, and development of a fire management plan. As recommended, a twenty-foot swath (fire-break) was harrow disked in along the hatchery's property line on the upper-bench area and behind quarters 4 and 5.

The BLM Shoshone District presented a six hour program on fire orders, fire shelters and general fire safety to the hatchery staff.

Domestic Water:

The hatchery continues to use bottled water for domestic use. A new domestic water system is being designed by Sverdrup Inc., Seattle, WA to bring the hatchery into compliance with the Safe Drinking Water Act. Work began this year with the drilling and casing of the well hole. Completion of the system is anticipated in FY 1996.

Special Use Permits

Permit number 74802 - Mr. Alfred Sandy, Hagerman Idaho.

Permit number 74801 - Mr. Butch Morris, Hagerman Idaho

#### HAGERMAN LAB

June 30, 1995 marked the last day of operation by Service staff. On September 27, 1995 the Service entered into a Memorandum of Understanding with the University of Idaho (UI) for operation of the lab.

On-going studies that had been initiated prior to the lab's closure were completed.

- Steelhead diet comparison study.
- Evaluation of diet for the control of fin erosion in steelhead. This was a cooperative effort with Bozeman Fish Technology Center and the Wellsboro Center, NBS.

STATION CYCLICAL MAINTENANCE/CONSTRUCTION

Cyclical Maintenance

Rehabilitation

Upgraded kitchen in quarters to GFI outlets and installed hard-wired battery backed up smoke alarms in the residences and old maintenance office.* Installed surge protectors in the service panels at all four residences.	\$2,048.10
Electrical panel upgrade work at hatchery #1.	\$ 182.70
Replaced garage doors in Building #11.	\$1,557.00
Upgraded hatchery buildings to code on GFI outlets.*	\$ 747.30
Drain modification to two fish transport units.	\$4,900.00
Replaced compressor for heat pump at Quarters #7.	\$1,458.11

\*(OSHA Compliance)

Construction

Composition roof replaced on building No. 9 (Old Office).	\$2,375.00
Asbestos removal & re-roofing on Qtrs 6 & 7 (Work to be completed FY96)	\$14,560.00
Domestic Well	\$35,000.00

Equipment Acquisitions

Ford Explorer	\$20,366.50
Ford Truck Chassis - IDFG-LSRCP property transfer	No Cost
Laptop Computer	\$ 4,766.92
Ford Fire Truck - BLM	\$ 7,900.00
500 Gallon Above Ground Fuel Storage Tank	\$ 543.44
Brush Cutter w/Front Safety Guard	\$ 867.00
Ohaus TS4K Balance	\$ 810.00
FLX Pit Cover for Truck Garage.	\$ 2,657.50

## FUTURE OUTLOOK

### PRODUCTION

Constraints imposed by the ESA on hatchery steelhead releases may affect Hagerman NFH production activities. In this regard, it will be paramount to continue a high level of interagency coordination for the hatchery's production activities and commitments.

More stringent requirements regarding discharge standards for hatchery effluent are anticipated.

### WATER RIGHTS

Declining Spring Flows in the Thousand Springs area, monitored by the U.S. Geological Service, are being used as the measure of the Snake River Plain Aquifer capability. The decline is attributed to an increase in more efficient sprinkler irrigation, coupled with an increase in the amount of water that is pumped from the aquifer. A review of flow data collected from two of the hatchery's springs, Riley Creek and Bickle Lake show a decline in flow of 9.6% and 21.5%, respectively since 1974.

The uncertainty of the Len Lewis Spring water supply due to its over appropriation during the beginning of the irrigation season and the hatchery's peak smolt production period in the spring, and the Services priority date relative to the Brailsford Ditch Association continues to be an issue. The Len Lewis Spring water source represents approximately 20% of the hatchery's total supply. The loss of this water would affect hatchery carrying capacity. A proposal to meet the irrigators call for water with substitute water using a pump-back system during periods of overlapping need has been proposed. The cost of installing and maintaining the pump-back system will be born by the hatchery.

### SAFETY

Continued emphasis will be placed on factors relating to safety and health in the work place. Particular emphasis will be placed on safety requirements for the Commercial Drivers License needed for operation of the fish distribution trucks.

A fire prevention/management plan is being developed due to the large amount of dry upland habitat owned by the Service. Of the 303 acres owned by the Service, 283 acres are cooperatively managed by IDFG as part of the Hagerman Wildlife Management area. New private residences under construction proximate to this property are creating a rural/urban interface situation. Fire fighter training is planed for two staff members.

## OUTREACH

Future emphasis at Hagerman NFH will be required for improving visitor services, control of visitor access, and for facility security after normal working hours. Tourism is Idaho's third largest industry, therefore an increase in visitor activity is anticipated in the future. The National Park Service, Hagerman Fossil Beds Monument, located in Hagerman, predicts that 300,000 people could be expected to visit their proposed interpretive center annually if constructed. Even without the center and no advertising they report that visitor activity in 1995 (10,000) is double the visitor activity in 1994.

More effort will be placed on interaction with school and civic youth groups in an effort to develop environmental awareness in the Magic Valley Communities.

HATCHERY PRODUCTION SUMMARY (Intensive Culture)

Station: Hagerman National Fish Hatchery		PERIOD COVERED: OCTOBER 1, 1994 THRU SEPTEMBER 30, 1995									
Species/ Strain and Lot Number	Fish on Hand Last Day of Period					To Date This Fiscal Year					Percent Survival
	Number	Weight	Length	D.I.	F.I.	Weight Gain	FEED Pounds	EXPENDED Costs	Conver- sion	Survival	
1	2	3	4	5	6	7	8	9	10	11	
STT-PAW-65	0	0	0	0	0	68,667	74,738	\$15,588	1.09	106	
STT-HCW-66	0	0	0	0	0	74,667	95,847	21,830	1.28	88	
STT-SAW-67	0	0	0	0	0	80,543	107,016	23,281	1.33	92	
STT-PAW-68	329,609	8,489	4.114	.10	.39	8,351	9,492	2,509	1.14	99	
STT-HCW-69	634,713	12,576	3.769	.04	.16	12,291	11,559	3,964	.94	95	
STT-SAW-70	556,065	9,861	3.632	.07	.26	9,661	8,301	3,065	.86	99	
<b>Total/Averages</b>		<b>1,520,387</b>	<b>30,926</b>	<b>XXXX</b>	<b>XXXX</b>	<b>XXXX</b>	<b>254,180</b>	<b>\$70,237</b>	<b>1.20</b>	<b>--</b>	

FIVE YEAR HATCHERY PRODUCTION SUMMARY

Station: Hagerman, ID NFH

	Fiscal Year				
	1995	1994	1993	1992	1991
I. Fish Production Data					
Intensive Culture:					
Fish Weight Gain (pounds)	254,180	345,180	321,735	316,697	349,782
Fish Numbers	1,520,387	1,517,194	1,894,680	1,744,945	1,586,078
Percent Survival	96.5	96.9	94.5	90.6	90.2
Feed Conversion	1.21	1.18	1.29	1.23	1.39
Extensive Culture:					
Fish Weight Gain (pounds)					
Fish Numbers					
Percent Survival					
Pounds per Acre					
II. Broodstock Production Data:					
Number of Females Spawed					
Number of Eggs					
Number of Fish					
III. Management Data:					
Full-Time Equivalent	8.5	8.5	7.3	7.6	8.0
Operational Costs	595,589	527,808	454,903	618,942	472,463
Vehicle/Equipment Costs (Items over \$1,000)	40,191	47,380	47,132	6,258	23,655
Cyclical Maintenance Costs	11,643	36,449	17,029	4,000	-0-
Quarters Costs	19,665	11,655	9,935	-0-	9,725

FISH HEALTH ACTIVITIES SUMMARY -  
NATIONAL FISH HATCHERY

Station: Hagerman, ID NFH

Fiscal Year: 1995

Problem/Incident/Activity 1	Species 2	Therapeutic Treatment 3	Results/Comments 4
Egg Disinfection	Steelhead Trout	PVP Iodine @ 100 ppm for 10 minutes	Routine Disinfection
Yersinia ruckeri - ERM	Steelhead Trout	Romet Medicated Feed	Effective after 2 successive treatments for ERM
Yersinia ruckeri - ERM	Steelhead Trout	Terramycin Mediated Feed	Effective as second treatment following Romet

Chemical Summary:

Chemical: PVP Iodine Purpose: Egg Disinfection Total Amount Used: 5 Gallons Total Cost: ( \$ 70.34) Last year

Romet ERM ERM ERM Anti Foam Fish Distribution Routine Disinfection

2650 lbs 7400 lbs 40 lbs 2 Gallons  
\$1,678.56 \$3,341.16 ( \$121.74) Last year  
( \$ 14.40) Last year

OPERATIONS/MAINTENANCE COST DATA

Station: Hagerman, ID NFH

Fiscal Year: 1995

Funding Source				
Operations (Fisheries)	Cyclical Maintenance (Fisheries)	Quarters Maintenance	Other Funding	
1 4710	2 4710	3 8610	4	
417,015				
3,060				
10,302				
798				
1,164				
2,658				
14,792				

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:

Station: Hagerman, ID NFH

OPERATIONS/MAINTENANCE COST DATA

Fiscal Year: 19 95

	Funding Source			
	Operations (Fisheries)	Cyclical Maintenance (Fisheries)	Quarters Maintenance	Other Funding
	4710	4710	38610	4
	4,399			
	17,357			
	4,262			
	75,350			
	3,299			
	11,099			
	11,732			

3. B. Vehicle Maintenance (continued)

2. Non-Distribution Vehicles

Total Mileage:

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: 1995

Station: Hagerman, ID NFH

	Funding Source			
	Operations (Fisheries)	Cyclical Maintenance (Fisheries)	Quarters Maintenance	Other Funding
	4710 <sup>1</sup>	4710 <sup>2</sup>	8610 <sup>3</sup>	4 <sup>4</sup>
	15,451			
	35,000			
	595,589			
	40,191			
		11,643		
			19,665	
	40,191	11,643	19,665	
	635,780	11,643	19,665	

\$ 667,088

3. F. Moving Expense

G. Miscellaneous (List)

Leased Trucks

Domestic Well

4. Operations (Total: Lines 1, 2, 3A-G)

5. Vehicles/Equipment Purchased (Over \$1,000)

6. Cyclical Maintenance

7. Quarters Maintenance

8. Total Maintenance (Total: Lines 5, 6, and 7)

9. Column Totals (Total: Lines 4 and 8)

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

**REPORT OF STATION PERSONNEL**

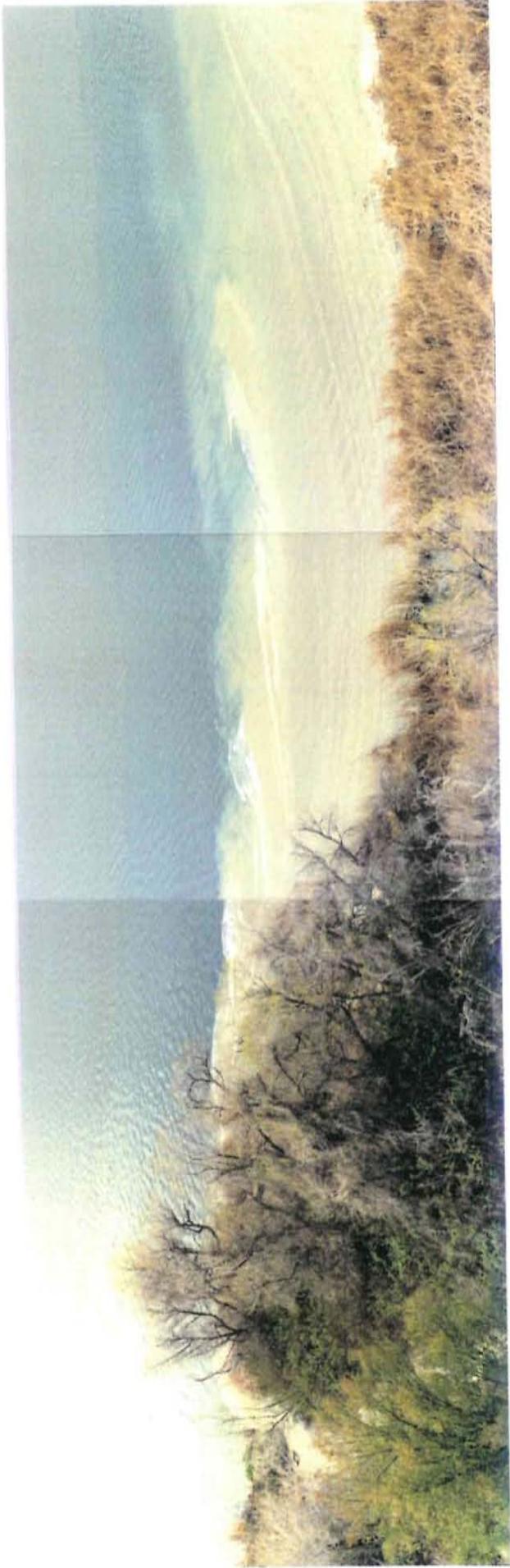
Station: Hagerman, ID NFH

Fiscal Year: 1995

Part I - Permanent Personnel (FTE's: 8.5 )					
Name Of Employee	Functional Title	Grade	Period Worked	Remarks	
Bryan R. Kenworthy	Sup. Fisheries Biologist	GS 12	94/10/01-95/09/30		
Robert Burns	Sup. Fisheries Biologist	GS 11	94/10/02-95/09/30		
Paul A. Hayduk	Fishery Biologist (Mgmt)	GS 07	94/10/01-95/03/05	Trainee	
Beatrice Martindale	Fisheries Program Asst.	GS 06	94/10/01-95/09/30	Part-time	
Linda M. McCaughey	Office Automation Clerk	GS 04	95/03/26-95/09/30	Part-time	
M. J. Kirsch, Jr.	Maintenance Worker	WG 08	94/10/01-95/09/30		
Michael G. Jacobson	Motor Vehicle Operator	WG 08	94/10/01-95/09/30		
Part II - Temporary Personnel (FTE's: )					
Name Of Employee	Functional Title	Grade	Period Worked	Remarks	







Spring start up of Northside Canal Company's wastewater canal #26; view from southeast corner of hatchery property on Snake River.



**Rob Burns presents “on the Spot” awards to Jim Kirsch and Mike Jacobson for their work with visiting schools.**



**A day at the Hatchery with Buhl Middle School and Hagerman Fifth Grade.**



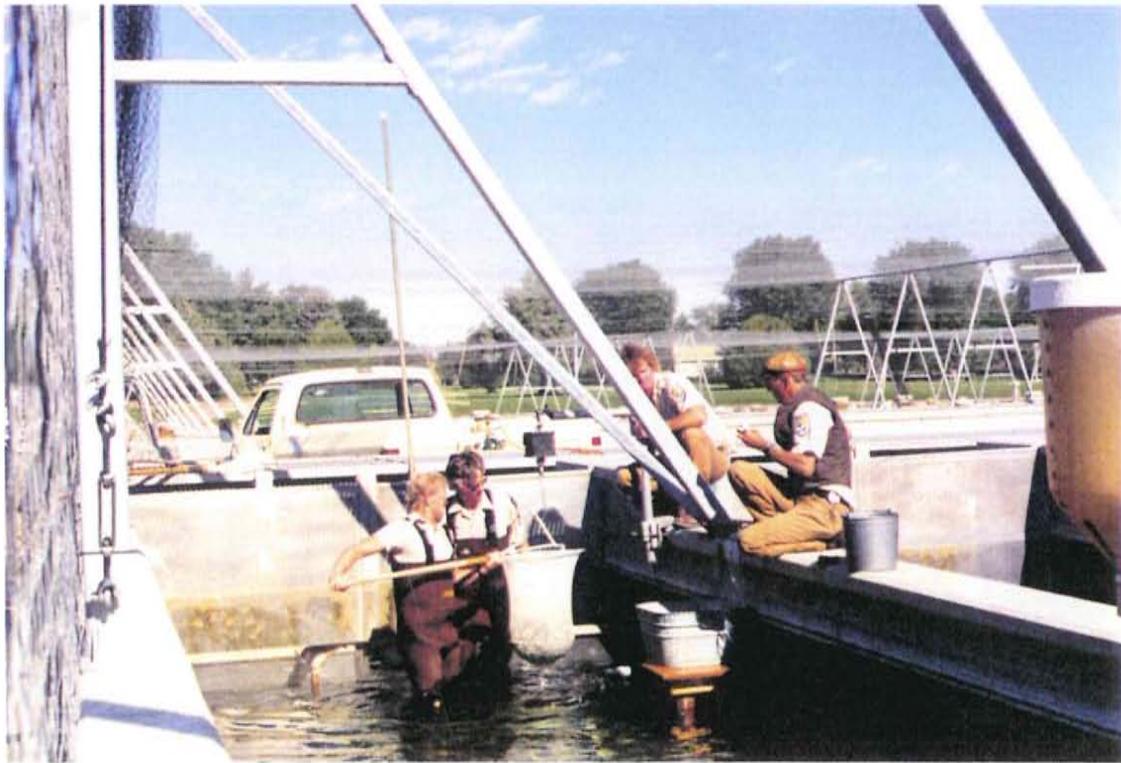


**Hands on nature studies for Buhl Middle School.**





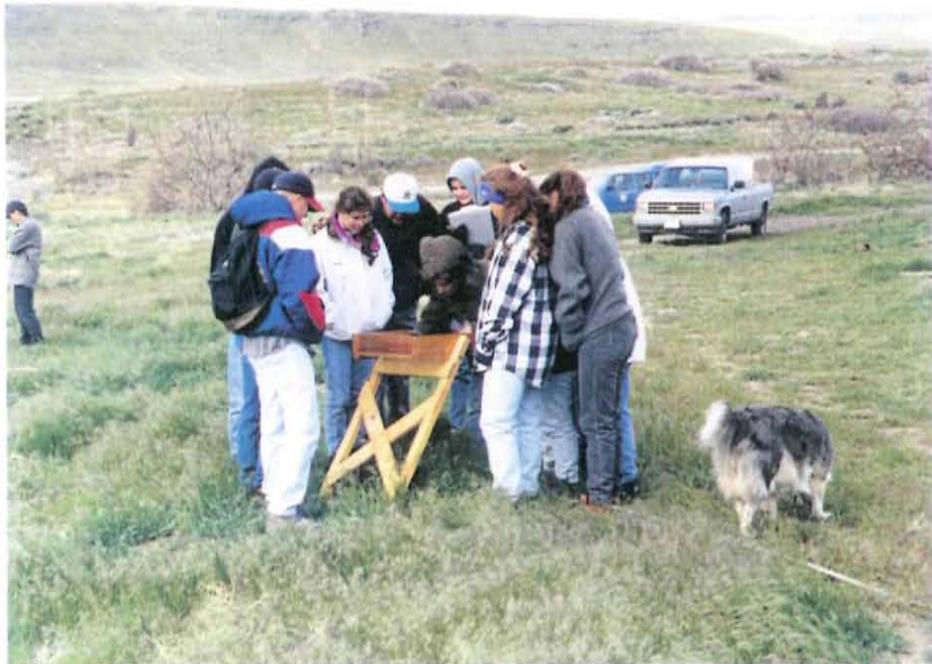
**Idaho Department of Fish & Game placing Passive Induced Transponder tags in steelhead.**



**Enteric Redmouth Vaccination**



**National Park Service staff assists with archeological review of domestic well tailings.**



**Carla Burnside, Archeologist, Malheur NWR conducts site review for proposed wetlands. Assistance provided by Buhl Middle School students.**



**Water quality and quantity are becoming a greater concern for residents of Southern Idaho.**



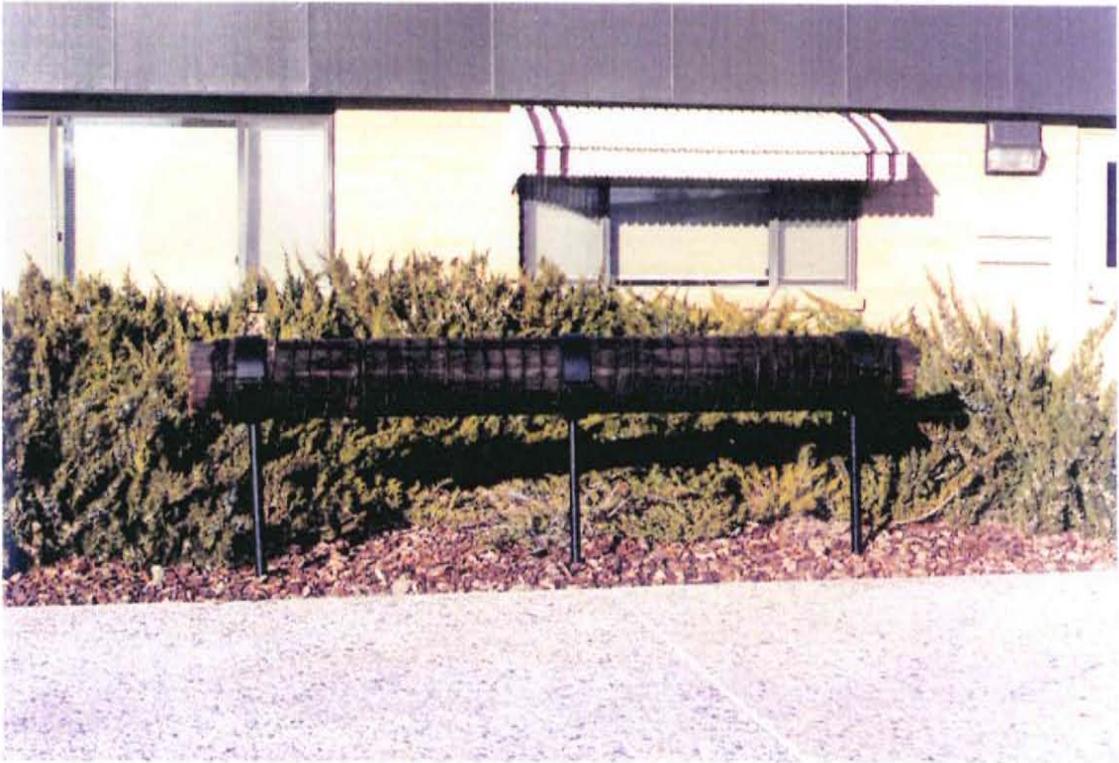
**Idaho Department of Water Resources evaluates prefabricated fiberglass ramped flume.**



**Polysonics Transit Time Portable Flowmeter**



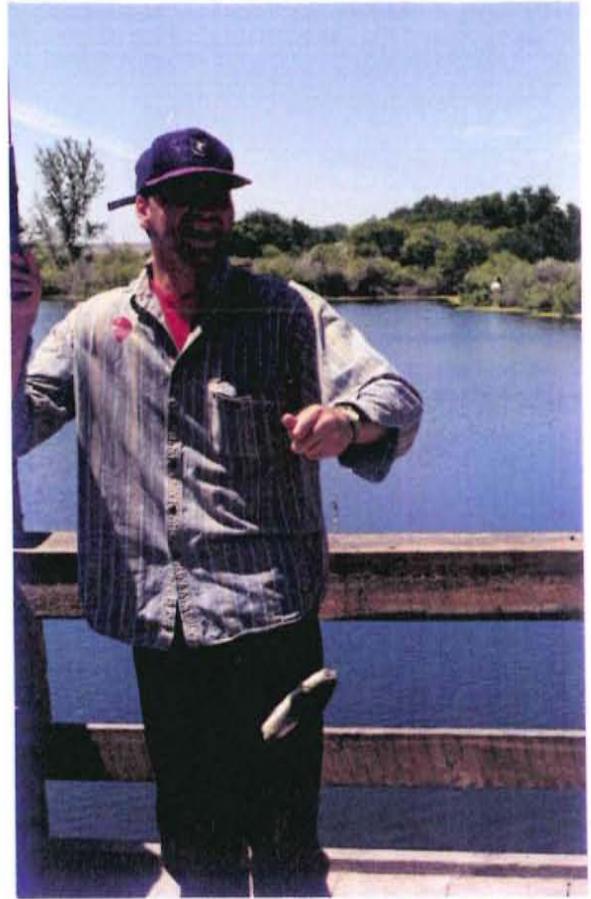
**Marsh McBriney portable closed conduit flow meter.**



**Before PVC Pipe**



**1995 Opening Day at Oster Lake #1.**



National Fishing Day at Oster Lake



**National Fishing Day at Hagerman NFH**



**National Fishing Day Casting Contest**



**Bob and Libby Beckett, Volunteer Hatchery Hosts- August 1995**



**Troop 107 removes trash from Oster Lake #1**



New directional signs

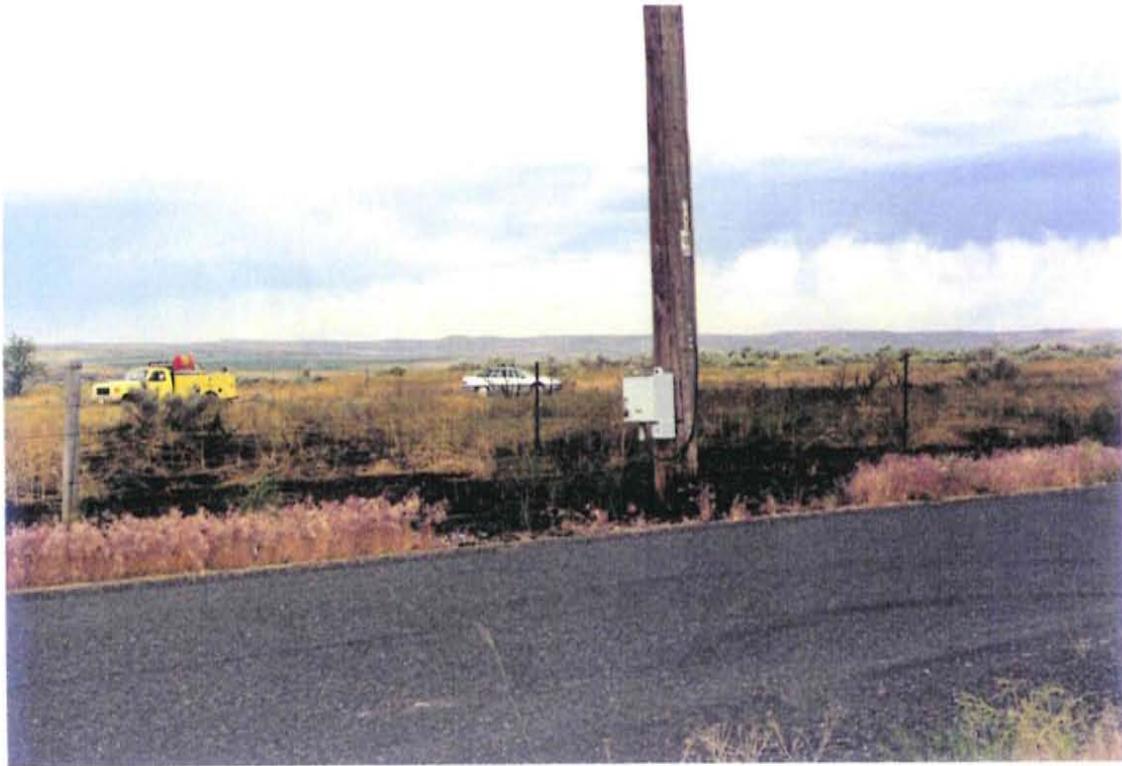


**Hagerman NFH Staff**

**Brian Clifford, Eric Willet, Jim Kirsch, Bea Martindale, Rob Burns, Linda McCaughey, Mike Jacobson and Bryan Kenworthy.**



**Mike Peterson, Student Intern, College of Southern Idaho, Fisheries Technology Program**



**Wildland Fire on private property adjacent to Hatchery Lands.**



**Fire Break**

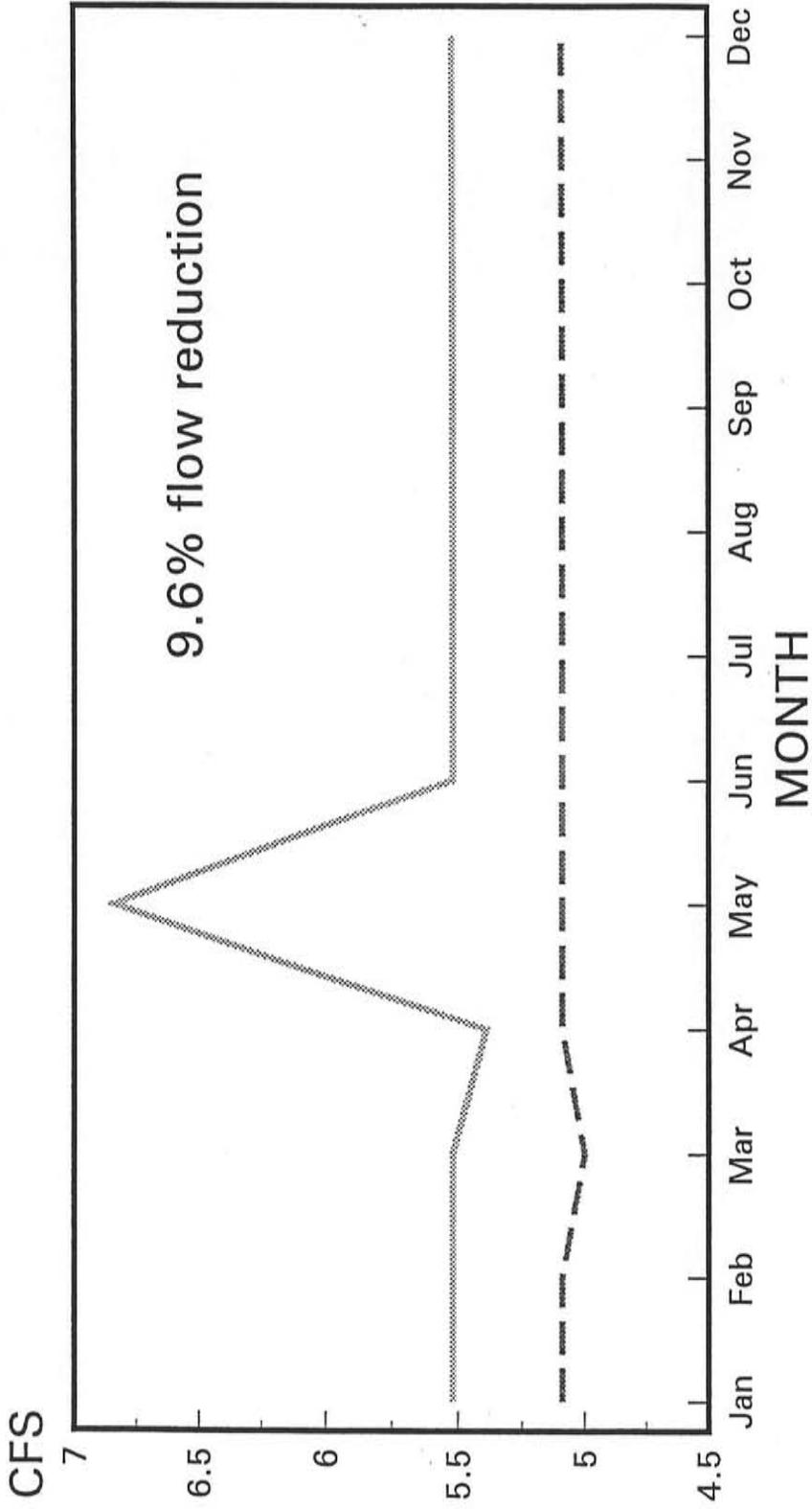


**New vehicle- Ford Explorer**



**Solid waste removal from hatchery pollution abatement pond.**

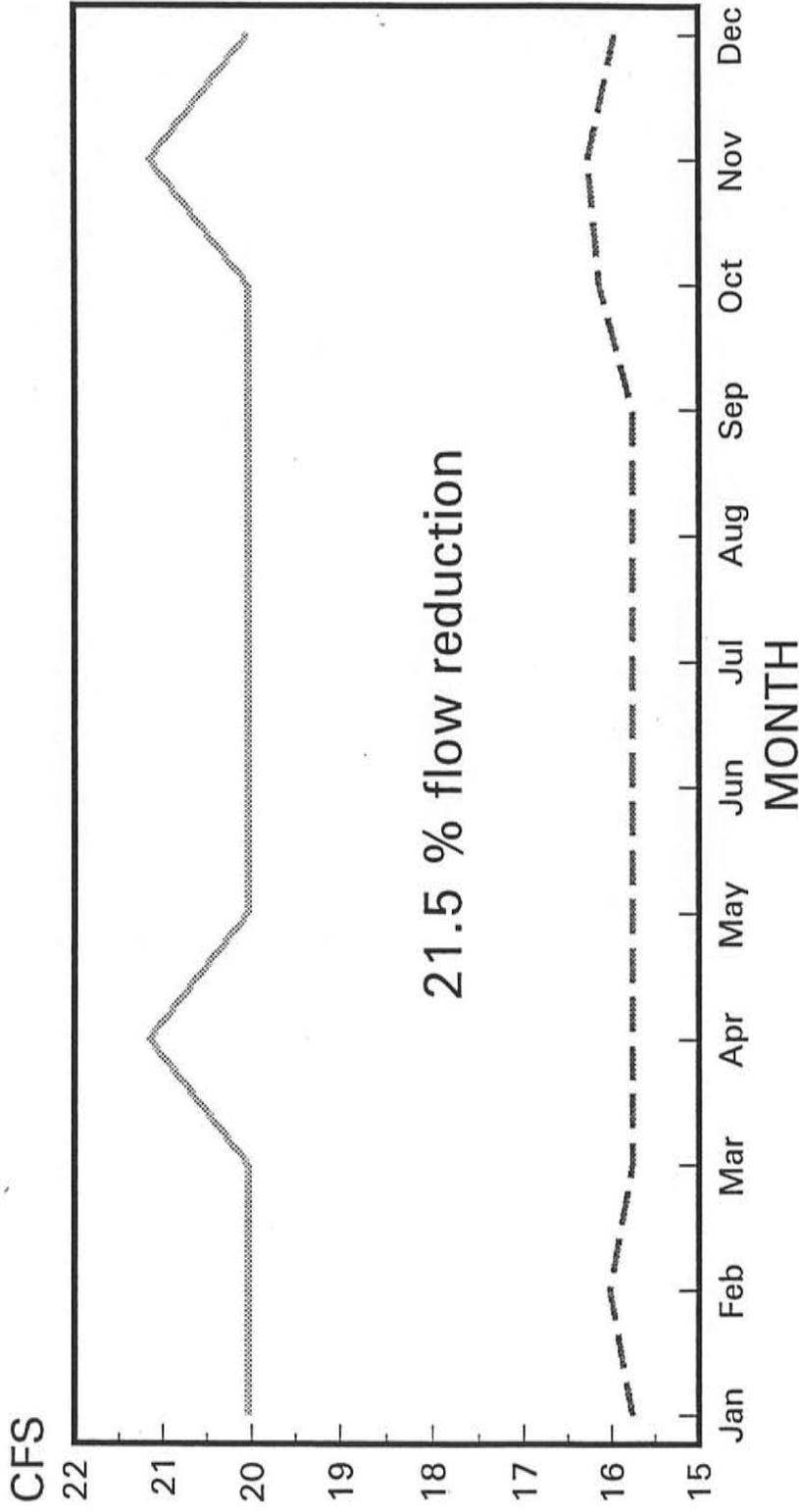
# HAGERMAN NATIONAL FISH HATCHERY



1974 1994

RILEY CREEK

# HAGERMAN NATIONAL FISH HATCHERY



1974 1994

BICKLE LAKE

National Testing Laboratories  
 6555 Wilson Mills Road  
 Cleveland, OH 44143

Sample completed 4-26-95

page 2. Sample code: 9760430

Analysis performed	MCL (mg/l)	Detection Level	Level Detected
Benzene	0.005	0.001	ND
Vinyl Chloride	0.002	0.001	ND
Carbon Tetrachloride	0.005	0.001	ND
1,2-Dichloroethane	0.005	0.001	ND
Trichloroethylene	0.005	0.001	ND
1,4-Dichlorobenzene	0.075	0.001	ND
1,1-Dichloroethylene	0.007	0.001	ND
1,1,1,-Trichloroethane	0.20	0.001	ND
Bromobenzene	---	0.002	ND
Bromomethane	---	0.002	ND
Chlorobenzene	0.1	0.001	ND
Chloroethane	---	0.002	ND
Chloromethane	---	0.002	ND
2-Chlorotoluene	---	0.001	ND
4-Chlorotoluene	---	0.001	ND
Dibromochloropropane (DBCP)	---	0.001	ND
Dibromomethane	---	0.002	ND
1,2-Dichlorobenzene	0.6	0.001	ND
1,3-Dichlorobenzene	---	0.001	ND
Dichlorodifluoromethane	---	0.002	ND
1,1-Dichloroethane	---	0.002	ND
Trans-1,2-Dichloroethylene	0.1	0.002	ND
cis-1,2-Dichloroethylene	0.07	0.002	ND
Dichloromethane	0.005	0.002	ND
1,2-Dichloropropane	0.005	0.002	ND
trans-1,3-Dichloropropane	---	0.002	ND
1,3-Dichloropropane	---	0.002	ND
2,2-Dichloropropane	---	0.002	ND
1,1-Dichloropropane	---	0.002	ND
1,3-Dichloropropane	---	0.002	ND
Ethylbenzene	0.7	0.001	ND
Ethylenedibromide (EDB)	---	0.001	ND
Styrene	0.1	0.001	ND
1,1,1,2-Tetrachloroethane	---	0.002	ND
1,1,2,2-Tetrachloroethane	---	0.002	ND
Tetrachloroethylene (PCE)	0.005	0.002	ND
1,2,4-Trichlorobenzene	---	0.002	ND
1,2,3-Trichlorobenzene	---	0.002	ND
1,1,2-Trichloroethane	0.005	0.002	ND
Trichlorofluoromethane	---	0.002	ND
1,2,3-Trichloropropane	---	0.002	ND
Toluene	1.0	0.001	ND
xylene	10	0.001	ND

Analysis performed	MCL (mg/l)	Detection Level	Level Detected
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Microbiological:  
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Total coliform (organism/100ml)	0	0	ND
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Inorganic chemicals - metals:  
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Aluminum	0.2	0.1	ND
Arsenic	0.05	0.010	ND
Barium	2.0	0.30	ND
Cadmium	0.005	0.002	ND
Chromium	0.1	0.004	ND
Copper	1.3	0.004	0.085
Iron	0.3	0.020	ND
Lead	0.015	0.002	ND
Manganese	0.05	0.004	ND
Mercury	0.002	0.001	ND
Nickel	0.1	0.02	ND
Selenium	0.05	0.002	ND
Silver	0.1	0.002	ND
Sodium	---	1.0	15
Zinc	5.0	0.004	0.011

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Inorganic chemicals - other, and physical factors:  
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Alkalinity (Total as CaCO3)	---	10.0	130
Chloride	250	5.0	10
Fluoride	4.0	0.5	ND
Nitrate as N	10	0.5	0.7
Nitrite as N	1.0	0.5	ND
Sulfate	250	5.0	24
Hardness (suggested limit = 100)		10.0	120*
pH (Standard Units)	6.5-8.5	---	8.0
Total Dissolved Solids	500	20.0	176
Turbidity (Turbidity Units)	1.0	0.1	ND

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Organic chemicals - trihalomethanes:  
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Bromoform	---	0.004	ND
Bromodichloromethane	---	0.002	ND
Chloroform	---	0.002	ND
Dibromochloromethane	---	0.004	ND
Total THMs (sum of four above)	0.1	0.002	ND

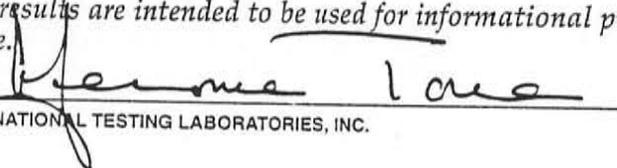
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Organic chemicals - pesticides, herbicides & PCBs

Alachlor	0.002	0.001	ND
Atrazine	0.003	0.002	ND
Chlordane	0.002	0.001	ND
Aldrin	---	0.002	ND
Dichloran	---	0.002	ND
Dieldren	---	0.001	ND
Endrin	0.002	0.0001	ND
Heptachlor	0.0004	0.0004	ND
Heptachlor Epoxide	0.0002	0.0001	ND
Hexachlorobenzene	0.001	0.0005	ND
Hexachlorocyclopentadiene	0.05	0.001	ND
Lindane	0.0002	0.0002	ND
Methoxychlor	0.04	0.002	ND
PCBs	0.0005	0.0005	ND
Pentachloronitrobenzene	---	0.002	ND
Silvex 2,4,5-TP	0.05	0.005	ND
Simazine	0.004	0.002	ND
Toxaphene	0.003	0.001	ND
Trifluralin	---	0.002	ND
2,4-D	0.07	0.010	ND

I certify that the analyses performed for this report are accurate, and that the laboratory tests were conducted by methods approved by the U.S. Environmental Protection Agency or variations of these EPA methods.

These test results are intended to be used for informational purposes only and may not be used for regulatory compliance.

  
 PRESIDENT, NATIONAL TESTING LABORATORIES, INC.

REV. 3-92