

ANNUAL REPORT

FISCAL YEAR 1983

LOWER SNAKE RIVER COMPENSATION PLAN OFFICE

Boise, Idaho

Submitted By: Kenneth R. Clinger Title: LSRCP Coordinator Date 11-21-83

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## I. Introduction:

The Lower Snake River Compensation Plan Office was established with the closing of the Boise Area Office in September 1982. The Office's prime responsibility is to administer U.S. Fish & Wildlife Service (FWS) field programs for State fisheries operations under the Lower Snake River Fish & Wildlife Compensation Plan (LSRCP).

The Lower Snake River Fish and Wildlife Compensation Plan was authorized by the Water Resources Development Act of 1976 (90 Stat. 2917). The LSRCP was developed to replace fish and wildlife losses caused by the construction and operation of Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Lock and Dam projects on the lower 150 miles of the Snake River in Washington and Idaho.

Construction responsibility for the LSRCP was assigned to the Walla Walla District, U.S. Army Corps of Engineers (Corps), while responsibility for fisheries operation and maintenance funding (O & M) was to be accomplished by "one of the Federal fisheries agencies". The question of O & M funding was settled in 1977 with the signing of an interagency agreement by the Corps, National Marine Fisheries Service, and FWS, stating that the FWS would budget for and administer O & M for LSRCP fisheries programs (responsibility for administration and O & M for wildlife programs remains with the Corps).

The Corps estimated costs for development of the authorized Compensation Plan are \$177 million for off-project features, while FWS estimated annual costs for fish facilities O & M are \$8.4 million. All anadromous fisheries compensation and a percentage of resident fisheries compensation is allocated to project power costs, and will be reimbursed to the treasury from Bonneville Power Administration (BPA) power revenues.

The LSRCP legislation authorized both sufficient anadromous fish hatcheries and associated trapping and holding facilities to return 18,300 fall chinook adults, 58,700 spring and summer chinook adults, and 55,100 steelhead adults back to the project area, and sufficient resident fish hatcheries and stream enhancement projects to produce 93,000 pounds of trout annually to replace lost resident sport fisheries in Washington and Idaho.

The program requires expansion or construction of twelve hatcheries and numerous satellite facilities in Idaho, Oregon, and Washington. Idaho Department of Fish and Game will operate four hatcheries, Oregon Department of Fish and Wildlife three hatcheries, Washington Department of Fisheries one hatchery, Washington Department of Game two hatcheries, and Fish and Wildlife Service two hatcheries. Brief descriptions of the individual hatchery operations follow:

### Clearwater Anadromous State Fish Hatchery - Idaho

During the year the last site selection for LSRCP hatcheries was made. The Clearwater Anadromous hatchery will be located across the North Fork of the Clearwater River from Dworshak NFH. It will be designed to produce 1,369,500 spring chinook smolts weighing 91,300 pounds and 2,500,000 steelhead trout smolts weighing 350,000 pounds with a staff of twelve. Scheduled for completion in 1987, the hatchery is expected to cost approximately \$35,000,000 to construct and \$1,340,000 annually for O & M. Conceptual design work is just beginning.

### Crystal Springs State Fish Hatchery - Idaho

To be located on the Snake River near Buhl, this facility is currently being designed to produce 2,000,000 steelhead trout smolts weighing 291,500 pounds. The site previously held a commercial trout hatchery. The purchase of the site by the Corps touched off a furor amongst local trout growers who felt the purchase price was too high. A GAO investigation resulted and the report stated the Government had in fact paid too much for the site. Scheduled for completion in the fall of 1985, the hatchery is expected to cost \$9,876,000 to construct. O & M plans call for a staff of eight and an annual O & M budget of \$700,000.

### McCall State Fish Hatchery - Idaho

This facility was designed to produce 1,000,000 summer chinook salmon smolts weighing 61,300 pounds. Completed in 1980 at a cost of \$5,053,000, the hatchery is located along the Payette River and has a satellite facility on the South Fork of the Salmon River. McCall requires a staff of four and, at full production, will have an estimated annual O & M cost of \$270,000. Two problems have surfaced in regard to operation of McCall. The first is an annual recurring fish mortality referred to as "Spring Thing" currently under study with LSRCP funds. The second is the route to the South Fork release site is not maintained in the winter and is often impassable due to snow accumulations when releases must be made.

### Sawtooth State Fish Hatchery - Idaho

Construction is underway on this \$8,197,000 facility on the upper Salmon River. When completed in 1984 it will require a staff of eight and an estimated annual budget of \$400,000 for O & M. In addition to producing 2,235,000 spring chinook salmon smolts weighing 149,000 pounds, a satellite facility on the East Fork of the Salmon River will be operated by Sawtooth staff. The satellite will trap adult steelhead for Hagerman NFH and Crystal Springs SFH in addition to supplying a portion of the chinook adults for Sawtooth itself. An eye fluke organism endemic to the drainage was considered a potential problem, but studies prior to construction determined no serious impact in a raceway environment.

## Irrigon State Fish Hatchery - Oregon

Irrigon hatchery was initially planned to be the site of all LSRCP steelhead production in Oregon. The groundwater supply was not adequate for the entire 279,600 pounds so an expansion of the existing Wallowa hatchery will be accomplished in addition to Irrigon Hatchery. The \$3,439,000 expansion at Wallowa will be complete in 1984 and will produce 300,000 steelhead smolts weighing 50,000 pounds. Irrigon is intended to produce 1,377,600 steelhead smolts weighing 229,600 pounds when the \$11,293,000 construction project is complete in 1985. O & M cost of the Irrigon/Wallowa steelhead production program is estimated to be \$750,000 annually with a staff of eleven.

## Lookingglass State Fish Hatchery - Oregon

Lookingglass was completed in 1982. The hatchery, which cost \$4,965,000 to construct, is located on Lookingglass Creek near Elgin, Oregon. At capacity 1,390,000 spring chinook smolts weighing 69,600 pounds will be produced. The hatchery and its satellites on Big Canyon Creek, and Grouse Creek require a staff of three and an annual O & M budget estimated at \$257,000.

## Lyons Ferry State Fish Hatchery - Washington

Located at the confluence of the Palouse and Snake Rivers, this facility when complete, will be two hatcheries in one. Phase I is complete and being operated by WDG. It is designed to produce 1,164,000 steelhead trout smolts weighing 116,400 pounds and 45,000 pounds of rainbow trout.

A renovation of Tucannon State Fish Hatchery will be accomplished by the Corps in order that an additional 41,000 pounds of rainbow trout can be produced by WDG. Its operation will be as a satellite of Lyons Ferry Phase I. The remaining 7,000 pounds of rainbow trout production stipulated in the compensation plan will come from stream enhancement accomplished by the Corps at the request of WDG.

Phase II at Lyons Ferry is currently under construction. Phase II will provide facilities for operation by WDF in which 9,162,000 fall chinook smolts weighing 101,800 pounds and 132,000 spring chinook smolts weighing 8,800 pounds will be produced. Lyons Ferry will be completed late in 1984 at a cost of \$22,257,000. To operate the hatchery and its satellites on the Tucannon, Touchet, and Grande Ronde rivers will take eleven people and an annual O & M budget of \$1,150,000.

During the first year of operation a problem of pump impeller erosion caused by water chemistry has plagued the hatchery. The Corps is dealing with this as a latent design defect and is attempting to find an alloy not susceptible to the electrolysis.

## Dworshak National Fish Hatchery (FWS) - Idaho

An expansion of facilities at Dworshak NFH was completed by the Corps in February, 1982 at a cost of \$1,710,000. Designed to produce 1,050,000 spring chinook salmon smolts weighing 70,000 pounds, the expansion requires a staff of three, and will cost approximately \$130,000 per year for O & M.

Hagerman National Fish Hatchery (FWS) - Idaho

Hagerman NFH has been expanded by the Corps of Engineers to produce 2,400,000 steelhead trout smolts weighing 340,000 pounds while retaining the capacity to produce 100,000 pounds for FWS commitments other than LSRCF. The \$8,486,000 expansion is nearly complete. An estimated \$468,000 annual O & M budget and a staff of nine will be required. Fish production has continued throughout the construction period.

Consistent with the desires of the administration and Congress, the Corps proposes to transfer title to the above state operated hatcheries and satellite fish facilities to the Fish and Wildlife Service. The Corps is currently conveying operational responsibility for constructed fish facilities to the FWS by Memorandum of Understanding.

II. Operations:

During the fiscal year, the Boise LSRCF Office operated under a budget of \$98,000 FWS appropriated 1300 funds, and \$28,000 Corps reimbursable 1930 funds. The Corps funds are provided to FWS for hatchery design input and review. Fiscal year 1983 O & M funds for the entire LSRCF fisheries program totaled \$2,759,000; of this total \$2,229,000 was appropriated 1300 funds provided by FWS, and \$530,000 was 1930 funds provided by the Corps. A detailed table showing LSRCF expenditures and production accomplishments is attached. Corps O & M expenditures that are listed on the attachment for hatchery operations have been provided during the construction for production studies needed for hatchery design information.

The office completed briefing statements for all stations receiving LSRCF operational funds. Copies of the briefings were provided to all known interested parties.

*evaluation*  
An interagency group was convened to draft LSRCF Hatchery Evaluation Guidelines. The group has completed a draft which has been submitted to State agencies for review. When approved by the four State Agency Directors and ARD-FR, the final document will be used as a format for developing hatchery evaluation project proposals for LSRCF funding. A final document is expected during the second quarter of FY 84.

Five contracts and sixteen cooperative agreements were drafted and finalized during the fiscal year. Contracts were the primary vehicle used to convey hatchery O & M funds and cooperative agreements were used both to convey funds for hatchery evaluation studies and to formalize mutually beneficial State/Federal field operations.

*per project approvals*  
Several potentially serious problems were encountered during the fiscal year: Our most serious problem involved the approval process for Hatchery Evaluation funds. During past fiscal years we neither sought nor had we been requested to submit an approval form "Request for Approval to Contract for Consulting Services, Management and Professional Services, and Special Studies and Analyses" for studies conducted by the States;

however, we had routinely submitted approval forms for FWS conducted studies. It was our assumption that as the purposes of the evaluation funds had been clearly stated in the budget justifications, and as the intent for their use by cooperating State agencies was specifically addressed, no further justification was necessary. To complicate the approval process further, funds were not received for the evaluation studies until early April, and as it was necessary to reach agreement with the states on priorities and projects and establish criteria for the evaluations, the State submitted projects were not available until mid-June. Consequently, after our drafting of the Cooperative Agreements and notification by CGS-Portland that pre-project approval request forms were mandatory, it was July 5 before the original submissions were made to CGS-Washington. After redoing the original forms to match a new format, and numerous delays in the approval process, approval for the studies was not received until mid-September. As these were one-year funds and needed to be obligated prior to September 30, the delay not only caused problems in obtaining State Director signatures on the Cooperative Agreements in the short period remaining, but also required cancellation of part of the Oregon studies. We can expect an extremely strong reaction by the agencies if this problem is repeated in FY 84.

*L.M. Funding receipt*

Our second problem revolves around late receipt of LSRCP funds. While FWS does not control the budget process, the problems caused by delay in the appropriation process remain real for State agencies with large ongoing, yet unfunded, LSRCP hatchery operations. There appear to be several mitigating steps the FWS can do to alleviate this recurring state problem. Current FWS attempts to secure a method for receiving direct BPA funding through the legislative process would certainly resolve the problem, but in the interim period, a contingency plan should be put into action by FWS. The Boise Office will develop a draft plan in FY 84.

Final problems involve LSRCP property. All property items purchased for LSRCP use remain Federal property. This property is in the custody of four state agencies, and posed a record keeping and inventory problem for our present staff using a manual system. The problem will continue to grow as more hatcheries are constructed; consequently, we plan to computerize our property records in FY 84. Motor vehicles also present a complex problem. The new credit card system does not seem to lend itself to our needs. Initially each LSRCP station had its own account number that provided billing directly to the station. Under the new system all bills come to this office for FWS payment because LSRCP has a single number. The problem becomes complicated as the states have been paid for their motor fuel through our existing contract, and there is no simple way for us to assure that all purchases are authorized and legitimate before submitting payment vouchers. A method will need to be developed if we maintain the present system. We plan to investigate the legality of the states using their credit cards for the Federally licensed vehicles in their custody. If acceptable to the states, this will partially resolve our credit card accounting problem.

### III. Construction Activities:

Early in the year a review of the design for Sawtooth State Fish Hatchery was completed by this office. Construction began in the spring as soon as weather permitted and has progressed on schedule. Sawtooth's satellite on the East Fork of the Salmon River was completed during the year. Both of these facilities are close to the epicenter of the October 28th earthquake (6.9 on the Richter Scale) but incurred no major damage.

Final design plans and specifications for the Curl Lake and the Cottonwood Creek satellites to Lyons Ferry State Fish Hatchery were reviewed. Both sites provide smolt acclimation and release facilities. Curl Lake releases to the Tucannon River and Cottonwood Creek releases to the Grande Ronde.

The preliminary design memorandum for Irrigon State Fish Hatchery was reviewed. Final design should be completed for review late in 1984.

Lookingglass State Fish Hatchery was formally dedicated in June. The LSRCP Coordinator and the Facilities Specialist both attended the ceremony.

Lyons Ferry Phase II (WDF) construction was started during 1983. The contractor is close to schedule and should complete the work in late 1984.

The final design of Tucannon Hatchery was reviewed. This facility will operate as a satellite of Lyons Ferry (WDG portion).

A site was chosen for the Clearwater River production of both chinook and steelhead completing this offices' site selection responsibilities. The office is now involved in the conceptual design of the hatchery.

Review of the Design Memorandum for Wallowa State Fish Hatchery expansion has been accomplished. We anticipate that construction will begin in early 1984.

Construction will be complete at Hagerman NFH during 1983. Two problems resulted during construction at Hagerman: Prior to the start of construction, considerable effort was expended by both FWS and the Corps to resolve a water rights question with the Brailsford Ditch Company. Midway through construction the Ditch Company objected to a planned pump back system that would provide them with "used" water. Rather than delay construction, the system was redesigned to return water to the trout raceways rather than to Brailsford Ditch.

The second problem involves reported damage to the office of the Tunison Lab Hagerman Field Station as a result of dynamite blasting during hatchery construction. Associate Director - Research and Development by letter of July 4th has requested the Boise LSRCP Coordinator to meet with the Corps to evaluate and determine an economical and appropriate level of repair. This will be done at the conclusion of major construction at Hagerman NFH.

#### IV. FWS Cooperative Programs:

The LSRCP program funded several cooperative studies with other FWS stations.

Two studies were funded with the Idaho Cooperative Fisheries Unit: an "Evaluation of hatchery practices and methods to control bacterial kidney disease in hatchery stocks of Snake River Chinook Salmon" was initiated in 1982, and will continue through 1988; and a program for trapping fall chinook salmon at Ice Harbor Dam has been continued annually.

A "Study of Etiology of Early Mortality in Spring and Summer Chinook Salmon" was initiated this FY in conjunction with the Tunison Laboratory and the Iowa State Cooperative Fishery Research Unit. This diet study will continue through FY 85, and is being conducted in conjunction with related disease studies conducted by the State of Idaho. Funds were also provided to FAO-Dworshak for assistance with Evaluation Studies work, and to the Dworshak Fish Health Center for Hatchery Biologist activities associated with both State and Federal operated LSRCP hatcheries.

#### V. State Cooperative Programs:

In addition to interagency cooperation afforded by the compensation program, five cooperative agreements were formalized between FWS and the state agencies which established guidelines for the mutually beneficial loans of vehicles and equipment and transfers of fish eggs and fry between LSRCP funded and State funded programs.

#### VI. Meetings:

On December 14, LSRCP Coordinator accompanied ARD Steucke on a LSRCP briefing for Director Jantzen.

Meetings were had in Boise on February 24th, and April 27th to draft Hatchery Evaluation Guidelines. Representatives from FWS, WDF, WDG, ODFW, and IDFG participated.

On March 14th, LSRCP staff met with IDF&G and Idaho Power Company representatives to discuss Idaho Power Company's participation in the Lyons Ferry Fall Chinook Hatchery.

LSRCP Coordinator participated in the Dworshak NFH Coordination meeting on March 23rd.

A meeting was attended at Lyons Ferry Hatchery on March 30th to discuss LSRCP fall chinook rearing and egg allocation. The LSRCP Coordinator and representatives from WDF, WDG, ODFW, and IDFG participated.

During March, the LSRCP Manager from CE Walla Walla spent three days with LSRCP staff developing a response for CE concerning potential commercial production of anadromous fish.

LSRCP Coordinator attended the Fisheries Project Leaders meeting in Medford, Oregon April 6th and 7th.

A meeting of CE and FWS representatives was held in Boise on April 12th to explore Government options for water use at Hagerman NFH.

LSRCP staff met with representatives of NMFS, ODFW, WDF and WDG on April 18, 19 and 20th, to discuss implementation of cooperative agreements and contracts for LSRCP programs.

On May 5th a meeting was held in Boise to discuss spring chinook salmon hatchery production problems, personnel from this office, Dworshak NFH, RO, and IDFG participated.

On June 1st and 2nd the LSRCP Coordinator attended a workshop on spring chinook production at Pendleton, Oregon.

LSRCP staff attended the June 18th dedication of Lookingglass Hatchery.

On July 20th LSRCP Coordinator participated in a meeting in Walla Walla to discuss the Clearwater Anadromous site. Participants from FWS, Corps, and IDFG discussed areas of concern in regard to site location and design.

On August 22nd a cross program coordination meeting was held in Boise. Representatives from Boise ES, LSRCP Office, Dworshak FAO, and Zone Manager Iverson participated.

## VII. Training:

Training was provided to the following employees:

John Hanson, an Independent Study (Potential Impacts of Diplostomum spp. of Fish Cultural Efforts in the Upper Salmon River Drainage), September 1, 1982 to December 17, 1982, Boise State University, Boise, Idaho.

John Hanson and Kenneth Higgs, 16 hour session in First Aid, December 6-7, in Boise, Idaho.

John Hanson, Mammology, January 1, 1983 to May 15, 1983, Boise State University, Boise, Idaho.

Yvonne Phillips, Fisheries Clerical Conference, May 10-11, in Portland, Oregon.

Yvonne Phillips, Small Purchases/Federal Supply Schedules, September 26-30, Portland, Oregon.

### VIII. Visitors:

An inspection tour of LSRCP sites was conducted for Bob Peoples and Cathy Tynon of the Central Office on October 18th and 19th.

On February 22nd and 23rd ARD Steucke inspected Hagerman NFH and Crystal Springs SFH site with LSRCP representatives.

An inspection tour was conducted for Deputy ARD Vincent and Bob Peoples of C.O. on August 3rd and 4th.

An inspection tour of Hagerman NFH and Crystal Springs site was conducted for Fred Mohrman, Clerk for the House Interior Appropriation Sub-Committee on August 30th.

### VIV. Staffing:

A total of 3.02 FTE staff years was employed during the year. This total included 2.24 permanent FTE, .76 temporary full time FTE and .20 YCC.

#### Employee Appointments:

Yvonne R. Phillips 12/25/82 GS-3

#### Employee Promotions:

Yvonne R. Phillips 8/7/83 GS-4

#### Employee Resignations:

Linda K. Tidd 12/25/82 GS-5

#### Present Employees:

Kenneth R. Higgs	LSRCP Coordinator	GS-13
John S. Hanson	Facility Specialist	GS-12
Yvonne R. Phillips	Administrative Clerk	GS-5

LOWER SNAKE RIVER COMPENSATION PLAN ACTIVITIES

<u>Installation/Program</u>	<u>83 Funds</u>		<u>Species</u>	<u>83 Production</u>	
	<u>(\$000)</u>	<u>FTE</u>		<u>Pounds</u>	<u>Numbers</u>
<u>STATE OF IDAHO</u>					
McCall SFH	\$160	-	SCS	5,850	167,895
	-	-	SuCS	9,050	183,896
East Fork Trap./Rel. Site	-	-	-	-	-
Crystal Springs SFH - FWS	-	-	STT	32,000	133,361
- ACoE	108	-	-	-	-
Sawtooth SFH	30	-	SCS	-	-
Clearwater Anadromous	-	-	STT	-	-
	-	-	SCS	-	-
<u>STATE OF OREGON</u>					
Lookingglass SFH - FWS	161	-	SCS	21,732	434,640
- ACoe	50	-	-	-	-
Irrigon SFH - FWS	-	-	STT	15,030	94,781
- ACoE	117	-	-	-	-
Wallowa Rearing Station	-	-	-	-	-
<u>STATE OF WASHINGTON</u>					
Lyons Ferry SFH					
- Phase I (DG) - FWS	340	-	STT	129,665	882,665
- ACoE	120	-	FCS	47,094	299,180
- Phase II (DF) - FWS	-	-	SCS	-	-
- ACoE	-	-	RBT	-	-
Tucannon Rearing - FWS	-	-	-	-	-
Station (DG) - ACoE	80	-	-	-	-
<u>FISH &amp; WILDLIFE SERVICE</u>					
Hagerman NFH	468	8.0	STT	131,381	424,000
	-	-	FCS	1,800	79,000
	-	-	SCS	8,895	269,000
Dworshak NFH	130	2.7	SCS	77,261	549,003
Fish Disease Biologist	10	0.3	-	-	-
<u>EGG BANKS</u>					
Washington Fall Chinook	121	-	FCS	83,075	664,600
Idaho Spring Chinook	58	-	-	-	-
<u>FISHERY EVALUATIONS</u>					
State of Washington - DG	46	-	-	-	-
- DF	5	-	-	-	-
State of Oregon	69	-	-	-	-
State of Idaho	22	-	-	-	-
FWS (Dworshak FAO)	5	0.1	-	-	-
SCS Gill/Nut. Dis. Res.	225	-	-	-	-
(State of Idaho)	( 95)	-	-	-	-
(FWS - FR)	(130)	-	-	-	-
Dworshak Kid. Dis. Res.	-	-	-	-	-
(ID CFRU FY 82 Funds)					
LSRCP MGT/COORD. - FWS	96	2.4	-	-	-
- ACoE	28	0.6	-	-	-
<u>REGIONAL OFFICE</u>					
	65	-	-	-	-
GENERAL ADMIN. SERV. - FWS	218	-	-	-	-
- ACoE	27	-	-	-	-
TOTALS - FWS	\$2,229	-			
- ACoE	530	-			
- Total	\$2,759	14.10			