

# NE OREGON OUTPLANTING MASTER PLAN AND FACILITIES - ODFW

8805305

## SHORT DESCRIPTION:

Develop the Imnaha and Grande Ronde Master Plans covering production, supplementation, genetics, etc. Develop facility designs and costs with schedule for implementation. Construct and startup new facilities as agreed between comanagers and BPA.

## SPONSOR/CONTRACTOR: ODFW

Oregon Department of Fish and Wildlife  
James V. Phelps, Hatchery Coordinator  
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## SUB-CONTRACTORS:

none

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## GOALS

### GENERAL:

Supports a healthy Columbia basin, Maintains biological diversity, Maintains genetic integrity, Increases run sizes or populations, Adaptive management (research or M&E), Program coordination or planning

### ANADROMOUS FISH:

Production

### NPPC PROGRAM MEASURE:

7.4L.

### RELATION TO MEASURE:

The program measure calls for the production of spring chinook in the Hood, Umatilla, Walla Walla, Grande Ronde and Imnaha. This project is to develop the Master Plan including program specifics, facility needs, monitoring and evaluation protocols to bring these facilities into successful production.

### BIOLOGICAL OPINION ID:

The Biological Opinion on 1995-1998 Hatchery Operations in the Columbia River Basin, Consultation Number 383, Section X (B)(3 and 4).

### OTHER PLANNING DOCUMENTS:

Snake River Salmon Recovery Plan and Volume 2 Grande Ronde and Imnaha section of the Wy Kan Ush Me Wa Kush Wit

### TARGET STOCK

Bear Creek, Imnaha, Wallowa, upper and lower Grande Ronde rivers; chinook, coho and sockeye stocks as agreed with comanagers

### LIFE STAGE

All

### MGMT CODE (see below)

S,E

Catherine Creek Spring Chinook

Smolt, adult

S,L,W

Upper Grande Ronde River Spring Chinook

Smolt, adult

S,L,W

Lostine River Spring Chinook

Smolt, adult

S,L,W

### AFFECTED STOCK

Other resident species

### BENEFIT OR DETRIMENT

Both

Bull Trout

Beneficial

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## BACKGROUND

### STREAM AREA AFFECTED

#### Stream name:

Imnaha, Lostine, Wallowa and upper Grande Ronde rivers and Catherine Creek

### LAND AREA INFORMATION

#### Subbasin:

IMNAHA, GRANDE RONDE

**Stream miles affected:**

all

**Land ownership:**

both

**Hydro project mitigated:**

This program is intended to mitigate for Snake River salmon losses resulting from the construction and operation of Columbia and Snake river hydroelectric projects.

**Acres affected:**

various

**Habitat types:**

none

**HISTORY:**

This project was initiated as one of the Northeast Oregon Hatchery Projects to improve fish production in the Grande Ronde and Imnaha subbasins via hatchery and weir development.. The project was started in response to the Council's objective of doubling the numbers of salmonids in the system. Project development was delayed while comanagers and the Pacific Northwest considered how to deal with the recovery of Snake River chinook listed under the Federal ESA listing. Project was restarted in 1996.

**PROJECT REPORTS AND PAPERS:**

Northeast Oregon Salmon and Steelhead Draft Master Plan, Imnaha River, Larson, March 1990. Northeast Oregon Salmon and Steelhead Draft Master Plan, Grande Ronde River, Bryson, March 1990. Feasibility for Reintroducing Sockeye & Coho Salmon in the Grande Ronde River and Coho and Chum in the Walla Walla River, S.P. Cramer, November 1990. Draft Siting Report for Northeast Oregon Hatchery Project, Montgomery Watson, February 1992. Draft Conceptual Design Report for Northeast Oregon Hatchery Project, Montgomery Watson, October 1992. Preliminary Report of Test Well Drilling Northeast Oregon Project, Montgomery Watson, October 1992. Genetic Risk Assessment of the Imnaha Master Plan, S.P. Cramer, December 1993. Genetic Risk Assessment of the Grande Ronde River Master Plan, S.P. Cramer, December 1994. Northeast Oregon Hatchery Project Grande Ronde River Master Plan Final Report, BRYSON, NPT, January 1993.

**ADAPTIVE MANAGEMENT IMPLICATIONS:**

We have attempted recovery of Grande Ronde stocks using non-indigenous stocks. Conclusions of the Grande Ronde panel convened by US v. Oregon parties found this approach to be inappropriate and recommended the initiation of endemic broods. Recovery of Grande Ronde stocks using an endemic brood strategy will require hatchery satellite and adult capture facilities on the upper Grande Ronde and Lostine rivers and Catherine Creek . These facilities will be utilized with Captive Brood programs (already underway) as well as Conventional Brood supplementation programs in development. Monitoring and Evaluation of project activities will provide information to allow decisions to be made utilizing Adaptive Management to recover listed species and move toward delisting.

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**PURPOSE AND METHODS**
**SPECIFIC MEASUREABLE OBJECTIVES:**

Upward trend in spawning ground counts. Increased outmigration of wild smolts while avoiding unintended changes to population structure, fitness and genetics.

**CRITICAL UNCERTAINTIES:**

Without intervention, loss of biodiversity and inbreeding depression due to small population size may put these stocks further at risk. Project implementation is expected to reduce those risks and hasten recovery and delisting.

**BIOLOGICAL NEED:**

Recovery of weak populations within 2-4 generations (8-16 years), to population sizes supporting ESA delisting. Prevent loss of biodiversity and inbreeding depression due to small population size. Develop population sizes capable of sustaining Tribal and Non-Tribal Harvests.

**HYPOTHESIS TO BE TESTED:**

Supplementation with endemic stocks will improve returns of ESA listed salmon species and stocks.

**ALTERNATIVE APPROACHES:**

See Finding of the US v. Oregon Grande Ronde panel and ODFW's Application for Emergency for Permit for Scientific Purposes and To Enhance the Production or Survival of Endangered Grande Ronde River Basin Spring Chinook under the Endangered Species Act.

**JUSTIFICATION FOR PLANNING:**

ODFW is involved as a comanager to plan, coordinate and participate in the operation of facilities which will release fish to reduce the likelihood of Extinction and progress toward recovery and delisting. ODFW, CTUIR and NPT are comanagers and will be funded under this and other projects to participate in the continued planning, construction, operation & maintenance and monitoring related to these facilities. This coordination and planning is required to ensure that this project is well thought out and has the highest potential for success.)

**METHODS:**

Supplementation using one or more of the following products; adults, gametes, eggs, fry, parr, presmolt, smolts, captive broodstock. The priority is to rear and release endemic smolts from a local facility. Captive broodstock began in 1995 with collection of juvenile chinook under LSRCP. In 1997 conventional production for these stocks may be initiated.

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**PLANNED ACTIVITIES**

**SCHEDULE:**

**Planning Phase**                      **Start** 1996                                      **End** 1998                                      **Subcontractor** none

**Task** 1996 Imnaha, Lostine, upper and lower Grande Ronde River and Catherine Creek Master Plans, Biological Assessments, NEPA EA/FONSI or Exemptions, Final Designs, site acquisitions, Cultural Resource surveys, 1997: Continue planning, construction and operation of additional facilities as mutually agreed by comanagers to reach NEOH goals.

**Implementation Phase**    **Start** 1997                                      **End** 2013                                      **Subcontractor**

**Task** (Construction of incubation and adult capture facilities on the Lostine and upper Grande Ronde rivers and Catherine Creek. Operation of facilities, 1998-

**O&M Phase**                      **Start** 1997                                      **End** ongoing                                      **Subcontractor**

**Task** Broodstock capture, acclimation and release.

**PROJECT COMPLETION DATE:**

ongoing

**CONSTRAINTS OR FACTORS THAT MAY CAUSE SCHEDULE OR BUDGET CHANGES:**

Difficulties in reaching agreement on program specifics, land purchase, funding, construction scheduling and NEPA analysis.

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**OUTCOMES, MONITORING AND EVALUATION**

**SUMMARY OF EXPECTED OUTCOMES**

**Expected performance of target population or quality change in land area affected:**

Reducing stress and improving imprintation of native stock smolts from the Captive Brood program and the conventional brood program that will use these facilities is expected to assist in the recovery and delisting of these stocks.

**Present utilization and conservation potential of target population or area:**

The present utilization potential is very limited due to depressed status and low productivity of these stocks under current conditions. The conservation potential including measures in this proposal is excellent assuming improvements anticipated in other tributary and mainstem projects are realized.

**Assumed historic status of utilization and conservation potential:**

According to Grande Ronde River Subbasin (NPPC 1990), "Fishery managers estimated that 12,200 spring chinook salmon escaped to the mouth of the Grande Ronde in 1957." By comparison, only 1800 adults escaped to the entire Snake River Basin in 1995.

**Long term expected utilization and conservation potential for target population or habitat:**

We believe the potential for recovery, delisting and return to harvestable levels is excellent.

**Contribution toward long-term goal:**

This program will improve egg to adult survival of the target stocks while protecting stock integrity.

**Indirect biological or environmental changes:**

none

**Physical products:**

A Master Plan, trapping and acclimation facilities, increased smolt production and adult returns.

**Environmental attributes affected by the project:**

NA

**Changes assumed or expected for affected environmental attributes:**

NA

**Measure of attribute changes:**

NA

**Assessment of effects on project outcomes of critical uncertainty:**

The initial Monitoring and Evaluation is described in Project Number 9604400. Additional M&E needs will be described in the Master Plan.

**Information products:**

Monthly, quarterly and Annual reports.

**Coordination outcomes:**

This project had been deferred until several fishery comanagement issues were resolved.

**MONITORING APPROACH**

Specifics developed in the Master Plan will include: Evaluate success of returning adults from the Captive Brood and conventional hatchery programs, their resultant natural smolt production and adult returns. Success will be measured by progress toward recovery, delisting and healthy populations capable of supporting Tribal and Nontribal harvest.

**Provisions to monitor population status or habitat quality:**

See Project numbers 9202604, 8909600 and LSRCP Research.

**Data analysis and evaluation:**

This issue will be dealt with in detail in the Master Plan.

**Information feed back to management decisions:**

Already in place is an Annual Operating Plan that includes all comanagers and research.

**Critical uncertainties affecting project's outcomes:**

Will be resolved through Monitoring and Evaluation outlined above.

**EVALUATION**

see MONITORING APPROACH

**Incorporating new information regarding uncertainties:**

Already in place is an Annual Operating Plan that includes all comanagers and research.

**Increasing public awareness of F&W activities:**

Through periodic reports, presentations and press coverage.

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**RELATIONSHIPS**

**RELATED BPA PROJECT**

9202604 Spring Chinook Salmon Early Life History  
9801001 Grande Ronde Basin Spring Chinook Captive Broodstock Program Operation and Maintenance, Monitoring and Evaluation, and Fish Health Monitoring  
9604400 Grande Ronde Basin Spring Chinook Captive Broodstock Program Capitol Construction Component  
9405400  
8402500 Grande Ronde Habitat Enhancement, Aka Joseph Creek, grande Ronde River ,or  
8805302 Ne Oregon Hatchery - Grande Ronde Satellite Facilities  
8805301 Ne Oregon Outplanting Facility Master Plan  
LSRCP, ODFW, USFWS, Lookingglass Hatchery Production Imnaha summer chinook. LSRCP, ODFW, USFWS, NPT: 1995 -96 Captive Broodstock Program NPPC #74D

**RELATIONSHIP**

Grande Ronde Basin Early Life History Monitoring & Evaluation  
Grande Ronde Basin Captive Brood Stock Operation & Maintenance, Monitoring & Evaluation and Fish Health Monitoring  
Grande Ronde Basin Captive Brood Program Capital Construction  
  
Bull Trout Life History  
Grande Ronde Habitat Enhancement  
  
CTUIR comanagement on upper Grande Ronde River and Catherine Creek  
Nez Perce comanagement on Lostine River  
Work being done to benefit listed Spring/Summer Chinook in the Imnaha and Grande Ronde basins by ODFW and comanagers

**RELATED NON-BPA PROJECT**

Monitoring and Evaluation on Imnaha, Lostine and upper Grande rivers and Catherine Creek

**RELATIONSHIP**

Information needed for management direction and adaptive management

**OPPORTUNITIES FOR COOPERATION:**

Opportunity to integrate LSRCP, Captive Brood and NEOH production, Acclimation and Adult Collection and Holding Facilities in the Grande Ronde and Imnaha subbasins.

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**COSTS AND FTE**

1997 Planned: \$200,001

**FUTURE FUNDING NEEDS:**

**PAST OBLIGATIONS (incl. 1997 if done):**

| <u>FY</u> | <u>\$ NEED</u> | <u>% PLAN</u> | <u>% IMPLEMENT</u> | <u>% O AND M</u> |
|-----------|----------------|---------------|--------------------|------------------|
| 1998      | \$290,000      | 50%           | 50%                |                  |
| 1999      | \$220,000      | 20%           | 60%                | 20%              |

| <u>FY</u> | <u>OBLIGATED</u> |
|-----------|------------------|
| 1997      | \$200,001        |

|      |           |     |     |     |        |           |
|------|-----------|-----|-----|-----|--------|-----------|
| 2000 | \$220,000 | 10% | 50% | 40% | TOTAL: | \$200,001 |
| 2001 | \$220,000 | 5%  | 20% | 75% |        |           |
| 2002 | \$220,000 | 5%  | 10% | 85% |        |           |

Note: Data are past obligations, or amounts committed by year, not amounts billed. Does not include data for related projects.

**LONGER TERM COSTS:** \$220,000.00 for continued operation and maintenance.

**1997 OVERHEAD PERCENT:** Presently 20.5%, however varies on an annual basis

**HOW DOES PERCENTAGE APPLY TO DIRECT COSTS:**  
Applies to all costs except capital purchases and contractual services

**CONTRACTOR FTE:** 2.5

**SUBCONTRACTOR FTE:** Unknown

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**SUPPLEMENTAL ANADROMOUS FISH EVALUATION FACTORS:**  
Project addresses specific Council Program measures.