

# INTEGRATED HATCHERY OPERATIONS TEAM

9204300

## SHORT DESCRIPTION:

Develop and implement regionally developed artificial propagation guidelines, plans, policies and performance measures. Implement remedial measures identified during the hatchery audit process. Coordinate the operation of salmonid hatchery programs to meet basinwide resource management goals and objectives. Operate hatchery programs in compliance with regionally adopted hatchery performance standards, fish health, ecological interactions, and genetics policies.

## SPONSOR/CONTRACTOR: PSMFC

Pacific States Marine Fisheries Commission  
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## SUB-CONTRACTORS:

Oregon Department of Fish and Wildlife, Washington Department of Fish and Wildlife, Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Confederated Tribes and Bands of the Yakama Indian Reservation, Confederated Tribes of the Colville Reservation, Confederated Tribes of the Warm Springs Reservation of Oregon, Confederated Tribes of the Umatilla Indian Reservation, Nez Perce Tribe, Shoshone Bannock Tribe, and Columbia Basin Fish and Wildlife Foundation

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## GOALS

### NPPC PROGRAM MEASURE:

7.2A.3; 7.2A.5; 7.2A.6; 7.2A.7; 7.2A.8; 7.2A.9; 7.2A.10; 7.2A.11; 7.2B.1; 7.2D.6; 7.2D.7

### RELATION TO MEASURE:

The project provides funding necessary for the full participation of the agencies and tribes, with management responsibilities for the Region's hatcheries, in the completion of assigned tasks under the Council's Fish and Wildlife Program

### TARGET STOCK

All Stocks

### LIFE STAGE

All

### MGMT CODE (see below)

S,A,(P),(L),W

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## BACKGROUND

**Project is an office site only**

### HISTORY:

Hatchery operation policies and procedures have been developed and published for implementation for all anadromous Columbia River Basin hatcheries. The Policies and Procedures for Columbia Basin Anadromous Salmonid Hatcheries underwent an extensive public and peer review process throughout the region. The state, tribal and federal fish and wildlife agencies committed to adopt the principles identified in the Regional Policies as demonstrated by signatures from each agency director and tribal chairman in January, 1995. Hatchery operational plans for each hatchery facility have been developed and are being updated every two years. Draft policies for coordinated operations have been prepared. Hatchery audits are being performed based on the process and performance standards developed by IHOT. In 1996 and 1997 IHOT coordinated the independent hatchery audits and began to review the results. The team has started to develop a data base of remedial actions suggested by the audit contractor for analysis and prioritization.

### BIOLOGICAL RESULTS ACHIEVED:

See the section titled "MANAGEMENT IMPLICATIONS"

### PROJECT REPORTS AND PAPERS:

Existing Policy Affecting Hatcheries in the Columbia River Basin: Combined Reports, DOE/BP-60629-1 May 1993; Operation Plans for Anadromous Fish Production Facilities in the Columbia River Basin, Volumes I, II, III, IV, V, DOE/BP-60629-1-7 May 1993; Implementation Plan for Integrating Regional Hatchery Policies, September 1994; Policies and Procedures for Columbia

Basin Anadromous Salmonid Hatcheries, DOE/BP-60629 July 1995. The second editions of the Operation Plans for Anadromous Fish Production Facilities in the Columbia River Basin Volumes I, II and III were published in 1996.

**ADAPTIVE MANAGEMENT IMPLICATIONS:**

Implementation of consistent hatchery operational policies and procedures will result in increased smolt to adult survivals and hatchery products which meet the fish management goals of the basin. The IHOT is also pursuing increased levels of cooperation by entering into MOU's among all operators of anadromous fish hatcheries to meet common goals which will ensure consistent hatchery operations throughout the basin. The co-managers pledge to confer with each other and to use their authorities and resources to accomplish these mutually acceptable hatchery practices.

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**PURPOSE AND METHODS**

**SPECIFIC MEASUREABLE OBJECTIVES:**

The policies and procedures document is organized into 5 chapters with each having measurable goals and objectives. The following four goals cover the coordination of the policies: Coordinate the operation of salmonid hatchery programs to meet basinwide resource management goals and objectives. Develop administrative agreements for improved sharing of facilities, manpower, equipment and/or supplies to meet basinwide management program goals and objectives. Foster open and frequent communication between managing entities to coordinate and jointly resolve technical issues relating to artificial propagation. Operate hatchery programs in compliance with regionally adopted hatchery performance standards, fish health, ecological interactions, and genetics policies. Implementation of the remedial actions that will be identified through the independent audit process will result in better and more efficient hatchery production of smolts in the Columbia River Basin to meet program objectives.

**CRITICAL UNCERTAINTIES:**

The effective use of anadromous hatchery fish should be based on well defined basinwide fishery management plans.

**BIOLOGICAL NEED:**

Ensure that anadromous fish hatchery operations will be coordinated throughout the Columbia River Basin and provide the best possible tools for meeting regional hatchery production responsibilities in fulfilling Columbia River fish management plans.

**HYPOTHESIS TO BE TESTED:**

NA

**METHODS:**

IHOT meets on a monthly basis to work towards meeting the four goals listed above and coordinate independent hatchery audits of all anadromous fish hatcheries in the basin.

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**PLANNED ACTIVITIES**

**SCHEDULE:**

<u>Planning Phase</u>	<u>Start</u> 1993	<u>End</u> ongoing	<u>Subcontractor</u>
<u>Task</u> 1998	Review independent hatchery audit report findings. Submit IHOT reports containing recommendations/actions to the appropriate operating and funding agencies following review of each independent hatchery audit report. Coordinate and integrate the Regional Hatchery Policies according to the IHOT Implementation Plan. Coordinate efforts to implement the Regional Hatchery Policies.		
1999 - 2001	IHOT will serve as the forum to foster open and frequent communications for coordinating and jointly resolving technical issues related to hatchery operations. Develop administrative agreements that improve sharing of manpower, equipment and supplies to enhance efficiency in meeting basin wide management goals. Review and revise Regional Hatchery Policies as needed. Review and revise Hatchery Operational Plans		

**PROJECT COMPLETION DATE:**

ongoing

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

The risks are minimal when fostering open communications, however, this will require continued cooperation from all of the signatory parties and that the use of the cultured fish be based on well defined fishery management plans.

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**OUTCOMES, MONITORING AND EVALUATION**

**SUMMARY OF EXPECTED OUTCOMES**

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

The IHOT members will actively participate in ensuring that the following outcomes are coordinated: All fish produced and released are consistent with management goals. Physical facilities and equipment are operated consistent with standards to maximize fish quality. Ensure compliance with hatchery coordination, fish health, ecological interactions and genetics policies. Ensure the use of an audit framework to evaluate the compliance of hatchery operations with regional standards.

**Information products:**

The hatchery audits will identify remedial actions required for the hatcheries to comply with IHOT policies. IHOT analysis of the remedial actions will result in a prioritization of the actions.

**Coordination outcomes:**

January 1993: Began Annual Reports to Council. January 1994: Completed implementation guidelines, performance standards and operating guidelines consistent with NMFS Recovery Plan. June 1994: Submitted Plan for implementing Production Policies. January 1995: Published IHOT Policies and Procedures. June 1996: Published IHOT Operation Plans for Anadromous Fish Production Facilities in the Columbia River Basin. Future: Provide prioritized remedial actions at fish hatcheries to improve production. Provide to Council the IHOT report of the analysis of the audits. Provide direction to fisheries co-managers to improve and coordinate hatchery operations basin wide. Revise IHOT Policies and Procedures.

**MONITORING APPROACH**

IHOT meets on a monthly basis to work towards meeting the four goals listed above and coordinate independent hatchery audits of all anadromous fish hatcheries in the basin.

**Data analysis and evaluation:**

IHOT members will analyze and evaluate hatchery audit results using best hatchery science available.

**Information feed back to management decisions:**

IHOT will submit reports to the Council, to all co-managers, and to funding entities.

**EVALUATION**

High level of coordination of hatchery operations in the basin. Hatcheries meeting various program goals and requirements of which there are many. Increased survival to adult stage of hatchery reared fish.

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**RELATIONSHIPS**

**RELATED BPA PROJECT**

**RELATIONSHIP**

8906200 Prepare Draft Annual Implementation Work Plan

IHOT Coordination, 0.25 FTE

**OPPORTUNITIES FOR COOPERATION:**

All Columbia Basin co-managers and cooperating entities as listed in the IHOT Policies and Procedures document have agreed to abide by these policies and have signed a memorandum of agreement to that effect. The IHOT is the first forum in the Columbia River Basin to develop technical policies and procedures affecting the management of anadromous fish hatcheries in the basin.

The IHOT forum will lead to greater cooperation among all of the hatchery facility operators regarding the technical aspects of fish hatchery operations.

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## **COSTS AND FTE**

**1997 Planned:** \$465,000

### **FUTURE FUNDING NEEDS:**

<u>FY</u>	<u>\$ NEED</u>	<u>% PLAN</u>	<u>% IMPLEMENT</u>	<u>% O AND M</u>
1998	\$635,000			
1999	\$635,000			
2000	\$680,000			
2001	\$727,000			
2002	\$778,000			

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

<u>FY</u>	<u>OBLIGATED</u>
1992	\$708,910
1993	\$502,561
1994	\$470,092
1995	\$887,238
1996	\$135,311
1997	\$405,934

TOTAL: \$3,110,046

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

### **OTHER NON-FINANCIAL SUPPORTERS:**

National Marine Fisheries Service, U.S. Army Corps of Engineers, Mid-Columbia Public Utility Districts, Pacific Northwest utilities Conference Committee

### **1997 OVERHEAD PERCENT:**

There are eleven contracting entities that have differing indirect costs associated with administering IHOT budgets. The average overhead rate for FY 1996 is estimated at 28.7%.

### **HOW DOES PERCENTAGE APPLY TO DIRECT COSTS:**

Varies by contracting entity.

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### **SUPPLEMENTAL ANADROMOUS FISH EVALUATION FACTORS:**

The IHOT project affects all anadromous fish reared in every hatchery in the Columbia River Basin. It is part of the coordinated plan to integrate hatchery operations of about 90 fish rearing facilities in the basin to meet the fish production goals of multiple basin plans, mitigation and compensation plans and agreements, ESA recovery plans and the Council's Columbia River Basin Fish and Wildlife Program.