

# **Salmon Hatcheries: Response to FWC request to increase production for conservation, SRKW prey, and fishery enhancement**

**Version: September 4, 2018**

## **BACKGROUND**

On August 11, 2018, the Washington Department of Fish and Wildlife Commission (Commission) requested that staff assess the budget needed to fund increased hatchery production three separate initiatives: 1) Conservation funding for programs developed by the Pacific Salmon Commission for implementation of the Pacific Salmon Treaty; 2) Southern Resident Killer Whale (SRKW) prey - including 30 million Chinook in Puget Sound and 20 million Chinook in the Columbia River; and 3) Fishery enhancement by increasing the production of 5.5 million coho in the Columbia River.

## **INTRODUCTION**

- 1) **Conservation/PSC** – We are seeking full funding through federal avenues.
- 2) **SRKW Prey** - WDFW staff evaluated budget needs and facility requirements necessary for the implementation of the increased production identified in the Commission’s proposal. Staff looked for existing capacity, if available, and determined construction costs if capacity was not available. Capacity of WDFW hatcheries have been reduced over time due to improving health at release, hatchery closures, reduction of available water (quantity/quality), and the implementation of mass marking.

In addition, WDFW consulted with the Oregon Department of Fish and Wildlife (ODFW) and the US Fish & Wildlife Service (USFWS) to obtain the facility needs and operating expenses to meet the proposed production at their facilities.

- 3) **Fishery Enhancement** – WDFW staff evaluated the costs and facility improvements to meet the needs of raising coho salmon at several facilities within the Washington portion of the Columbia River drainage. Rearing of coho occurs over an approximate 14 month period demanding greater water and pond volume requirements to stay within the established rearing criteria.

## **BUDGET**

- 1) **Conservation** - We are seeking full funding through federal avenues.
- 2) **SRKW Prey** - The estimated operating budget to raise 50 million Chinook is \$9,607,004. This estimate includes FTEs, fish feed, fish health assessments, mass marking/coded wire tagging, monitoring and evaluation, trucking, chemicals and drugs, maintenance, and agency indirect. If we pursued a 50:50 funding split with federal partners, as suggested, then the cost would be \$4,803,502.

The estimated capital budget request to raise 50 million additional Chinook is \$121,395,675. This includes construction of net pens, ponds, incubation equipment, water supply, pollution abatement, planting trucks, and auto/manual marking trailers.

**Fishery Enhancement** – The estimated operating budget to raise 5.5 million coho is \$1,870,341. This estimate includes FTEs, fish feed, fish health assessments, mass marking and coded wire tagging, monitoring and evaluation, chemicals and drugs, maintenance, and agency indirect. If we pursued a 50:50 funding split with federal partners, as suggested, then the cost would be \$935,171

The estimated capital budget request needed to raise 5.5 million coho is \$38,929,500. This includes construction of net pens, ponds, incubation equipment, water supply, pollution abatement, planting trucks, and auto/manual marking trailers.

For items 2 and 3, capital budget needs would be sequenced occur over the next several biennia to account for pre-design, permitting, etc. Much of the operating budget funding would not be needed until production approval is reached with our co-managers, federal agencies permit the program changes, and facility modifications have occurred.

#### **POTENTIAL CONSTRAINTS**

WDFW would need to provide additional information to NOAA and USFWS to reinstate Endangered Species Act (ESA) consultation for programs already covered under the ESA. For those programs that have not yet undergone an ESA consultation, WDFW and our co-managers will need to update and resubmit Hatchery Genetic Management Plans to NOAA and USFWS for ESA consultation at the new production levels.

In order to increase hatchery production, WDFW will need to meet legal, co-manager, ESA, and environmental obligations.

#### **2019-21 HATCHERY BUDGET ITEMS ALSO IN CONSIDERATION**

At the August meeting, the Commission approved an operating funding request to keep eight existing facilities open (for steelhead, salmon, and trout) and another, separate performance-level package that includes \$1 million for increased hatchery salmon production and \$0.8M for Mitchell Act facilities. These are separate from SRKW-directed funding, which we currently have marked as a “place-holder,” pending further direction from the Governor’s Office.

The Department has anticipated a request emerging from the Governor’s SRKW Task Force this fall that would ask the Department to submit a request for operating funds to increase hatchery

production, along with other activities to help with the recovery of SRKW such salmon habitat restoration, vessel enforcement, pinniped management, forage fish conservation, and outreach.

The Department is currently supporting the SRKW Task Force and is generating estimates for increased production, including brood year 2018 (eggs taken this fall to improve the availability of prey in the next three to five years. We're actively working with NMFS and tribal co-managers to identify facilities that produce documented SRKW prey and exploring available capacity at those facilities that fit within other legal requirements.