Solving the "H's"
Hatchery and Harvest
Reform in Willapa Bay:

Hatchery Scientific Review Group

What are we trying to accomplish?

□ RCW 77.04.012
Mandate of department and commission

RCW 77.04.012 Mandate of department and commission (in part)

"Wildlife, fish, and shellfish are the property of the state. The commission, director, and the department shall preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish in state waters and offshore waters."

Mandate of department and commission. cont.

"The department shall conserve the wildlife and food fish, game fish, and shellfish resources in a manner that does not impair the resource. In a manner consistent with this goal, the department shall seek to maintain the economic well-being and stability of the fishing industry in the state. The department shall promote orderly fisheries and shall enhance and improve recreational and commercial fishing in this state."

Mandate of department and commission. cont.

"The commission may authorize the taking of wildlife, food fish, game fish, and shellfish only at times or places, or in manners or quantities, as in the judgment of the commission does not <u>impair</u> the supply of these resources."

Outcomes:

In some ways ESA listing is a legal determination of the status of a population (and a pretty low bar). I believe the moral and legal responsibility that is described in the founding legislation for WDFW (preserve, protect and perpetuate) should be the guidance we strive to follow and sets the standard of care at a much higher level.

The Issues:

Chinook populations in Willapa Bay are no longer distinct from one another.

- Most naturally spawning fish are 1st or 2nd generation hatchery fish.
- Reduced benefits for all fisheries -Excess hatchery fish return both to the hatchery and on the spawning grounds.

The Good news

- □ 1) Wild Salmonid Policy- 1997
- □ 2) Hatchery and Fishery Reform Policy-2009
- 3) Draft Willapa Bay Management Plan- 2010
- □ 4) Willapa Bay Salmon Management Policy -2015
- 5) Legal authority in implement Policies

Solving the Hatchery "H"

Hatchery Reform— provides the means and methods to allow for distinct natural populations to develop, and become more productive through local adaptation, even if their origins are different than historical populations. This is done by managing gene flow between natural and hatchery fish so the natural environment has a stronger influence on selection (PNI and pHOS).

Solving the Harvest "H"

- Harvest- Selective fishing provides the means for those naturally produced fish to escape in sufficient numbers and generations to allow natural selection to operate on the population via "local adaptation".
- Currently there are significant numbers of excess hatchery fish (both at the hatchery and on the spawning grounds) to greatly increase benefits to all fisheries, and increase conservation efforts, if they could be harvested.

Summary

- Salmon populations are in their current condition in large part due to past management practices in 3 of the 4 "H's" (Harvest, Hatcheries, Habitat).
- Now that we have a better understanding of Harvest (selective), Hatcheries (Hatchery Reform) and Habitat (improvements) we owe it to the resource and future generations of WA state citizens to apply that understanding to rebuild those populations in a manner consistent with the founding legislation.

Questions?