

Washington and Oregon Eulachon Management Plan 2.0



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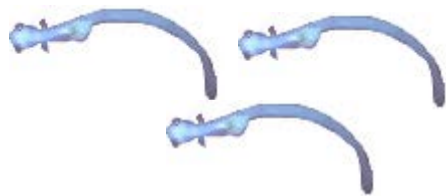


Washington
Department of
**FISH and
WILDLIFE**

Life History

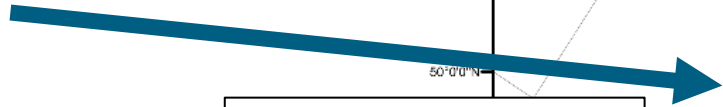


Grow for 2–5 years in the ocean

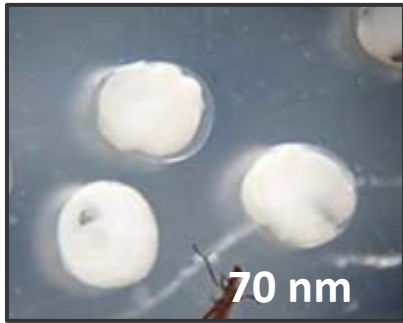
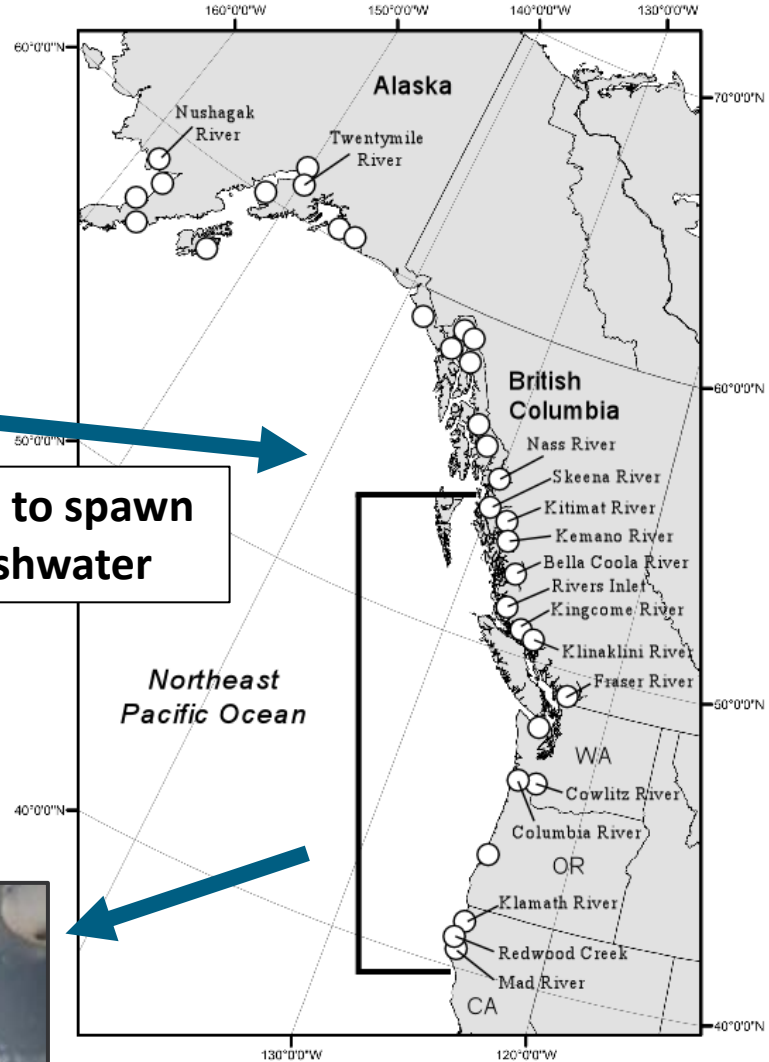


4–7 mm

Larvae disperse into ocean



Migrate to spawn in freshwater



Ecosystem Role, forage fish

Pacific Whiting (Hake)



White Sturgeon



Humpback, Beluga, and Gray Whales



Chinook smolts, Adult Spring Chinook and Steelhead



Seals and Sea Lions



Gulls, Eagles, Cormorants



Washington State Fisheries



- Washington accounted for most of the commercial smelt harvest since the late-1800s.
- The original Washington Oregon Eulachon Management Plan was implemented in 2001, following declines of fishery landings in the mid-1990's.
- In response to the ESA listing of Eulachon in 2010, the states discontinued commercial and recreational fisheries, 2011–2013.



Commercial Fisheries

- Since 2014, the states have worked closely with the NOAA Fisheries to determine when sustainable smelt harvest may occur.
- Today's commercial fisheries are within the mainstem Columbia River, limited to 8-15 fishing periods annually and account for a fraction of the total harvest.



Recreational Fisheries

- When harvest opens to the public, thousands of people will show up to dip smelt along the banks of the Cowlitz River in Washington.
- In recent years, fisheries have been limited to 1-2 days of fishing, 5 hrs of fishing per day, with a 10-lb daily limit per person.



Why are we updating?

The 2001 plan is outdated because the status of Eulachon has changed:

- Southern DPS Eulachon were federally listed as threatened on March 18, 2010.
- Need for updated management strategies and a transparent process.
- Need to obtain take coverage for our fisheries under a 4(d) rule that NOAA is working on for Eulachon.



Management Area



Columbia River mainstem from the mouth upstream to Bonneville Dam

Adjacent tributaries including:

- Lewis, Kalama, Cowlitz, Elochoman, Grays, and Deep rivers in Washington
- Sandy River in Oregon



Smelt Monitoring

- Commercial fisheries provide adult smelt biological data and a rough estimate of in-season abundance for informing sustainable harvest goals.
- Plankton tow surveys are used to estimate egg and larvae densities. Data is expanded to estimate total adult run abundance (spawning stock biomass) at the end of the season.



Harvest Strategies

Due to data limitations, this plan uses a stepwise approach to evaluate relevant indicators to determine the starting Harvest Phase at the onset of the season.



Pre-season indicators include:

P1: Average recent abundance

P2: Trend in recent abundance

P3: Trend in forecasted abundance



Harvest Strategies



Each Harvest Phase is assigned an end-of-season target harvest rate, progressing at each phase and improved run-sizes, providing managers with the information needed to develop sustainable harvest seasons.

- HP 0 – Research Impacts Only
- HP 1 – 2%
- HP 2 – 4%
- HP 3 – 6 %
- HP 4 – 10 %



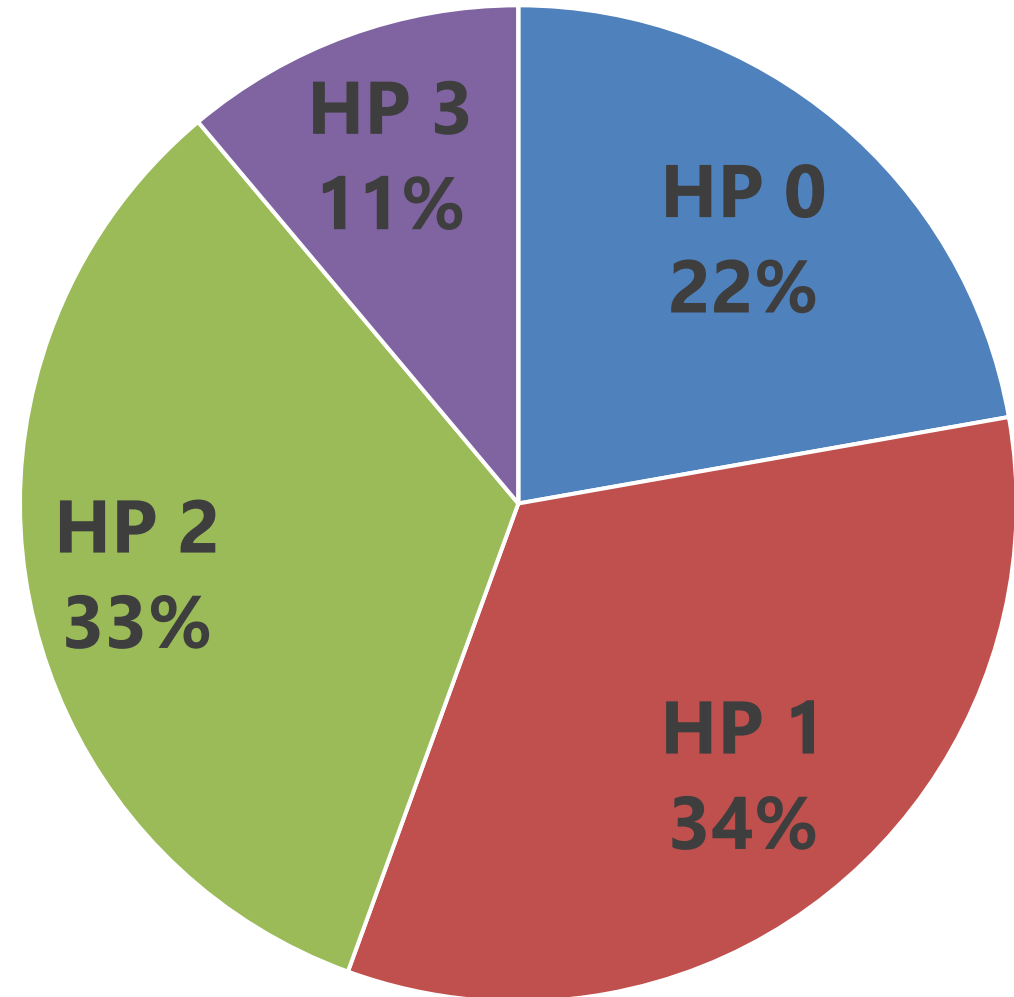
Season Setting

- The Harvest Phase also determines the allowable open periods and areas for commercial and recreational harvest.
- Due to the challenging nature of predicting a smelt run pre-season, in-season management triggers allow for adjustments to the Harvest Phase if the run abundance is higher or lower than predicted.



Frequency of Harvest Phases

- In an exercise to evaluate the frequency of harvest phases occurring, we applied these updated harvest strategies the past 9 years.
- In that time, we found Harvest Phases 1 and 2 were the most likely to occur.
- Harvest Phase 4 did not occur in this time range.



Other Considerations



- Timeframe and scope of plan
- Future monitoring recommendations
- Evaluation of ESA-take
- Coordination and communication with other harvest entities and NOAA Fisheries
- Enforcement coverage

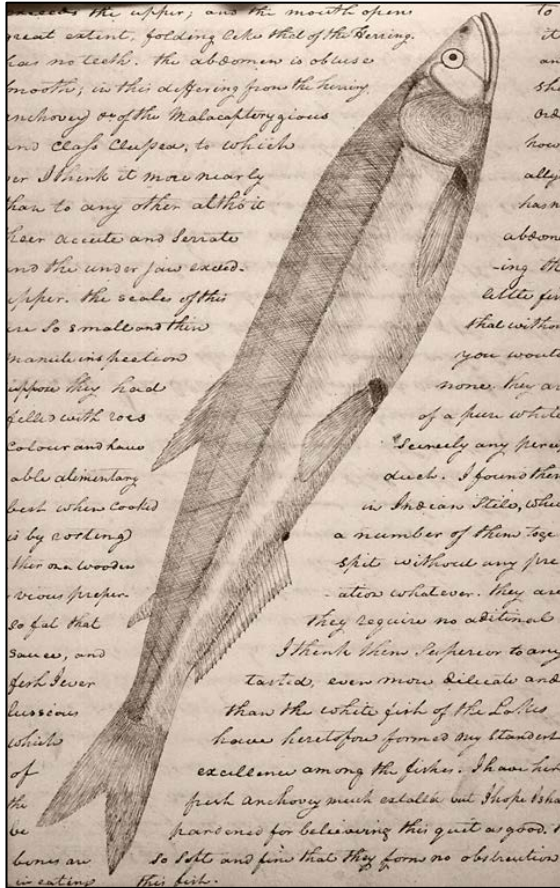


Steps Towards Adoption

- Post updated management plan and SEPA Analysis for public comment – *in progress*.
- Joint State staff review of comments received and update plan.
- Finalize and adopt plan, director signature.



Lewis and Clark Expedition



"They are so fat they require no additional sauce, and I think them superior to any fish I ever tasted..."

- February 24, 1806, Meriwether Lewis

Eulachon Drawing by Meriwether Lewis
Image from lewis-clark.org

