

OREGON AND WASHINGTON DEPARTMENTS OF FISH AND WILDLIFE
JOINT STAFF REPORT - WINTER FACT SHEET NO. 3
Columbia River Compact/Joint State Hearing
February 5, 2014

Research Fisheries under consideration:

- Non-Indian mainstem Columbia River commercial eulachon fisheries
- Oregon and Washington tributary recreational eulachon fisheries

Detailed information on eulachon stock status, management guidelines, and harvest for Columbia River and tributary fisheries are presented in Joint Staff Reports, which are produced annually and available on-line. The most recent report is the 2014 Winter Report (January 21, 2014).

<http://wdfw.wa.gov/fishing/crc/> or <http://www.dfw.state.or.us/fish/OSCRP/CRM/reports.asp>

STOCK STATUS

- Eulachon enter the Columbia River in early to mid-January, though a small ‘pilot’ run often occurs in December. Peak tributary abundance is usually in February, with variable abundance through March, and an occasional late showing during April.
- Since 1992, average abundance of eulachon, as represented by commercial landings, declined by 90% from pre-1993 levels. Twelve years in particular were especially low, with landings averaging 20,000 pounds per year or 1% of pre-1993 levels, a result of fishery restrictions implemented in response to extremely low abundance.
- Effective May 17, 2010, the Southern Distinct Population Segment of eulachon were federally-listed as threatened under the ESA. This genetic group encompasses all populations within the states of Washington, Oregon, and California and extends from the Skeena River in British Columbia (inclusive) south to the Mad River in Northern California (inclusive). The National Marine Fisheries Service (NMFS) identified climate change impacts on ocean conditions as the most serious threat to eulachon; with commercial harvest ranked 9th and recreational harvest ranked 13th among 16 identified threats to Columbia River eulachon.
- In response to the ESA listing, the states took precautionary action and prohibited commercial sales from Columbia River and tributary fisheries effective December 10, 2010, and closed all recreational eulachon fisheries effective January 1, 2011.
- The states have since been coordinating with NMFS to reinstate research-based eulachon fisheries. Limited conservation-level fisheries would provide the opportunity to gather fishery landing and pounds per landing (CPUE) data again so that the status and run strength of the Columbia River eulachon can be better assessed. Similar information was used in the decision to list eulachon under the ESA.

2014 Abundance Indicators

- For the 2014 adult return, both positive and negative indicators exist that do not readily point toward improving or declining returns. However, indicators for 2013 were also mixed, which ended up being one of best runs in a decade based on larval counts, so the 2014 run is

predicted to be similar to 2011 and 2012 (which were improved abundance years), but could be on par with 2013.

Positive abundance indicators for 2014 include:

- (1) A modest improvement in eulachon larval densities during the winter of 2011;
- (2) A relatively high level of Age-1+ bycatch during 2011, and a relatively high level of Age-2+ bycatch during 2012 in the Canadian ocean shrimp fisheries; and
- (3) Favorable ocean conditions during most of the ocean-phase for BY 2009-20011 fish.

Negative abundance indices for 2014 include:

- (1) Low mainstem Columbia River larval densities during the winters of 2009 and 2010;
- (2) Decreasing adult smelt biomass tonnage in the 2010-2012 Canadian ocean shrimp fisheries;
- (3) Warm ocean conditions during the end of 2009 and beginning of 2010; and
- (4) Weak adult landings and CPUE for brood years 2009 and 2010.

2014 Environmental Conditions and Other Observations

- Freshwater sampling of juvenile eulachon production (larvae densities) for 2014 is averaging 43% higher than the similar period in 2013.
- The current mainstem water temperature of 41° F is conducive to adult migration, but a forecast for cold weather may delay movement.
- Bird and marine mammal activity was observed in the lower Cowlitz River the weekend of January 18-19, indicating likely presence of eulachon entering the river. No bird or marine mammal activity was observed in the river the weekend of February 1-2.

MANAGEMENT GUIDELINES

- In 2001 the WDFW, in coordination with ODFW, finalized the Washington and Oregon Eulachon Management Plan (WOEMP). The plan contains recommended policies concerning smelt fishery management in the mainstem Columbia River and its tributaries below Bonneville Dam. Fishery recommendations have been separated into three levels depending on run size expectations based on: (1) parental run strength as indexed by fishery landings; (2) juvenile production as indicated by larval sampling; and (3) estimates of ocean productivity.

<i>Fishery Structure Contained in the Washington and Oregon Eulachon Management Plan</i>
<p><u>Level One</u></p> <ul style="list-style-type: none">✓ Great uncertainty in run strength or indications of a poor return.✓ Commercial fisheries limited to one 12-24 hour period per week for the Columbia and Cowlitz rivers.✓ Tributary sport fisheries limited to one 12-24 hour fishing period per week in the Cowlitz River.
<p><u>Level Two</u></p> <ul style="list-style-type: none">✓ Promising abundance in the spawning return and productivity indices that are favorable, yet it is still uncertain whether the run is moderate or strong.✓ Commercial fisheries would consist of two or three days per week in the Columbia and Cowlitz rivers.✓ Tributary sport fisheries could be increased to two or three days per week.✓ Consider expansion of sport and commercial fisheries into other lower Columbia River tributaries.

Level Three

- ✓ Very positive indicators of strong abundance and productivity.
- ✓ Commercial fisheries would consist of up to four days per week in the Columbia River and all lower Columbia River tributaries.
- ✓ Tributary sport fisheries should be opened in all tributaries for four to seven days per week.

- As part of the recent discussions with NMFS, the states have committed to review and update the WOEMP to better demonstrate that reinstated fisheries will be consistent with ESA recovery goals, objectives, and criteria.
- The states will use the framework of the existing WOEMP to guide development of limited research-based fishery proposals for 2014. In order to emphasize a precautionary approach, the proposed fishery level for 2014 will be less than the Level One structure in the WOEMP.

Overview of Past Fisheries

- From 1938-2000, annual mainstem Columbia River commercial landings averaged 400,000 pounds. During 2001-2010, the fishery was generally open 7 days/week in December and two to four days per week (7-18 hours/day) in January through March. January through March fisheries were open 9 to 51 days (100 – 900 hours annually). Recent (2001-2010) annual landings ranged from 100 to 66,900 pounds.
- From 1938-2000, Cowlitz River commercial landings averaged 1,170,000 pounds per year. During 2001 – 2010 the Cowlitz River commercial dipnet fishery was open 1 to 3 days per week (6 -12 hour periods) during January through March. Annual landing during those years ranged from zero to 464,400 pounds.
- The Sandy River commercial fishery was open year-round until November 2010.
- During 1998-2010, Washington tributary recreational fisheries were open 1 to 7 days per week, with limited hours in some years. In 2005 daily limits were reduced from 20 pounds to 10 pounds. During 2006-2010, only the Cowlitz River was open.
- Oregon tributary recreational seasons were open 7 days per week with a 25 pound daily limit through 2009 and with a 10 pound limit in 2010.
- Tribal C&S Fisheries:
 - Members of the Yakama Nation (YN) routinely fish for eulachon for subsistence purposes using dipnet gear in the lower Cowlitz River. Yakama staff coordinate with WDFW to avoid user-group conflicts. The annual harvest of eulachon by YN tribal members typically ranges from 1,000 to 4,000 pounds.
 - Both the YN and Confederated tribes of the Warm Springs Reservation (WS) harvested eulachon from the Cowlitz River in 2013. WS members harvested an estimated 2,000 pounds.

Basis for Reinstating non-Indian Fisheries

- Historically, fishery managers relied on “fishery-dependent” assessments comprised of commercial fishery landings and pounds per landing data as an indicator for run strength. This data also helped managers identify population trends. This long-term set of data ended in 2011 with the discontinuation of Columbia River and tributary fisheries.

- With reinstatement of conservative fisheries, biological data collected will provide a better understanding of the structure of the Columbia River sub-population including data on run distribution, run strength, weight distribution, age composition, sex ratio, stage of maturity, and fecundity.
- Fishery assessment data will complement survey data currently being collected on eulachon larval production in the Columbia River system. The survey work has resulted in preliminary estimates of eulachon Spawning Stock Biomass (SSB) that ranged from 4.8 million pounds in 2011-2012 to 13.0 million pounds in 2012-2013.
- Fishery assessment data will help to better understand and fine tune the SSB estimation calculations and help staff provide NMFS with improved data for a viability assessment as part of a eulachon recovery plan.
- The data collected should also provide us a better understanding of the historical landings data, and may help the eulachon recovery team with run re-constructions for use in a viability analysis.

2014 FISHERY PROPOSALS

- Considering historic and recent population indicators, staff concludes limited fisheries, monitored for effort and catch, would provide additional information on the current status of eulachon and help place historic landings data in perspective.
- According to the WOEMP, Level Two fisheries may be considered when there is promising abundance in the spawning return and productivity indices that are favorable, yet it is still uncertain whether the run is moderate or strong.
- In order to emphasize a conservative approach to management in 2014, Washington and Oregon staff propose a season structure that is more conservative than past Level One fisheries as follows:

2014 Mainstem Columbia River Commercial Smelt Fisheries

2014 Commercial Mainstem Smelt Fishery Recommendation	
Adopt a reduced Level One fishery consisting of two 7-hour fishing periods per week	
Season:	Mondays and Thursdays from February 10 through March 6, 2014 Open hours are 7 AM to 2 PM
Area:	Zones 1-3
Gear:	Gill net only. Specifications per permanent regulations.
Miscellaneous:	24-hour Quick Reporting Rule in effect for Washington buyers.

- The proposed season, being restricted to three zones and to 8 days (56 hours), is more conservative (by half) than past Level One fisheries.
- Landings are estimated to be on the order of 2,300 to 13,300 pounds (0.02% to 0.28% of the runs seen in 2011 – 2013).

- The recommendation will provide a minimal harvest opportunity while reinstating the historic index of run strength.

2014 Washington Tributary Commercial Fishery

- Historically, tributary commercial fishery landings accounted for over 95% of total commercial landings and over 85% of landings in recent years (2001-2010).
- WDFW staff is not proposing a Washington tributary commercial dip net fishery at this time. This will result in a substantial reduction in harvest impacts for 2014 relative to traditional Level One fisheries.

2014 Washington Tributary Recreational Smelt Fishery

<i>2014 Washington Tributary Sport Fishery Recommendation</i>	
Adopt a reduced Level One fishery consisting of one 6-hour fishing period per week	
Season:	Saturdays from February 8 through March 1, 2014. Open hours are 6 AM to Noon
Area:	Cowlitz River
Gear:	Dip Net (bank only)
Daily Limit:	10 pounds per person

- The proposed season, being restricted to 24 hours over 4 days, is more conservative than past Level One fisheries. This duration is much shorter (less than half of most) past fisheries.
- Harvest during this proposed fishery is estimated to be on the order of 1,500 to 39,900 pounds (0.01% to 0.83% of the runs seen in 2011 – 2013).
- Collection of creel survey data on the 2014 recreational fishery will address a gap in our limited information on recreational fishery harvest of eulachon.

2014 Oregon Tributary Smelt Fisheries

<i>2014 Oregon Tributary Sport Fishery Recommendation</i>	
Adopt a reduced Level One fishery consisting of one 6-hour fishing period per week	
Season:	6 AM to Noon Saturdays from March 1 through March 22, 2014.
Area:	Sandy River
Gear:	Dip Net (bank only)
Daily Limit:	10 pounds per person

- The proposed season, being restricted to 24 hours over 4 days, is much more conservative than past Level One fisheries.
- Anticipated low participation, in combination with the proposed fishery structure, should moderate harvest and allow staff to track progress of the fishery.

2014 Tribal C&S Fisheries

- The Yakama Nation has adopted a Cowlitz River Smelt Fishing Permit for 2014. The permit is for ceremonial and subsistence use only, using traditional hand-held dipnets fished from shore. The season is expected to be open daily through March, except for Sunday closures.

- Yakama Nation landings are expected to be similar to past levels, which was typically less than 4,000 pounds annually.
- WDFW and the Confederated Tribes of Warm Springs are currently in discussions that could potentially lead to an agreement regarding C&S fishing for eulachon in the Cowlitz River. If the WS fish for eulachon in 2014, the expected harvest would be similar to the 2,000 pounds landed in 2013.

Future Meetings

Staff is not proposing any additional hearings at this time but will continue to monitor stock status and fishery harvest, and recommend additional hearings as needed.