

2014 Columbia River Pilot Seine Fishery

In August and September of 2014, seine nets were used to harvest salmon from the Columbia River for the first time in more than 60 years. The purpose of this pilot fishery was to help evaluate the use of seine nets for selective fishing during the commercial salmon fishery in the lower mainstem Columbia River.

While ODFW and WDFW have spent several years testing the gear and collecting data, the time needed to collect this data influenced how the gear was operated. A new test to examine how the gears operate when implemented as a “real” fishery was needed.

Seine nets are small-mesh fishing nets that hang vertically in the water with the bottom edge held down by weights and the top edge suspended with floats. Fish are encircled by the net as the two ends are pulled together onto the beach or into a boat. A purse seine includes a drawstring at the bottom of the net to keep fish from swimming out.

The 2014 fishery took place on 22 days between Aug. 19 and Sept. 30 and was limited to ten participants: six fished with beach seines, and four fished with purse seines.

ESA impacts available to the 2014 seine pilot fishery were designated as research impacts, which are separate from “full fleet” fishery impacts.

The objectives for this research pilot fishery were:

- Estimate catch rates and sorting times for the gears under “real-world” fishing conditions.
- Determine steelhead:Chinook ratios by gear and by fishing zone.
- Estimate Chinook and coho catch rates for each gear in a larger run year.
- Compare immediate mortalities observed in the pilot fishery to those observed during previous research.

Because the ESA research impacts are limited, the harvestable catch available to the seine fisheries was limited.

Each fisher was assigned a quota limiting their catch of Chinook and coho salmon. Beach seiners could harvest 500 adult Chinook and 250 adult coho, and purse seiners could keep 750 Chinook and 450 coho. Only adipose fin-clipped salmon could be retained. In addition, each fisher’s steelhead handle was capped at 360 fish (non-tribal commercial fishers are always required to release all steelhead, wild or hatchery). A fisher had to stop all fishing operations once any of these individual limits was achieved. ODFW or WDFW staff monitored all fishing efforts to observe and document the catch, including catch of non-target fish which were to be released (e.g., all steelhead and sturgeon).

Additional information

[Development of the seine fishery](#)

[Regulations for 2014 pilot seine fishery](#)

[Research objectives and related studies](#)

[Preliminary 2014 fall seine fishery landings](#)

BACKGROUND

In 2013 the Oregon and Washington Fish and Wildlife Commissions each adopted a policy prioritizing recreational fishing in the mainstem Columbia River. The policy seeks to end the use of gillnets in the mainstem by 2017 by promoting the development and implementation of alternative selective gear-types and techniques for mainstem Columbia River commercial fisheries during the transition period (2013-2016).

Fishery objectives for these alternative selective gear types are to provide area-specific opportunity to target abundant hatchery stocks, reduce the number of hatchery-origin fish on natural spawning areas, limit mortalities of non-target species and stocks, and provide economically viable commercial fishing opportunities. In addition, the policy seeks to increase the opportunities and catches of commercial fishers in off-channel areas.

DEVELOPMENT OF SEINE FISHERY

- Prior to July of 2013, seine gear was prohibited for commercial harvest of salmon in the Columbia River.
 - The Oregon legislature adopted revised statutes under Senate Bill 830 to allow the use of seine gear to harvest salmon.
 - Washington has used an existing “emerging fishery” regulation that allows experimental fishery permits to be issued for commercial harvest in an emerging fishery that will have limited entry.
- During 2013-14, ODFW/WDFW collected input from the commercial fishing industry on how best to design and implement seine fisheries.
- The *U.S. vs Oregon* Technical Advisory Committee (TAC), developed interim post-release mortality rates to use for a pilot seine fishery in 2014, based in part on research by WDFW.
- In late May 2014, all Columbia River Gillnet license holders were invited to participate in a random drawing to select participants in a seine research fishery in fall 2014.
- Six beach and four purse seine applicants were drawn in early July. On August 12, the Columbia River Compact met and established open days for the pilot seine fishery. Additional fishing days were established through the end of September. All fishers operated under harvest limitations:

2014 Fall - Catch Limits - Research Seine		
	Beach	Purse
Adult Chinook kept	500	750
Adult coho kept	250	450
Steelhead handled (all released)	360	360

- Each fisher was required to cease all fishing operations once any of the above limits were achieved. Agency observers were onboard 100% of the vessels to ensure compliance and tracking of non-retained catch.

REGULATIONS FOR 2014 PILOT SEINE FISHERY

- Only ten fishers were allowed to fish during the pilot fishery. Each fisher ceased fishing when any of the catch limits were achieved.
- River mouth “no fishing areas” (sanctuaries) remained in effect.
- Seines were not allowed in Select Areas commercial fishing areas.
- [Seine gear restrictions, allowable species and handling restrictions.](#)

RELATED STUDIES

Post-release mortality estimates:

- During 2011, 2012, and 2013, studies were conducted to estimate mortality rates for salmon and steelhead encountered and released during agency testing of seine gears.
- This work is on-going and existing data continues to be reviewed. In the interim, the states worked with TAC to develop a set of mortality rates for use when conducting 2014 fall seine fisheries. The following rates were assigned to fish released from these gears in 2014:

TAC Mortality Rates		
2014	Beach	Purse
Chinook	34.3%	22.5%
Coho	38.4%	28.9%
Steelhead	8.3%	3.3%

- ODFW has also been conducting research to estimate post-release mortality from mark-selective coho fisheries using tangle nets and live capture techniques and will continue this work through the fall of 2014.

OTHER

How does the new Columbia River Endorsement fee relate to these efforts?

- http://www.dfw.state.or.us/fish/CRP/columbia_river_basin_endorsement.asp
- No funds from the Columbia River Endorsement fee are used to purchase fishing gear or pay commercial fishers.
- Some of the funds are used to increase hatchery releases in off-channel areas for focal commercial harvest to offset reduced mainstem Columbia River commercial allocations.
- Some of the funds are used to fund monitoring of commercial and recreational fisheries, but no endorsement funds were used to monitor the seine fishery.