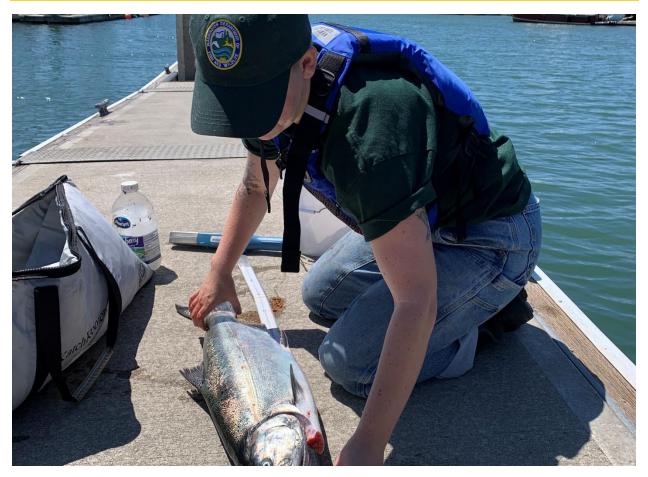
Washington Department of Fish and Wildlife North of Falcon Background Information

Key terms and suggested resources



A WDFW creel checker at a Bellingham boat ramp samples a hatchery-marked Chinook salmon caught in the San Juan Islands (Marine Area 7) during the summer opener in 2023.



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What is North of Falcon (NOF)?

- North of Falcon (NOF) refers to fisheries that occur north of Cape Falcon on the northern Oregon coast and encompasses Oregon and Washington (Columbia River, Coast, and within the Puget Sound management unit).
- Each year from February through April, state, federal, and tribal fishery managers gather to plan recreational and commercial salmon fisheries. In Washington state and a northern portion of Oregon, this series of meetings—involving representatives from federal, state, and tribal governments and recreational and commercial fishing industries—is known as the NOF process. This process builds on salmon run forecasting by state, tribal and federal scientists that begins each fall, with forecasts typically available by early spring.
- The <u>NOF process</u> also involves a series of public and state/tribal meetings from February through April to come to an agreement for the upcoming year's salmon fishing seasons.
- WDFW divides salmon fisheries in specific <u>marine areas</u> into two management area units: coastal fisheries (marine areas 1 through 4) and Puget Sound fisheries (marine areas 5 through 13 including the Straits of Juan de Fuca and Georgia, Puget Sound, and San Juan Islands). Extensive planning and discussion during NOF are also focused on the Columbia River and other freshwater salmon fisheries across Washington, as well as certain steelhead fisheries.
- The <u>Pacific Fishery Management Council (PFMC)</u> establishes ocean salmon seasons from three to 200 nautical miles off the Pacific Coast and includes <u>Neah Bay (Marine Area 4)</u>, <u>La Push (Marine Area 3)</u>, <u>Westport-Ocean Shores (Marine Area 2)</u>, and Columbia River/Ilwaco (Marine Area 1).
- In certain rivers, salmon fisheries determined through NOF may also overlap with and influence steelhead fisheries, or steelhead conservation and comanagement may influence salmon seasons; for example, spring Chinook or fall coho fisheries.

What governmental policies affect the NOF process?

- <u>The Boldt Decision (1974)</u> Upheld by the U.S. Supreme Court and based upon treaties with the Puget Sound Treaty tribes to allow the state and tribes to manage their own fisheries (co-managers) and share the harvestable salmon.
- <u>Endangered Species Act (ESA)</u> Fisheries must not pose jeopardy to federally ESA—listed fish such as Puget Sound Chinook (1999).
- <u>Pacific Salmon Treaty (U.S./Canada)</u> Helps ensure enough salmon destined for the southern U.S. are allowed to pass through Canadian waters to allow fishing opportunity and enough fish to reach the spawning grounds (and vice versa for salmon stocks returning to Canada).
- Conservation objectives are agreed to by the co-managers to ensure enough salmon get past fisheries and reach rivers to spawn and recover the population.

WDFW Fish and Wildlife Commission North of Falcon Policy guides Department staff in considering conservation, allocation, in-season management, and monitoring issues associated with the annual NOF salmon fishery planning process. When considering management issues, Department staff will ensure that decisions are made consistent with the Department's statutory authority; U.S. v. Washington; U.S. v. Oregon; the Endangered Species Act; the Puget Sound Chinook Harvest Management Plan; the Pacific Salmon Treaty; the Pacific Fishery Management Council's Framework Salmon Management Plan; pertinent state/tribal agreements; and the applicable Fish and Wildlife Commission policies.

What are the steps for annual salmon fishing seasons?

- Estimate the forecasted returns of individual hatchery and wild stocks of salmon. Forecasted returns means estimating the numbers of individual and wild stocks returning to their spawning grounds.
- Determine if enough fish are returning to allow for harvest.
- Predict harvest for tribal and state recreational and commercial fisheries for Oregon and Washington; include the northern fisheries (Alaska and Canada) too.
- Analyze forecast and harvest scenarios using the Fisheries Regulations Assessment Model (FRAM) to determine whether proposed fishing plans meet management objectives (e.g., ESA impact limits).
- Negotiate with the recreational anglers, commercial fishers, and tribes to allow a fair sharing of catch and ensure conservation objectives are met.
- Combine all Puget Sound and ocean fisheries into the "Agreed-to Fisheries Document" that the recreational (sport) fishing rules pamphlet is based upon.

Glossary of key terms

AEQ: Adult equivalents (number of wild salmon that would have returned to the river in either the present year or future years if not killed in fisheries).

CERC: Critical exploitation rate ceiling (maximum fishery impacts allowed when a stock is in critically low abundance, see Escapement LAT).

CES: <u>Concise Explanatory Statement</u> describes the WDFW's reasons for adopting the annual recreational salmon fishing rules and responds to public comments received on the proposed rules. The rules, once adopted, will be set forth in the Washington Administrative Code (WAC). The management period for each fishing season typically ends in April and begins anew each May.

Constraining stock: Wild salmon for a particular river that is estimated to be the most overimpacted that will limit (or reduce) fishing opportunities.

CPUE: The Catch per Unit Effort is a standard measure of the rate of catch in a fishery. In recreational fisheries, the unit of effort is defined as one angler trip. Therefore, the CPUE is legal fish caught per angler trip.

CWT: Coded-wire tag is a tiny piece of stainless steel placed in nose of juvenile salmon and recovered from adults that return to estimate where the fish is from. Each tag is inscribed with a binary code that identifies its specific release group.

Emergency Fishing Rule Change: WDFW rule change resulting from in-season management actions based on monitoring of fishery resources. These can include additional days on the water, early closure of a fishery, or changes in bag limits. The updates reflect changes to the Sport Fishing Pamphlet. Rules found in the pamphlet are in effect unless superseded by a rule change. These are critical rule changes that require immediate action and are good for 120 days or less. Recreational emergency Fishing Rule Changes are distributed via email and posted to the WDFW website. All emergency rule changes—recreational and commercial—are also archived online.

Encounters: Number of fish harvested plus released fish. Encounters contribute to impacts against protected stocks, including catch and release mortalities.

ESA: federal Endangered Species Act.

ERC: Exploitation rate ceiling (maximum allowable rate of returning wild salmon that can be killed to achieve spawning escapement objectives that are consistent with current habitat function). For additional information see section 4.4 in the Comprehensive Management Plan for Puget Sound Chinook.

Escapement LAT: Escapement Low Abundance Threshold (a threshold of returning salmon that represents increased management responsiveness to avoid a stock entering critical status). For additional information see section 4.2 in the Chinook. Salmon stocks are managed to allow enough mature salmon to escape harvest (called "escapement" or "conservation objective") and return to freshwater to spawn.

ER: An Exploitation Rate is the maximum allowed proportion of a salmon stock that can be removed by a fishery. It is a percentage of total mortality (i.e., in fisheries and on spawning grounds) that occurs in fisheries, including landed and non-landed fishery mortality components.

Fishery Scalers: The relationship between the anticipated impacts to stocks in a fishery, and the FRAM (see definition below) base period impacts to stocks for that fishery (marine area and timestep). It's an adjustment to the modeled base period impacts to stocks based on change in catch or effort.

Forecast: Estimated number of adult salmon that will return.

FRAM: Fisheries Regulation Assessment Model used to combine forecasts and harvest of fisheries to estimate number of wild fish that will return to the rivers to spawn.

Impacts: The cumulative effect on protected salmon stocks or runs from harvest and other sources of mortality, including catch and release mortalities from encounters. Impacts are severely restricted by the Endangered Species Act, exploitation rates, and other conservation measures.

LCN Tules: Lower Columbia Natural Tule Chinook (sometimes called LCR, Lower Columbia River, tule).

LOAF: List of Agreed Fisheries set by WDFW during the North of Falcon process. These fishing dates cover all fisheries from May 15 of a given year to May 14 of the following given year. These season summaries are not meant to be comprehensive regulations; more details and regulations are included in the annual Washington Sport Fishing Rules pamphlet and is usually available by early summer.

Jack salmon: Salmon that return to freshwater and spawn one to two years earlier than the other adult salmon within their brood year. Jack salmon are commonly smaller in size.

Release Mortality Rate: Percent of fish released that die due to physical or physiological damage caused by a fishery encounter. In Puget Sound recreational fisheries, WDFW uses a 10% release mortality rate for legal-sized Chinook and a 7% release mortality rate for coho. Different release mortality rates may be used depending on gear types, location of fishing, species encountered, or for sub-legal sized salmon. For additional information, see Appendix 6 and Appendix 7 in the Fishery Regulation Assessment Model.

Resident fish: Hatchery or wild salmon, often Chinook or coho, that remain in or near the waters of the Salish Sea instead of migrating into the open ocean. Typically, smaller, and sleeker than salmon that migrate to the open ocean.

Mixed stock fishery: These are fisheries that take place in areas that encounter multiple stocks of potentially different species, geographic or genetic origins or any combination of these variables. The proportion of stocks encountered in these fisheries may differ both season to season and year to year. Mixed stock fisheries offer a challenge to fisheries managers due to the difficulty in targeting fish of a specific stock.

Modeling: A mathematical representation of a stock or fishery based on data.

Mortalities: The number of dead salmon accounted for in a model.

MSF: Mark-selective fisheries are a hatchery targeted fishery where wild fish are released.

Escapement: Number of wild salmon returning to the spawning grounds for a particular stock.

NOF: North of Falcon is the process to establish salmon seasons for state and tribal fisheries that occur north of Cape Falcon on the northern Oregon coast and encompasses Oregon and Washington (Columbia River, Coast, and Puget Sound).

NT: Non-treaty fisheries (sport and commercial including net and troll).

SUS: Southern United States (WA, OR, CA); terminology used in salmon season-setting process and defined by all marine fishing areas south of the British Columbia-U.S. boundary.

SUS PT ER: Southern U.S. (WA, OR, CA) pre-terminal exploitation rate (caught in marine waters within the southern U.S.).

Selective gear fishery: A fishery with gear restrictions in place, such as single barbless hooks, or use of artificial lures only.

T: Treaty fisheries (tribal ceremonial/subsistence and commercial: net, freshwater net, troll.

Terminal area fishery: A fishery conducted in the river of origin or directly adjacent to the river of origin where there is typically only one fish stock present. Terminal salmon fisheries in Puget Sound include the Tulalip Terminal Area Fishery, Sinclair Inlet and Port Orchard, and East Elliott Bay.

Total ER: Total exploitation rate for Alaska, Canada, and southern U.S.

(You can also find additional common salmon terms by going to this <u>link</u> on the Pacific Fishery Management Council website.)

Background links for more information:

- WDFW North of Falcon webpage including public input form and Frequently Asked Questions: wdfw.wa.gov/fishing/management/north-falcon
- WDFW tribal co-management webpage: wdfw.wa.gov/fishing/tribal/co-management
- Northwest Indian Fisheries Commission: <u>nwifc.org/</u>
- NWIFC Northwest Treaty Tribes webpage: nwtreatytribes.org/
- List of Agreed Fisheries (LOAF) and season summaries:

wdfw.wa.gov/fishing/management/north-falcon/summaries

Read the <u>WDFW blog on understanding Puget Sound salmon fisheries</u>
<u>management</u> and watch the <u>WDFW YouTube video</u>. Each provides useful
information on the complexities of Puget Sound salmon management.