Washington Department of Fish and Wildlife

Overview of 2020 Columbia River Chinook Salmon Fisheries in Washington's Concurrent Waters

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Overview

The states and treaty tribes share the harvestable surplus of Chinook salmon fishing in the Columbia through the *US v Oregon* process.

Of the state share, the Washington Department of Fish and Wildlife (WDFW) and Oregon Department of Fish and Wildlife (ODFW) work together to establish concurrent rules for recreational and commercial fisheries. The Washington and Oregon Fish and Wildlife Commissions delegated their respective directors to negotiate the recreational/commercial allocations and allowable gear types for 2020. The actual fishing seasons are set by the <u>Columbia River Compact</u> members, consistent with the framework negotiated by the two directors.

This agreement only applies to the 2020 season. Conservation measures remain unchanged from 2019, and no additional fishing pressure was approved beyond the annual amount allowed in full compliance with all salmon and steelhead Endangered Species Act (ESA) requirements and sustainable fishery management practices.

In general, the allocations in Columbia River fisheries refer to the proportion of impacts to wild fish allowed under Endangered Species Act guidelines, not the proportion of overall catch.

As of writing, this paper summarizes the Chinook salmon fisheries in concurrent waters for the spring, summer, and fall fishing seasons. The summer and fall fishing plans will not be finalized until mid-April, following the Pacific Fisheries Management Council process that establishes the ocean harvest components. It is important to note that the Directors' agreements on allocation and gear type will be applied to the harvestable surplus available in the summer and fall seasons.

Spring 2020

In the spring, we estimate that 82,000 Upriver Spring Chinook will return to the mouth of the Columbia. Mortalities for the ESA-listed portions of that run are limited by the National Marine Fisheries Service, regardless of whether the mortalities are caused by recreational or commercial fisheries.

In the 2020 spring state fishery, we estimate 5,700 Upriver Spring Chinook mortalities will be available for recreational and commercial fisheries in the mainstem Columbia (this estimate includes constraints due to the legal requirement that state harvest not exceed the harvest by the treaty tribes). *US v Oregon* imposes an additional 30% buffer on mainstem fisheries prior to the run-size update, which adjusts the mortalities to roughly 4,000 Upriver Spring Chinook

mortalities available prior to about mid-May. This mortality level includes catch (i.e., retained hatchery fish) plus the proportion of wild fish that die after being caught and released.

The Upriver Spring Chinook recreational and commercial fisheries in the mainstem are markselective; meaning only marked fish may be retained and unmarked (wild) fish must be released. The release mortality rates for Upriver Spring Chinook are 10% for recreational fisheries and 15% for commercial tangle net fisheries. Gill nets, which are not a mark-selective fishing gear, are not allowed in the mainstem in the spring, but are fished in off-channel (SAFE) areas targeting local hatchery salmon. Even though these SAFE fisheries are conducted off the mainstem, on occasion, some Upriver Spring Chinook pass through this area and are intercepted in this fishery, too. They are accounted for in the total non-treaty commercial allowable catch.

We forecast that $\sim 80\%$ of all fish encountered during the spring fishery are marked hatchery fish. Thus, $\sim 20\%$ of the fish encountered are ESA-listed fish and would need to be released from the commercial tangle nets and the recreational hook and line fishery, and those released fish would die at a handling mortality of 15% and 10%, respectively.

Under the 2020 plan, 75% of the Upriver Spring Chinook would be allocated to recreational anglers with the other 25% allocated to the commercial fishery. Only tangle nets would be allowed in the mainstem during the commercial spring fishery, after the run size update in mid-to late-May.

In 2019, the 20% commercial allocation was used to promulgate fisheries in the off-channel SAFE areas (three in Oregon, one in Washington). Fisheries managers restricted that fishery twice last year as mortalities approached the take limit. The additional 5% allocation in 2020 allows fishery managers to avoid closures in the off-channel SAFE areas and, if there are any remaining impacts in the commercial allocation, potentially open a limited tangle net fishery in the mainstem after the run size update.

Assuming the Upriver run comes in at forecast, we anticipate that under the agreed-upon 75/25 allocation, recreational anglers will keep ~5,700 Upriver hatchery fish, ~1,200 wild fish will be handled and released, and of those, ~120 would be mortalities (due to the 10% handling mortality rate). The SAFE commercial fisheries on average would use 230 Upriver Spring Chinook mortalities (both hatchery and wild) that dip-in to off-channel areas as they target local hatchery fish. If there were 5% take remaining in the commercial allocation after the SAFE fisheries occurred, then the commercial tangle net fishery would catch an estimated 240 hatchery fish, ~50 wild fish would be released, with ~7 mortalities (due to the 15% handling mortality rate).

Hypothetically, if the spring allocation was 80/20, and the tangle net fishery did not occur, then the 7 mortalities associated with a possible 5% commercial tangle net effort would translate to an additional ~70 wild fish handled and released and a total of ~325 Upriver Spring Chinook caught and handled by the rec fleet.

Going from 80/20 to 75/25 in the spring essentially results in the same number of dead wild (ESA) fish. The total non-treaty fisheries allowable impact does not change with any allocation between sport and commercial fisheries.

Summer 2020

Historically, the summer Chinook recreational fishery was closed from 1974-2001 to conserve the population before recovery efforts successfully restored it to harvestable numbers. Beginning in 2010, recreational fisheries are primarily mark-selective to achieve newly established objectives for minimizing the numbers of hatchery-origin spawners in natural spawning areas. Commercial fisheries for summer Chinook were closed from 1965-2003. Limited gill net fishing effort occurred from 2004 through 2016. Since 2017, there has been no commercial fishing in the mainstem, and a small number of summer Chinook have been caught in SAFE fisheries using gill nets in off-channel areas to target local hatchery salmon stocks.

The 2020 forecast for summer Chinook returning to the Upper Columbia is 38,300 fish (at the mouth of the Columbia). The *US v OR* escapement goal is 29,000 fish (estimated at the mouth of the Columbia). The harvest is based on an abundance-based matrix but is shared equally between treaty and non-treaty fisheries when the run is at least 125% of the escapement goal (about 36,000 fish). The non-treaty in-river priority for summer Chinook is for recreational and Colville tribal fisheries above Priest Rapids Dam.

Any remaining summer Chinook impacts for non-treaty fisheries below Priest Rapids Dam are allocated 80% and 20% for the recreational and commercial fisheries, respectively. No gillnets will be permitted on the mainstem for the summer Chinook fishery. Fishery managers anticipate very little opportunity, if any, in the 2020 season for recreational fisheries in the lower Columbia River. In 2019, which had a similar run forecast as 2020, there were no directed recreational fisheries for summer Chinook, but some of the impacts were applied to allow for a recreational steelhead fishery. There were no commercial fisheries in the mainstem for summer Chinook in 2019.

Fall 2020

Fishery managers track seven key stocks for fall Chinook. The 2020 forecast for these seven stocks is 431,000, which is 55,000 fish above the 2019 return. The two primary stocks that drive the fall Chinook fishery are the Lower River Hatchery Chinook (i.e., Tule) and the Upriver Bright Chinook (which include Hanford Reach- and Snake River-bound fish). Both of these stocks have ESA-listed components.

The 2020 allocations for the fall Chinook fishery are the same as 2019, with a maximum of 70% allocated to the recreational fishery, and no less than 30% allocated to commercial fishers. Gillnets, restricted to large mesh only in order to reduce impacts to steelhead, will again be allowed in the mainstem during the fall salmon fishery upstream of the Lewis River on the lower Columbia River, in order to maintain concurrency with Oregon. Of the 30% commercial allocation, 2% is available for alternative commercial fishing gears.

Other

The use of barbless hooks in salmon and steelhead Columbia River fisheries will again be mandatory under the new agreement. This is a change from 2019, when the Washington Fish and Wildlife Commission made barbless hooks voluntary after June 1. Barbless hooks will be required for salmon and steelhead fisheries on the mainstem Columbia River from the mouth to the Washington/Oregon state line upstream of McNary Dam, effective March 1.