

JOINT STAFF REPORT
SPRING CHINOOK SPORT FISHERY FACT SHEET
Joint State Hearing
April 1, 2003

<p>Purpose: To review salmon stock status, review the ongoing spring chinook sport fishery, and consider modifications to the ongoing sport fishery in the mainstem Columbia River.</p> <p>TAC: This Fact Sheet was not reviewed by the TAC.</p>
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MANAGEMENT GUIDELINES

Endangered Species Act (ESA)

- Fisheries being considered at this Compact are addressed in a Section 7/10 Application outlining proposed non-Indian fisheries that the states of Washington and Oregon submitted to the National Marine Fisheries Service (NMFS) on November 3, 2000.
- The ESA limits aggregate fishery impacts to $\leq 2\%$ for listed wild steelhead; however, the fishery will be managed for a range of 1.6%-1.8% as a buffer against unforeseen circumstances.

Interim Management Agreement

- An Interim Management Agreement covering fisheries for upriver spring chinook, summer chinook, and sockeye is in effect for 2001-2003.
- The Interim Management Agreement includes a sliding scale spring chinook harvest matrix for 2001-2005 and allocates upriver impacts between non-Indian and treaty Indian fisheries for 2001-2003.
- Based on preseason run size forecasts, the Interim Management Agreement limits impacts to listed upriver spring chinook to $\leq 2\%$ for non-Indian fisheries and $\leq 9\%$ for treaty Indian fisheries in 2003.

Non-Indian Upriver Impact Allocation

- Non-Indian fisheries will be managed in accordance with the guiding principles, fishery management objectives, and impact sharing matrix adopted by the Oregon and Washington Fish and Wildlife Commissions and the Columbia River Compact.
- Non-Indian impacts are allocated 1.7% for fisheries below McNary Dam and 0.3% for fisheries above McNary Dam, Select Area Fisheries, and as a management buffer.
- Upriver impacts for non-Indian fisheries below McNary Dam in 2003 are further allocated 35% (0.59% impact) for commercial fisheries and 65% (1.11% impact) for sport fisheries.
- Preseason expectations were for impacts of 0.28% in fisheries above McNary Dam and 0.02% in Select Area fisheries.

Willamette Spring Chinook Management

- The Fisheries Management and Evaluation Plan (FMEP) for Willamette spring chinook limits impacts for all freshwater fisheries in 2002 to $\leq 15\%$ on wild Willamette River spring chinook.

- Based on the preseason run size forecast of 109,800 the Willamette River Basin Fish Management Plan (WFMP) allocates surplus hatchery Willamette River spring chinook 70% for sport fisheries (40,900 fish) and 30% for commercial fisheries (17,500 fish) in 2003.

STOCK STATUS

Spring Chinook

- Spring chinook primarily enter the lower Columbia River during March and April with upriver stock abundance peaking during the late March to early April timeframe.
- The preseason spring chinook run size forecasts include returns of 145,400 upriver stock and 109,800 Willamette stock to the Columbia River mouth.
- Upriver spring chinook passage over Bonneville Dam is tracking well ahead of preseason expectations with 14,900 adults passing through March 29. During 2000-2002 spring chinook counts at Bonneville Dam through March 29 ranged between 962-6,862 adults.
- Run sizes cannot be updated until late April for upriver stock and early May for Willamette stock.

WATER CONDITIONS

- Columbia River water conditions at Bonneville Dam have remained relatively stable during the first half of March.
- Columbia River flow, as measured at Bonneville Dam, has exceeded 200 kcfs on only three days during the month of March. Flows typically range between 150 kcfs and 300 kcfs during March.
- Water temperatures measured at Bonneville Dam have ranged between 45°F-46°F since March 15. Temperatures typically range between 43°F-48°F during the last half of March.
- Visibility measured at Bonneville Dam ranged between 3-6 feet during the month of March. Visibility can fluctuate widely during March, typically ranging between 1-6 feet.
- Willamette River flows and turbidity have fluctuated widely during March while temperature has remained stable.
- Flows measured at Salem ranged between 27,000-39,000 cfs during March 17-22 and ranged between 56,000-70,000 during March 23-28. Since March 28 flows have dropped from 70,000 cfs on March 28 to 44,000 cfs on March 31.
- Turbidity measured at Willamette Falls ranged between <1.0-1.3 feet during March 24-28 and increased to two feet on March 31.
- Temperature measured at Willamette Falls was 46°F prior to March 8 and has ranged between 48°F -51°F during March 10-31.

FISHERY UPDATES

Non-Indian Salmon Commercial Demonstration Fishery

- The fishery consisted of two 16-hour (5 am-9 pm) fishing periods on February 17 and 19 followed by one 10-hour (9 am-7 pm) fishing period on March 21. Gear regulations included an 8" minimum mesh size restriction during the first two fishing periods and a 4¼" maximum mesh size restriction during the final fishing period. Other selective fishery regulations in effect during 2002 (i.e. short soak times, short nets, and use of recovery boxes) were adopted for 2003.

- Staff monitored a total of 108 boats and 237 drifts during this fishery. Total landings were similar to preseason expectations but handle of upriver spring chinook was significantly higher than expected.

<i>Chinook and Steelhead Catch During the 2003 Demonstration Fishery</i>									
Fishing Period	Total	Chinook Kept			Chinook Released			Steelhead Released	
		Upriver Stock	Willamette River Stock	Other Lower River Stock	Total	Upriver Stock	Lower River Stocks	Total	Wild
Feb 17-19	539	389	113	37	587	548	39	174	141
March 21	2,634	1,306	998	330	1,907	1,602	305	2,010	984
Total	3,173	1,695	1,111	367	2,494	2,150	344	2,184	1,125

- Long-term mortality rates used to determine impact rates are the same as those recommended by the TAC: 50% for chinook and 35% for steelhead in large mesh (8"-9¾"), and 25% for chinook and 20% for steelhead in small mesh (≤4¼").
- Impacts to listed species during the first two fishing periods are estimated to be 0.305% for upriver spring chinook, 0.057% for wild Willamette spring chinook, and 0.300% for wild winter steelhead. Total impacts to date represent 52% of the upriver spring chinook impact limit, 2% of the wild Willamette spring chinook impact guideline, and 17%-19% of the wild winter steelhead impact limit.
- Based on preseason run size forecasts impacts to listed species are estimated to be 0.82% on upriver spring chinook, 0.34% on Willamette spring chinook and 1.59% on wild winter steelhead.
- The kept catch of 1,100 Willamette hatchery spring chinook was much less than the 17,500 allocated to the commercial fishery by the WFMP.

Select Area Commercial Fisheries

- Winter season commercial fisheries occurred in the Select Area fishing sites of Youngs Bay and Blind Slough. Total spring chinook landings were less than preseason expectations while handle of upriver spring chinook was larger than expected.
- Landings totaled 63 spring chinook in the Youngs Bay fishery of which 37 were upriver stock and totaled 4 spring chinook in the Blind Slough fishery of which zero were upriver stock.
- Winter season fisheries in both Select areas combined resulted in an estimated 0.025% impact on upriver chinook.

Mainstem Spring Chinook Sport Fishery

- The mainstem Columbia River is scheduled to be open for adipose fin-clipped salmon, adipose fin-clipped steelhead, and shad angling from the mouth at Buoy 10 upstream to McNary Dam (excluding salmon angling from a boat and from the Washington shore between Bonneville Dam and Tower Island power lines) during January 1-May-15 below I-5 Bridge and during February 15-May 15 above I-5 Bridge.
- Fishing was generally slow during February with an estimated 9,600 angler trips resulting in 209 chinook kept and 223 chinook released. The chinook catch during February was comprised of 100% upriver stock which resulted in a 0.029% impact on upriver spring chinook during the month of February.

- Fishing improved significantly during the first half of March, especially in the gorge just below Bonneville Dam. Poor water conditions have reduced fishing opportunities below the mouth of the Willamette during the last half of March and focussed the fishery to the gorge where fishing conditions have been good.
- During March 1-31 angler trips were estimated to total 68,000 which resulted in 5,800 chinook kept and 3,300 chinook released. The chinook catch during March was comprised of 83% upriver stock and 17% lower river stocks which resulted in a 0.52% impact on listed spring chinook during the month of March.

Area	Angler	Total	Kept	Upriver Stock	
	Trips	Catch	Catch	%	Impact
Below I-5	54,900	5,659	3,680 (65%)	72%	0.282%
Above I-5	22,700	3,863	2,287 (59%)	100%	0.265%
Total	77,600	9,522	5,967 (63%)	84%	0.547%

- Long-term mortality rates used to determine the upriver spring chinook impact rate is 10%.
- Impacts to upriver spring chinook to date have totaled 0.55% which represents 49% of the sport catch guideline of 1.11%.

Lower Willamette Spring Chinook Fishery

- The mainstem Willamette River below Willamette Falls is open for adipose fin-clipped chinook salmon and adipose fin-clipped steelhead the entire year.
- Poor fishing conditions have limited effort and catch during March.
- Catch rates increased with improving water conditions. Since March 28 catch rates in the Oregon City/Milwaukie area have ranged between one spring chinook kept for every 4-9 boats. Fishing remains slow in the remainder of the river, including Multnomah Channel.

FISHERY OPTIONS

Mainstem Spring Chinook Sport Fishery

- The Joint Staff is recommending the following options for the ongoing sport fishery.

<i>Option 1</i>
<ul style="list-style-type: none"> • Do not modify ongoing fishery at this time and manage fishery to close fishery when upriver spring chinook impact limit is projected to be reached.

- ✓ Fishery would likely close prior to Friday April 11.
- ✓ Maintains consistent fishery until closure.
- ✓ Allows entire river to remain open throughout duration of the fishery.
- ✓ Will require more conservative management to ensure impact limit is not exceeded.
- ✓ Fishery remains open in area where catch is comprised of 100% upriver stock.

Option 2

- Effective Tuesday April 8 modify ongoing fishery to remain open three days per week (Saturday, Sunday, and Monday) and close the fishery completely when the upriver spring chinook impact limit is projected to be reached.

- ✓ Reduces catch rate and fishery would likely close prior to Tuesday April 15.
- ✓ Allows entire river to remain open throughout the duration of the fishery.
- ✓ Fishery remains open in area where catch is comprised of 100% upriver stock.
- ✓ Does not allow 7-day per week fishery to continue through the duration of the fishery.
- ✓ Reduction in days open per week will increase effort and congestion considerably during the open days.

Option 3

- Effective Saturday April 5 modify ongoing fishery to close area between I-5 Bridge and Bonneville Dam.

- ✓ Reduces impact rate and fishery would likely close prior to Saturday April 19.
- ✓ Eliminates fishery in area where impacts to listed species are at their maximum.
- ✓ Maintains 7-day per week opportunity throughout the duration of the fishery.
- ✓ Open area is consistent with management of past fisheries to protect listed upriver spring chinook.
- ✓ Closes area where angler success is greatest.

Option 4

- Effective Sunday April 6 modify ongoing fishery to remain open four days per week (Wednesday through Saturday) in the area between the mouth at Buoy 10 upstream to the I-5 Bridge.

- ✓ Reduces catch and impact rates with the expectation that the fishery will continue through April 18 and provide a management buffer on impacts.
- ✓ Eliminates area where impacts to listed species are at their maximum.
- ✓ Open area is consistent with management of past fisheries to protect listed upriver spring chinook.
- ✓ Closes area where angler success is greatest.
- ✓ Reduction in day open per week will increase effort and congestion considerably during open days.

FUTURE MEETINGS

- The Joint Staff recommends that a technical fishery checkpoint occur on Tuesday April 8 to update impacts associated with the ongoing sport spring chinook fishery.
- The Joint Staff recommends that the next Joint State Sport hearing to update spring chinook stock status, review ongoing spring chinook sport fishery, and consider modifications to the ongoing sport fishery occur via telephone at 2 pm Tuesday April 15.

Oregon Department of Fish and Wildlife
Washington Department of Fish and Wildlife
April 1, 2003