

2020 Columbia River North of Falcon Teleconference

2019 COLUMBIA RIVER SUMMER/FALL FISHERIES AND RUN SIZES 2020 COLUMBIA RIVER PRESEASON FORECASTS

All data preliminary and subject to change

March 17, 2020

2019 RETURNS AND CONSERVATION OBJECTIVES

Upper Columbia Summer Chinook

- Pre-season forecast was 36,340 fish
- Actual return was 34,619 fish (95% of forecast)

Snake River Wild (SRW)/Upriver Bright (URB)

- Preseason
 - URB run size = 159,250
 - Snake River wild (SRW) run size = 8,600
 - Total allowable URB harvest rate (HR) = 31.25%
 - Non-Treaty fisheries HR expectation = 8.25%
 - Treaty Indian fisheries HR expectation = 18.4%
- Actual
 - URB run size = 212,240 (133% of forecast; projected at <200K in-season)
 - SRW run size = 15,230 (177% of forecast)
 - Total URB HR = 26.58% (45% allowed)
 - Non-Treaty fisheries URB HR = 7.37% (15% allowed; projected at >8% in-season)
 - Treaty Indian fisheries URB HR = 19.2% (30% allowed)

Lower Columbia River Tules (LCR)

- Preseason
 - Lower River Hatchery tule (LRH) run size = 55,100
 - Total allowable ocean and Columbia River exploitation rate (ER) = 38%
 - Total ocean and Columbia River ER expectation = 35.9%
 - Columbia River ER expectation = 8.1%
- Actual
 - LRH run size = 48,910 (89% of forecast)
 - Total ocean and Columbia River ER = 31.0%
 - Columbia River ER = 9.8%

Lower River Natural Coho (LCN)

- Preseason
 - Columbia River Coho run size = 611,300 (388,000 early stock, 223,300 late stock)
 - Total allowable ocean and Columbia River ER = 23%
 - Total ocean and Columbia River ER expectation = 18.0%

- Columbia River ER (including Buoy 10) expectation = 4.2%
- Actual
 - Columbia River Coho run size = 210,900 (34% of forecast; 142,400 early stock, 68,500 late stock)
 - Preliminary estimates total 19.5% ER for ocean and in-river fisheries.
 - Columbia River ER (including Buoy 10) = 3.6%

Upriver Summer Steelhead

- Preseason
 - Bonneville Dam passage (July – October) = 118,200 (950 wild B-Index)
 - Non-Treaty ESA impact limit = 2.0% wild A-Index and 2.0% wild B-Index
- Actual
 - Bonneville Dam passage (July – October) = 72,466 (61% of forecast), return included 899 wild B-Index (95% of forecast)
 - Non-Treaty ESA impact = <1% wild A-Index and <1% wild B-Index (both preliminary)

2019 FISHERY GUIDANCE

Columbia River fisheries were managed to meet the following guidelines and objectives:

Federal/State Endangered Species Act

- Sockeye, steelhead, Chinook, Coho, Chum

US v OR Management Agreement (MA)

- 2018-2027 MA in effect

OFWC/WFWC Guidance

- Impact/Allocation sharing
 - Summer Chinook: harvestable surplus available to in-river fisheries <PRD allocated 80% to recreational, 20% to commercial
 - Sockeye: ~80% of allowable Snake River ESA impacts to recreational, balance to commercial for incidental harvest in Chinook-directed fisheries.
 - Fall Chinook (LRH and SRW)
 - No more than 70% of allowable ESA impacts on the most constraining Chinook stock to recreational, no less than 30% to commercial.

WDFW/Colville Tribe Upper Columbia Management Agreement (UCMA)

- Upper Columbia summer Chinook

2019 NON-TREATY FISHERIES REVIEW

Recreational Fisheries:

- Due to the low forecast, expected ocean harvest, and sharing guidelines in the UCMA, the summer Chinook recreational fishery downstream of Bonneville Dam was scheduled to be closed for Chinook retention. Sockeye retention was also closed due to a poor forecast. Steelhead retention was allowed throughout the summer management period with a one steelhead bag effective July 1.
 - Total catch estimates for the fishery downstream of Bonneville Dam include 492 adult Chinook released, 2,228 hatchery steelhead kept (2,101 steelhead released), and 159 sockeye released from 19,756 angler trips during the summer season.
- The summer Chinook and sockeye recreational fishery between Bonneville and Priest Rapids dams was also closed for Chinook retention.
 - Season total catch estimates include 38 Chinook and 3 sockeye released, and 40 steelhead kept from 837 angler trips.
- Summer Chinook fisheries (including tributaries) upstream of Priest Rapids Dam were open from July 16 – October 15).
 - Total catch estimates for these fisheries are 5,791 adult Chinook kept and 1,563 released from 13,353 angler trips.
- The Buoy 10 recreational fishery opened August 1 with a daily bag limit of two salmon/one Chinook. Chinook retention was scheduled to close after August 20 but continued through December for Coho. Steelhead retention was scheduled to be closed during August. Preseason harvest expectations (kept plus release mortalities) included 13,490 Chinook (5.92% LCR Chinook ER and 1.45% SRW harvest rate) and 57,500 Coho.
 - The season generally occurred as expected, except Coho harvest did not meet expectations due to the weak return. In addition, the steelhead non-retention period was extended through September due to lower than expected returns.
 - Season total catch estimates include 11,274 kept Chinook (15,276 released), 22,775 Coho kept (24,353 released), and 73 steelhead released from 76,977 angler trips.
 - The kept Chinook catch was similar to expectations, but more Chinook were released than anticipated preseason. Collectively, the LRH ER exceeded expectations. Coho catches were much lower than expected, but relatively high given the final run size. The aggregate Coho mark rate was the lowest since 2012.
- The fall LCR recreational fishery opened August 1. For the purpose of regulating the Chinook retention periods, the fishery was split into three subareas:
 - 1) Tongue/Rocky Point upstream to west Puget Island
 - 2) West Puget Island upstream to Warrior Rock/Bachelor Island
 - 3) Warrior Rock/Bachelor Island upstream to Bonneville Dam
- The new subarea (Tongue/Rocky Point to west Puget Island) was established to extend the Chinook retention period in the areas upstream of Puget Island. Chinook retention

in this new subarea was managed concurrent with Buoy 10 regulations to reduce effort shift above the Tongue Point line. A daily bag limit of one adult salmon (Chinook and hatchery Coho) was planned for lower Puget Island upstream to Warrior Rock through August 27. Beginning August 28, Chinook retention would close while Coho retention was to continue with a two hatchery Coho daily bag limit through December 31. Steelhead retention was scheduled to be closed during August. For the area upstream of Warrior Rock, the pre-season plan included Chinook retention through September 8 with a one adult salmonid daily bag limit. Steelhead retention was scheduled to be closed during August. After Chinook retention closed, Coho and steelhead retention would continue with a two hatchery adult salmonid (no more than one steelhead) daily bag limit through December 31. Preseason harvest expectations (kept plus release mortalities) for all areas combined included 4,890 Chinook (0.2% LCR Chinook ER and 2.4% SRW harvest rate) and 4,300 Coho.

- The Chinook retention season in the area downstream of Warrior Rock occurred as planned while upstream of Warrior Rock, Chinook catches exceeded expectations resulting in retention closing effective September 6 (3 days early).
 - Due to the recreational URB allocation being met, in-season action was taken to close all angling effective September 26. Retention of hatchery Coho reopened October 18.
 - Due to the poor steelhead return, retention was closed August 1-September 30, and continued through October as part of the angling closure.
 - Season total catch estimates include 7,165 kept Chinook (6,737 released), 1,046 Coho kept (1,075 released), and 366 steelhead released from 58,655 angler trips.
 - The total and bright-stock Chinook catches were higher than expectations, even with the shortened season upstream of Warrior Rock.
 - “Party Fishing” regulations were in effect all season which allow each legal angler aboard a vessel to continue fishing until the daily limit for all anglers aboard was achieved.
- The recreational fishery from Bonneville Dam upstream to the Highway 395 Bridge near Pasco, Washington was planned to open August 1 and be managed based on in-season harvest estimates and run-size updates. Regulations included Chinook retention open beginning August 1 with a one adult fish daily bag limit. Area-specific steelhead block closures were in effect.
 - The actual Chinook retention season closed effective September 26 due to the recreational URB allocation being exceeded. Hatchery Coho retention re-opened in Bonneville Pool during October 18-31.
 - Season total catch estimates included 3,351 kept adult Chinook (390 released) and 729 Coho kept (182 released) from 11,846 angler trips.
 - Effort and URB Chinook catch exceeded expectations.
 - “Party Fishing” regulations were in effect all season.

Commercial Fisheries:

- A commercial summer Chinook fishery did not occur since no harvestable surplus was available. Additionally, current WA and OR Commission guidance requires the use of gear other than traditional gillnets for this fishery. Based on results of recent gear evaluations, there are few alternative gears available to access the commercial share of summer Chinook, especially in an open-competitive fishery.
- The preseason plan for the Early Fall commercial drift net fishery was for five 9-hour fishing periods in Zones 4-5 during the last three weeks of August. Any late fall Chinook-directed opportunity would be contingent upon results of the August fishery and in-season run-size updates. Based on the large Coho forecast, a late-fall tangle net fishery of approximately 12 days was planned for Zones 1-3.
- The actual August season consisted of four, 9-hour periods in Zones 4-5 with a 9-inch minimum mesh restriction. The catch of 6,462 Chinook was less than the preseason expectation of 8,020. An additional 206 Coho and 509 white sturgeon were landed. One additional Chinook-directed fishing period occurred in the late fall season (October 8-9), landings included 1,686 Chinook and 14 Coho. Deliveries per period for the fall Chinook-directed fisheries averaged 52 in August and 12 in October. Ex-vessel value averaged \$2.54/lb for Chinook and \$1.76/lb for Coho. The Coho-directed fishery using tangle net gear consisted of 11 fishing periods during September 30-October 25. Landings included 2,492 hatchery Coho and 676 Chinook; the Coho catch was only 8% of preseason expectations. Ex-vessel value averaged \$2.38/lb for Chinook and \$1.90/lb for Coho in this fishery.

2019 Non-Treaty Summer Chinook Fisheries Summary				
<i>(All data preliminary and includes kept + release mortalities)</i>				
	Pre		Post	
Runsize	36,345		34,619	
Harvest allocated Fishery	Allowed Pre	Post	Actual Take	Actual/ Allowed
PFMC Ocean Fisheries	5,556	3,490	3,490	100%
Below Priest Rapids Dam (PRD)	10.0%	10.0%	1.2%	
Commercial below BON	25	14	14	100%
Recreational Below Bonneville	125	74	74	100%
Recreational BON to PRD	10	6	6	100%
Below PRD Total	160	94	94	100%
Above Priest Rapids Dam (PRD)	90.0%	90.0%	98.8%	
Wanapum Tribal	22	27	27	100%
Colville Tribal	563	671	1,404	209%
Recreational above PRD	149	260	6,025	2313%
Above PRD Total	734	958	7,456	778%
Non-Treaty Total	6,450	4,542	11,040	243%

2019 Fall Chinook Non-Treaty Catch Sharing - Preseason Buffered						
SRW - IMPACTS			Brights - Mainstem			
	Impact	Percent		Mortalities	Percent	Harvest
Sport	5.77%	70%	Sport	11,900	70%	11,900
Comm	2.48%	30%	Comm	5,000	30%	5,000
LRH - Impacts			Chinook - Mainstem			
	Impact	Percent		Mortalities	Percent	Harvest
Sport	6.45%	80%	Sport	20,100	68%	20,100
Comm	1.60%	20%	Comm	9,300	32%	9,300
SRW Pre-update IMPACTS			SRW% Set Aside			
	Impact	Percent	20%	Aggregate		
Sport	4.57%	70%	21%	Sport		
Comm	2.01%	30%	19%	Comm		

Non-Treaty Catch Sharing						
SRW - IMPACTS			Brights - Mainstem			
	Impact	Percent		Mortalities	Percent	Harvest
Sport	5.57%	75.6%	Sport	15,900	73%	15,900
Comm	1.80%	24.4%	Comm	5,800	27%	5,800
LRH - Impacts			Chinook - Mainstem			
	Impact	Percent		Mortalities	Percent	Harvest
Sport	8.26%	80%	Sport	22,800	74%	22,800
Comm	2.04%	20%	Comm	7,900	26%	7,900

Columbia River Fall Chinook Fishery Model Summary

Ocean Option: **Chin2719** 26-Apr-19
 Columbia River Model Option: **Model** **2019 Final Preseason-Buffer - Chin2719**

2019 Final Preseason-Buffer - Chin2719

Management Guidelines	Goal/Guideline	SRW	Total URB
Harvest Rate	31.25%	25.01%	25.01%
Non-Treaty	8.25%	6.58%	6.58%
Treaty	23.0%	18.4%	18.4%
% of Harvestable Surplus		Total	
Non-Treaty	50%	30%	
Treaty	50%	34%	
McNary Escapement	60,000	110,100	
LRH Ocean/Inriver Exp. Rate	38%	35.81%	
Non-Treaty Wild B Index Steelhead	2%	2%	
Treaty Total B Index Steelhead	13%	13%	
Upriver Coho to Bonneville Dam	50%	63%	
Lower Columbia Chum	5%	0.10%	

2019 Fall Chinook Non-Treaty Catch Sharing - Preseason Buffered					
SRW - IMPACTS			Brights - Mainstem		
	Impact	Percent		Mortalities	Percent Harvest
Sport	5.77%	70%	Sport	11,900	70%
Comm	2.48%	30%	Comm	5,000	30%
LRH - Impacts			Chinook - Mainstem		
	Impact	Percent		Mortalities	Percent Harvest
Sport	6.45%	80%	Sport	20,100	68%
Comm	1.60%	20%	Comm	9,300	32%
SRW Pre-update IMPACTS			SRW% Set Aside		
	Impact	Percent	20%	Aggregate	
Sport	4.57%	70%	21%	Sport	
Comm	2.01%	30%	19%	Comm	

			Total	LRH	LRW	BPH	URB	LRB	PUB	SAB	SRW	LRH ER	SRW HR
Ocean Harvest			53,860	11,280	5,190	12,560	17,310	860	6,660				
Columbia River Run			349,680	55,090	14,110	48,420	159,250	7,910	61,810	3,100	8,600	8.0%	6.4%
2019 Fisheries Fishery Description													
Harvest Below Bonneville													
Zone 4-5 Wk 33			280	10	0	70	170	0	20	0	10	0.01%	0.11%
Zone 4-5 Wk 34			3,210	350	0	1,290	1,200	20	350	10	60	0.39%	0.75%
Zone 4-5 Wk 35			4,530	490	20	1,720	1,670	40	590	10	90	0.60%	1.05%
Sept Z 4-5 Wk38-Wk40		Placeholder	590	60	10	150	240	30	110	0	10	0.08%	0.15%
Oct Coho Tanglenet		October	670	80	60	10	410	0	110	0	20	0.11%	0.26%
Select Areas			6,240	4,050	0	260	270	0	90	1,580	10	0.40%	0.17%
Buoy 10 Kept + Morts	2 fish/1 CK	nMSF Aug 1-20	13,490	4,520	430	3,350	2,310	80	620	1,100	120	5.92%	1.45%
TP to Lewis	1 fish/2 fish >8/27	nMSF Aug 1-27, CK clsd <Puget I. Aug 2	1,570	30	0	10	1,400	10	90	10	80	0.05%	0.88%
Lewis to Bonn	1 fish/2 fish >9/8	nMSF Aug 1-Sept 8	3,320	120	0	170	2,470	170	390	0	130	0.18%	1.55%
Tributary Sport	MSF		3,550	2,300	1,240	0	0	0	0	0	0	0.30%	0.00%
Lower River Total			36,360	12,020	1,770	7,030	10,120	350	2,360	2,710	550	8.05%	6.36%
*additional coho limits considered inseason													
Bonneville Dam Passage			228,610			36,880	149,130		42,600		8,050		
Harvest Above Bonneville													
Zone 6 - Bonn to Hwy 395	1 Salmonid		2,770				1,100		1,670		60		0.69%
Treaty Comm. and C&S			64,200			21,300	29,300		13,600		1,580		18.4%
Hanford Reach Sport			7,360				7,360				0		
McNary Dam Passage			110,070				110,070						
Lower Granite Dam Passage											6,453		

Columbia River Fall Chinook Fishery Model Summary				2019 Post Season (DRAFT)											
Ocean Option:	Final Post														
Columbia River Model Option:	Model	2019 Post Season (DRAFT)													
				Non-Treaty Catch Sharing											
Management Guidelines	Goal/Guideline	SRW	Total URB	SRW - IMPACTS			Brights - Mainstem								
Harvest Rate	45.00%	26.58%	26.58%	Impact	Percent		Mortalities	Percent	Harvest						
Non-Treaty	15.0%	7.37%	7.37%	Sport	5.57%	75.6%	Sport	15,900	73%	15,900					
Treaty	30.0%	19.2%	19.2%	Comm	1.80%	24.4%	Comm	5,800	27%	5,800					
% of Harvestable Surplus		Total		LRH - Impacts			Chinook - Mainstem								
Non-Treaty	50%	26%		Impact	Percent		Mortalities	Percent	Harvest						
Treaty	50%	29%		Sport	8.26%	80%	Sport	22,800	74%	22,800					
McNary Escapement	60,000	128,000		Comm	2.04%	20%	Comm	7,900	26%	7,900					
LRH Ocean/Inriver Exp. Rate	38%	31.3%													
Non-Treaty Wild B Index Steelhead	2%	<1%													
Treaty Total B Index Steelhead	13%	NA													
Upriver Coho to Bonneville Dam	50%	60%													
Lower Columbia Chum	5%	<2%													
				Total	LRH	LRW	BPH	URB	LRB	PUB	SAB	SRW	LRH	SRW	
Ocean Harvest				38,720	4,990	5,400	4,880	16,930	760	5,750			ER	HR	
Columbia River Run				375,770	48,910	16,660	28,950	212,240	9,930	58,140	940	15,230	10.2%	6.2%	
Harvest Below Bonneville				2019 Fisheries Fishery Description											
Zone 4-5 Wk 33				Aug 14-15	420	60	0	60	210	10	40	0	10	0.1%	0.10%
Zone 4-5 Wk 34				Aug 19-22	3,170	450	0	440	1,570	90	270	0	110	0.8%	0.74%
Zone 4-5 Wk 35				Aug 26-27	2,670	140	0	980	1,450	0	90	0	100	0.3%	0.68%
Zone 4-5 Wk 36				Sep 2 - Sep 8	0	0	0	0	0	0	0	0	0	0.0%	0.00%
Zone 4-5 Wk 38				Sep 9 - Sep 15	0	0	0	0	0	0	0	0	0	0.0%	0.00%
Zone 4-5 Wk 41				Oct 8-9	1,690	0	0	0	150	630	790	0	10	0	0.07%
Oct Coho Tanglenet		Coho target		Sep 30-Oct 25 (11 d)	680	0	0	0	340	0	140	0	20	0.0%	0.16%
Select Areas				Full Season	3,370	2,390	0	70	100	10	130	270	10	0.9%	0.05%
Buoy 10 Kept + Morts	2 fish/1 CK	nMSF Aug 1-20		+Aug 21-Dec31 coho	14,480	4,650	0	1,530	3,650	160	980	280	260	7.5%	1.72%
TP to Lewis	2 fish/1 CK	nMSF Aug 1-27, CK clsd <Puget I. Aug 21			3,070	0	0	0	1,940	150	770	0	140	0.0%	0.92%
Lewis to Bonn	2 fish/1 CK	nMSF Aug 1-Sept 5			6,090	390	0	350	4,170	100	520	0	300	0.5%	1.75%
Tributary Sport	MSF			Full season	2,910	1,360	1,080	0	0	0	30	0	0	0.2%	0.00%
Lower River Total					32,970	9,450	1,080	3,430	13,580	1,140	3,730	570	970	10.2%	6.18%
Bonneville Dam Passage					272,040			21,190	198,640		52,220		14,260		
Harvest Above Bonneville															
Z6 - Bonn to Hwy 395 Kept+Rel Morts	1 fish			Aug 1-Sep25	3,880				2,070		1,080		150		0.97%
Treaty Comm. and C&S				Average season	72,260			10,790	40,770		14,980		2,930		19.2%
Hanford Reach Sport Kept+Rel Morts	2 fish/1 fish in-season			Average season	13,190				11,810				0		
McNary Dam Passage					128,280				127,970						
Lower Granite Dam Passage													11,259		

Note: Post-season URB/SRW limit of 15% was not known until run reconstruction completed in February 2020.

2019 Preseason Expectations and Post-season Actual Coho Harvest and Exploitation Rates		
Harvest Summary (kept + release mortalities)		
	Total Harvest Mortalities	
Fishery	Preseason	Post-season
Mainstem Commercial (all gears)	33,445	2,856
Select Area Commercial	88,595	18,697
B10 Sport	57,512	26,881
LCR Sport	4,361	1,252
Ocean Fisheries	310,363	125,364
Total Harvest/Mortalities	494,276	175,050
	Exploitation Rate	
Fishery	Preseason	Post-season
Mainstem Commercial (all gears)	1.54%	0.39%
Select Area Commercial	0.08%	0.16%
B10 Sport	1.83%	2.76%
LCR Sport	0.10%	0.26%
Ocean Fisheries	13.8%	15.87%
Total Exploitation Rate	17.34%	19.45%

2020 FORECASTS, CONSERVATION OBJECTIVES, AND POLICY GUIDANCE

Upper Columbia Summer Chinook

- Pre-PFMC Forecast = 38,300
- Current policy guidance allocates harvestable surplus in fisheries below Priest Rapids Dam as 80% recreational and 20% commercial. However, no directed non-treaty commercial or recreational fisheries below Priest Rapids Dam are expected given the forecast, ocean harvest, and sharing allocations within the Upper Columbia Management Plan.
- Some incidental harvest mortalities will be allocated in order to prosecute Select Area commercial fisheries and a potential recreational summer steelhead/sockeye fishery.

Upriver Summer Steelhead

- Forecast = 99,900 (Skamania + A-Index + B-Index)
 - A-Index = 85,900 (33,300 wild)
 - B-Index = 9,600 (1,400 wild)
- Non-treaty fisheries allowed 2% impact rate on both wild A-Index and wild B-Index.
- Given the poor expected return for upriver summer steelhead, fishery restrictions similar to those enacted in recent years are likely/possible; for example:
 - Daily bag limit may not include more than one hatchery steelhead when open
 - Night fishing closures
 - Similar rolling block steelhead retention closures for mainstem and some tributary recreational fisheries as previous years. Below is last year's pre-season closure schedule for reference:
 - August: Buoy 10 to The Dalles Dam

- September: The Dalles Dam to John Day Dam
- September and October: John Day Dam to McNary Dam
- October and November: McNary Dam to Hwy 395 Bridge (Pasco)
- Oregon tributary mouth angling closures (e.g. Deschutes River) and Washington tributary mouth restrictions (e.g. Drano Lake)

Lower Columbia River (LCR) Tule Fall Chinook

- Preliminary pre-PFMC forecast = 51,000
- Total ocean and Columbia River ER limit = 38%
- Columbia River ER = currently expected to be ~13%
- This stock not expected to be a constraint in 2020

Snake River Wild/Upriver Bright (URB) Fall Chinook

- Preliminary pre-PFMC forecast = 233,400
- Based on the preseason URB and SRW forecasts, the allowed non-treaty URB harvest rate is $\leq 15\%$.
- Policy guidance for the most constraining fall Chinook stock (URB in 2020) is no more than 70% for recreational fisheries and not less than 30% commercial fisheries. Gillnets allowed in Zones 4-5.
 - Use up to 2% of commercial ESA impacts of the most constraining stock for use in lower river commercial fisheries using alternative gears. The Department shall approve alternative gears for use.
 - To clarify, 2% of 30% equates to $\leq 6.7\%$ of the commercial allocation available for alternative gears.

Columbia River Fall Chinook Returns 2019-2020			
	2019		2020
Stock	Forecast	Return	Forecast
Lower River Hatchery - LRH	54,500	48,900	51,000
Lower River Wild - LRW	13,700	16,700	19,700
Lower River Bright - LRB	8,000	9,900	7,900
Bonneville Pool Hatchery - BPH	46,000	29,000	46,200
Upriver Bright – URB	158,400	212,000	233,400
<i>Snake River Wild (SRW)</i>	<i>8,600</i>	<i>15,200</i>	<i>10,900</i>
Pool Upriver Bright - PUB	56,700	58,100	71,800
Select Area Bright - SAB	3,100	900	1,000
Lower River Total	79,300	76,400	79,600
Upriver Total	261,000	299,300	351,400
Columbia River Total	340,400	375,700	431,000
<i>2019 forecast/return is post-NOF; 2020 is pre-NOF</i>			
<i>SRW is a sub-component of URB</i>			

Columbia River Coho

- Current harvest matrix in place since 2015
- Pre-NOF ocean abundance forecast = 181,000 adults
 - 130,700 early stock and 50,300 late stock
- Lower River Natural (LCN) Coho impacts prioritized to Select Area fisheries, mainstem commercial Chinook fisheries, and commercial hatchery Coho fisheries, followed by recreational fisheries, and then Coho-directed mainstem commercial fisheries. Total ocean and Columbia River ER limit = 18% on LCN Coho.

Other

- Barbless hooks required in mainstem Columbia River (mouth upstream to the OR/WA border above McNary Dam) effective March 1, 2020.

CONSIDERATIONS FOR 2020 FISHERIES

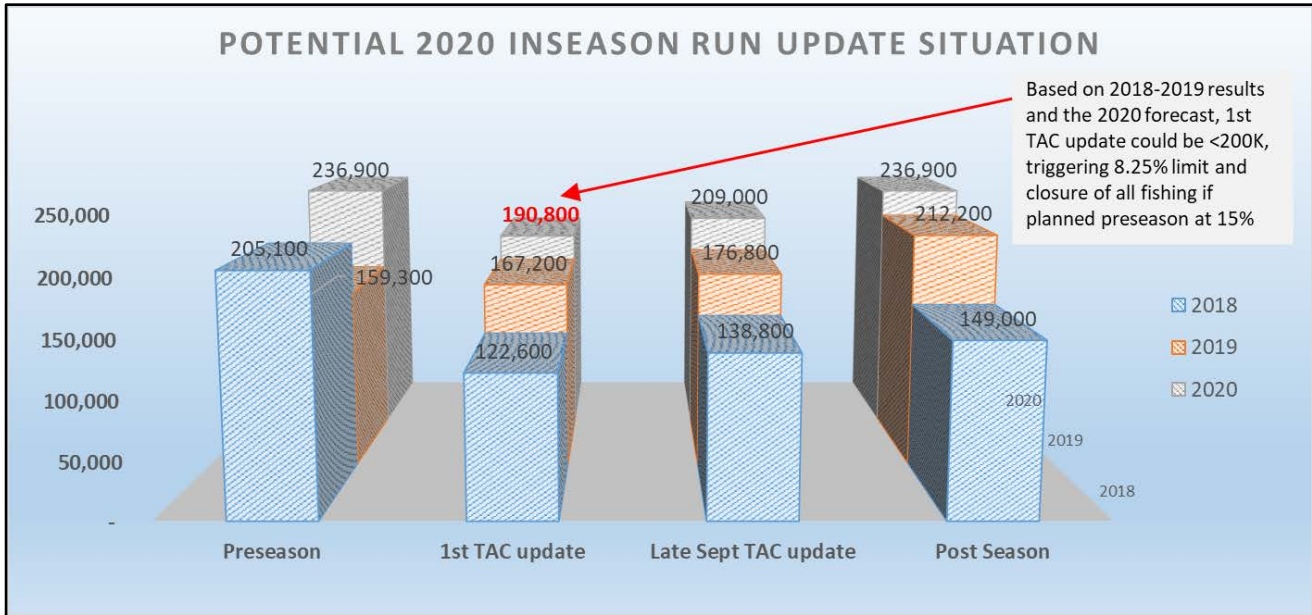
Track record of ESA Impacts

- Non-treaty fisheries exceeded the allowed SRW impact rate in 2017 and 2018 but were well within the allowed rate of 15% in 2019 based on the post-season URB/SRW run sizes.
- Tule impact rates have been exceeded twice since 2005.

2017-2019 SRW Fall Chinook Impacts by Fishery						
Fishery	2017		2018		2019	
	Pre	Post	Pre	Post	Pre	Post
Mainstem Commercial Z 4-5	4.1%	4.0%	2.1%	2.2%	2.1%	1.6%
Coho Tangle net	0.0%	0.0%	0.3%	0.0%	0.2%	0.2%
Select Areas	0.2%	0.3%	0.2%	0.0%	0.2%	>0.1%
Buoy 10	1.6%	4.1%	1.7%	2.0%	1.5%	1.7%
TP to Lewis	2.2%	2.0%	1.3%	2.9%	1.1%	0.9%
Lewis to Bonneville	3.2%	4.8%	2.2%	2.1%	2.4%	1.8%
Bonneville to Hwy 395	0.7%	0.9%	0.5%	0.1%	0.8%	1.0%
Total	12.01%	16.00%	8.24%	9.35%	8.25%	7.4%
Commercial	4.3%	4.3%	2.5%	2.2%	2.5%	1.8%
Sport	7.7%	11.7%	5.7%	7.1%	5.8%	5.6%

Management Constraints

- The preseason URB and SRW forecasts are over the 15% URB harvest rate threshold (200,000 URB and 8,000 SRW). However, considering forecasting error, they are not high enough to eliminate the risk of the actual URB run being below 200,000 fish (and 8.5% HR limit).
- Recent initial in-season run size updates (mid-September) have generally been below the final URB run size, averaging 81% of final for 2018-2019. Given this in-season error, the mid-September 2020 run-size update could be ~191,000, which is below the breakpoint for 15% vs 8.25% non-treaty allowed URB/SRW harvest rate.



Harvest rates in recreational fisheries

- Buoy 10 angler effort fluctuates with annual salmon returns but average effort has remained relatively stable during the last decade when compared to years prior to 2010. However, Chinook handle rates have generally been increasing in recent years.
- The LCR fall recreational fishery has seen an increase in angler effort over time, averaging 41,000 trips per year in the 1980s, 54,200 angler trips in the 1990s, 94,400 trips in the 2000s, and 118,400 trips since 2010
 - Annual fall Chinook catch has also increased, averaging 2,300 during the 1980s, 5,000 during 1990s, 14,700 during the 2000s, and 23,600 since 2010.
- In 2019, observed fall Chinook handle rates in the Warrior Rock to Bonneville and above Bonneville fisheries were higher than expected.

“Tools in the Toolbox” for managing recreational fisheries

- Collectively, it is becoming harder to maintain season length, particularly in years when URB/SRW Chinook are the limiting stock (i.e. 8.25%).
- There are only so many options available to maintain/lengthen Chinook retention seasons:
 - Daily bag limits: Already at one Chinook daily but a one fish daily bag limit could reduce non-retention mortalities (off the water sooner).
 - Seasonal bag limits: Used for Oregon coastal Chinook fisheries in recent years.
 - Days-per-week: Expected to extend absolute end dates for Chinook retention but usually results in fewer total fishing days due to effort shift.
 - Over-lapping Chinook retention: During a certain period of the fall Chinook run (late August-mid September), could slow handle rates in each fishery segment since anglers would need to choose where to go. The 2019 season structure of sequential Chinook retention closures allowed anglers to move upstream with the URB run resulting in emergency in-season actions to manage fisheries.

Non-target handle in recreational fisheries

- Due to various reasons (higher Chinook catch rates, 8.25% URB HR, steelhead closures, lower Coho mark rates), a lower proportion of the fish handled in fall fisheries are being retained, resulting in more release mortalities.
- During certain timeframes in the different recreational fishery components, anglers have expressed concern over the higher numbers of fish caught and released.

Fall season recreational trips and catch below Bonneville Dam by CHF retention status, 2019									
Fishery	Month	Date	CHF Retention Status	Trips	Sum Kept	Sum Rel	Sum Rel Morts	Kept/ mort	Morts/ kept
B10*	Aug	8/1-20	Open	38498	13640	6948	1459	9.3	0.1
	Aug-Oct	8/21-10/31	Closed	38479	19909	32681	6863	2.9	0.3
	Total				76977	33549	39629	8322	4.0
LCR	Aug	8/1-27	Open	35222	4701	210	44	106.6	0.0
	Aug	8/27-31	Closed <WR	332	0	62	13	0.0	
	Sep	9/1-5	Open >WR	10840	2631	183	38	68.5	0.0
	Sep	9/6-30	Closed	10416	567	6696	1406	0.4	2.5
	Oct	10/1-31	Closed	1865	312	661	139	2.2	0.4
	Total				58675	8211	7812	1641	5.0
Total			Open	84560	20972	7341	1542	13.6	0.1
Total			Closed	51092	20788	40100	8421	2.5	0.4

** B10 data itemized by CHF retention status is approximated pending final daily catch estimates*

2020 Management Approach

- Due to overages for SRW impact rates in recent years, staff is taking a conservative approach for planning 2020 fall Chinook fisheries. Therefore, staff does not recommend fully allocating all SRW impacts for use prior to in-season run updates.
- Currently, staff is planning fisheries assuming a 15% URB harvest rate but not allocating more than 55% of the allowed URB harvest prior to the mid-September run-update. Preseason plans for fisheries occurring after the run-update would be contingent on the update exceeding 200,000 URBs.
- Mainstem fall season commercial fisheries already follow a split season structure with Chinook-target fisheries typically occurring in late-August and mid- to late-September.
- Since recreational fisheries farther upstream would disproportionately benefit from re-opening of Chinook retention after the run update, staff is considering adjusting base URB sharing percentages among the fishery components to provide a higher proportion of the base URB allocation to the Buoy 10 and Tongue Point-Warrior Rock fisheries prior to the run update. Under this approach, recreational fisheries upstream of Warrior Rock would be allocated a lower proportion of their URB sub-allocation prior to the run-update but have access to a higher proportion of the balance post run-update if the URB run exceeds 200,000.

- Due to the release mortality issue during Chinook non-retention periods described above, the low Coho forecast, and a high likelihood for steelhead retention closures, staff is considering salmonid fishing closures upstream of the Tongue/Rocky Point line whenever Chinook retention is closed.
- Staff is working to model season structures for Chinook-retention periods with the intent to provide more detail at the next North of Falcon public meeting.

Ocean fishery options - see remaining handouts, "Salmon Guidance Letter to PFMC" and "2020 NOF Management Alternatives"

*Oregon/Washington Departments of Fish and Wildlife
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