

Comprehensive Review of the Columbia River Basin Salmon
Management Policy C-3620
2013-2017
ALLOCATION

QUESTIONS: 30, 31, 32, 33, 34, 35, and 36

Supplemental staff comments:

Harvest alone may not be the best measure of achieving allocation objectives, as sufficient fish may have been present and other factors such as water condition or lack of effort may have resulted in less harvest than anticipated. During the preseason process, the Policy allocation is used to plan all of the fisheries. During in-season management, staff attempt to adjust fisheries to adhere to those objectives at the same time that run sizes, run timing, catch rates, water conditions and stock compositions are all changing from preseason assumptions.

Question 30

Question paraphrase: What was the actual allocation sharing of spring Chinook between sport and commercial fisheries and how did it compare to the Policy?

Policy citation: The presumptive path for the management of spring Chinook salmon fisheries is summarized in Appendix Table A (pg. 14)

Specific question: *In comparison to the values in Appendix A, what were the actual impact sharing values beginning in 2013, and what was the actual commercial fishing gear usage in the years involved?*

Analysis: The ESA allocations from the Policy and actual impacts are shown in Table 30A. The sport allocation increased from 60% in 2013 to 80% in 2017 and actual allocation used increased from 54% in 2013 to 71% in 2017.

Table 30A: Upriver Spring Chinook ESA Sharing

	% Sport Share Allocated	% Comm Share Allocated	Sport ESA Impacts	Comm ESA Impacts	% Sport Share Actual	% Comm Share Actual
2013	60%	40%	0.76%	0.64%	54%	46%
2014	70%	30%	1.04%	0.62%	63%	37%
2015	70%	30%	0.86%	1.02%	46%	54%
2016	70%	30%	0.94%	0.76%	55%	45%
2017	80%	20%	1.00%	0.40%	71%	29%

Table 30B shows the percentage of the ESA impacts that were actually utilized by each fishery. This table shows that on average, the sport fishery utilized 72% of their allotted impacts and the commercial fishery utilized 126% of their allotted impacts. With spring Chinook management,

the Catch Balance provision in the *U.S. v Oregon* Management Agreement is usually more constraining than ESA impacts and this results in ESA impacts not being achieved, or ESA impacts being reallocated to another fishery. The Policy states “the Department will exercise in-season management flexibility to utilize the non-Indian upriver spring Chinook impact allocation to meet the objectives of both fisheries, i.e., upriver impact sharing adjustments in response to in-season information pertaining to catch and run size.” For example, in 2015 and 2016, ESA impacts were reallocated in-season from sport to commercial as part of the adaptive management provision.

Table 30B: Percent of Upriver Spring Chinook ESA Impact Utilized

Sport				Commercial			
	Allowed Impacts	Actual Impacts	% of Allowed		Allowed Impacts	Actual Impacts	% of Allowed
2013	1.02%	0.76%	75%	2013	0.60%	0.64%	107%
2014	1.40%	1.04%	74%	2014	0.60%	0.62%	103%
2015	1.54%	0.86%	56%	2015	0.66%	1.02%	155%
2016	1.33%	0.94%	71%	2016	0.57%	0.76%	133%
2017	1.20%	1.00%	83%	2017	0.30%	0.40%	133%
Average			72%	Average			126%

Table 30C shows the actual catch balance allocations for each of the fisheries from 2010-2017. During 2010-2012 (pre-Policy) the commercial fishery averaged 75% of their catch balance allocation and the sport fishery averaged 100% of their catch balance allocation. During 2013-2017 (Policy) the commercial fishery averaged 95% of their catch balance allocation and the sport fishery averaged 88% of their catch balance allocation. Both fisheries were able to utilize a high percentage of their catch balance allocation given the challenges of in-season fishery management.

Table 30C: Upriver Spring Chinook Catch Balance Shares

	Comm Catch Balance Used	Comm Catch Balance Allowed	% Comm Catch Balance Used	Sport Catch Balance Used	Sport Catch Balance Allowed	% Sport Catch Balance Used
2010	9,077	12,530	72%	28,859	21,490	134%
2011	3,816	6,825	56%	13,842	15,345	90%
2012	4,605	4,759	97%	13,691	18,297	75%
2013	1,757	2,624	67%	6,330	7,593	83%
2014	3,621	4,911	74%	17,349	19,347	90%
2015	6,528	6,376	102%	19,381	24,836	78%
2016	3,285	3,335	99%	13,043	13,756	95%
2017	463	347	133%	7,316	7,760	94%
2010-2012 Average			75%			100%
2013-2017 Average			95%			88%

Question 31

Question paraphrase: Did the spring Chinook management buffer keep the non-treaty fisheries from exceeding the ESA guidelines?

Policy citation: **Fishery Management Buffer** (spring Chinook) (pg. 14)

Specific question: *Did the management buffer approach work over the course of the Policy, or were ESA impacts exceeded since 2012?*

Analysis: Yes, the management buffer was effective in maintaining non-Indian ESA impacts within the overall non-Indian guidelines. Non-Indian ESA impact rates were not exceeded during 2013-2017 and averaged 87% of the total during that period (Table 31A).

Table 31A: Comparison of Upriver Spring Chinook Impacts Used Versus Allowed

	Total Impacts Used	Total ESA Impacts Allowed	% of Total Impacts Used
2013	1.40%	1.70%	82%
2014	1.66%	2.00%	83%
2015	1.91%	2.20%	87%
2016	1.70%	1.90%	89%
2017	1.40%	1.50%	93%
Average	1.61%	1.86%	87%

Question 32

Question paraphrase: What was the actual allocation sharing of spring Chinook within the sport fishery and how did it compare to the Policy?

Policy citation: The Department will provide to the Commission each year a briefing on the effectiveness of fishery management actions in meeting spring Chinook sport fishery allocation objectives throughout the Columbia River basin. The Commission may consider changes to the sport allocation in this Policy in the future to balance sport fishery objectives in the areas below Bonneville Dam, above Bonneville Dam, and in the Snake River. (pg. 15)

Specific question: *Was this accomplished with the agenda item presented by Bill Tweit at the September Commission meeting in Port Angeles?*

Analysis: The ESA allocations from the Policy and actual impacts are shown in Table 32A. During 2013-2017, the sport fishery below Bonneville ESA allocation averaged 74% compared to 75% prescribed in the policy and fisheries above Bonneville averaged 26% compared to 25%.

Table 32A: Upriver Spring Chinook Sport ESA Sharing

	Below Bonneville Allocation	Above Bonneville Allocation	Actual Impacts Below Bonneville	Actual Impacts Above Bonneville	Below Bonneville Actual	Above Bonneville Actual
2013	75%	25%	0.61%	0.17%	79%	21%
2014	75%	25%	0.79%	0.30%	73%	27%
2015	75%	25%	0.69%	0.24%	74%	26%
2016	75%	25%	0.71%	0.23%	75%	25%
2017	75%	25%	0.68%	0.27%	72%	28%
Average					74%	26%

Table 32B shows the catch balance allocations and actual harvest for each of the three geographic sport fisheries. From 2013-2017, the sport fisheries below Bonneville averaged 92% of their catch balance allocation, Bonneville to the WA/OR border average 100% of their catch balance allocation and Wanapum/Snake River fisheries averaged 68% of their catch balance allocation. Although the averages for the fishery from Bonneville to the WA/OR border shows an average of 100%, the range was 2% in 2017 and 201% in 2014. Although the averages for the Wanapum/Snake River fisheries shows an average of 68%, the range was 17% in 2017 and 100% in 2014.

Table 32B: Percent of Upriver Spring Chinook Between Sport Geographic Areas Utilized

Below Bonneville			
	Postseason Allowed	Actual Harvest	% of Allowed
2013	6,168	5,343	87%
2014	15,682	13,572	87%
2015	19,316	15,689	81%
2016	10,767	10,167	94%
2017	6,334	7,198	114%
Average			92%

Bonneville to WA/OR Border			
	Postseason Allowed	Actual Harvest	% of Allowed
2013	822	1,093	133%
2014	2,091	4,208	201%
2015	2,615	1,647	63%
2016	1,436	1,480	103%
2017	845	18	2%
Average			100%

Wanapum/Snake			
	Postseason Allowed	Actual Harvest	% of Allowed
2013	603	374	62%
2014	1,574	1,575	100%
2015	2,904	1,996	69%
2016	1,561	1,397	89%
2017	582	101	17%
Average			68%

In 2017, an in-season reduction in the run size resulted in little real fishing opportunity upstream of Bonneville Dam, even though the final run size was close to the forecast. This was an unusual circumstance; other factors have had more influence on harvest management decisions in other years under the Policy. Summaries by year are included in the **Additional Reference Materials**.

Recreational Advisory Group/Public Comments:

Recommended to remove 2017 in the average as it could be considered an outlier year as it took an unusual set of circumstances.

Eastside Recreational Public Comments:

Recommended to keep 2017 included in the average as it did occur and unusual circumstances occur every year in one way or another.

Question 33

Question paraphrase: What was the actual allocation sharing of summer Chinook between sport and commercial fisheries and how did it compare to the Policy? What were the results of testing alternative gears?

Policy citation: The presumptive path for the management of summer Chinook salmon fisheries is summarized in Appendix Table B (pg. 15)

Specific question: *In comparison to the values in Appendix B, what were the actual impact sharing values beginning in 2013? Were alternative gears tested and if so, what were the results in comparison to the gill net fishery option?*

Analysis: The catch allocations from the Policy and actual catches are shown in Table 33A. The sport allocation increased from 60% in 2013 to 80% in 2017 and actual allocation used increased from 55% in 2013 to 99% in 2017.

Table 33A: Summer Chinook Harvest Sharing

	% Sport Share Allocated	% Comm Share Allocated	Sport Harvest Below PRD	Commercial Harvest	% Sport Share Actual	% Comm Share Actual
2013	60%	40%	2,382	1,987	55%	45%
2014	60%	40%	2,839	2,788	50%	50%
2015	70%	30%	6,938	4,043	63%	37%
2016	70%	30%	4,272	3,050	58%	42%
2017	80%	20%	4,115	47	99%	1%

Table 33B shows the percentage of the harvest that was actually utilized by each fishery. This table shows that on average, the sport fishery utilized 85% of their allotted harvest and the commercial fishery utilized 84% of their allotted harvest. Annual harvest sharing tables can be found in the **Additional Reference Materials**.

Table 33B: Percent of Summer Chinook Catch Utilized

Commercial				Sport Below Priest Rapids Sport			
	Postseason Allowed	Actual Harvest	% of Allowed		Postseason Allowed	Actual Harvest	% of Allowed
2013	2,145	1,987	93%	2013	2,621	2,382	91%
2014	2,601	2,788	107%	2014	3,901	2,839	73%
2015	4,068	4,043	99%	2015	9,492	6,938	73%
2016	2,513	3,050	121%	2016	5,864	4,272	73%
2017	949	47	5%	2017	3,797	4,115	108%
Average			85%	Average			84%

See Questions 12 and 13 for information on alternative gears. No alternative gear fisheries were implemented for summer Chinook.

Question 34

Question paraphrase: What was the actual allocation sharing of summer Chinook above and below Priest Rapids Dam and how did it compare to the Policy?

Policy citation: Percent of non-treaty allocation assigned to fisheries above Priest Rapids Dam (summer Chinook) (pg. 16)

Specific question: How do these allocation targets compare to actual values for the years in question?

Analysis: The harvest allocations from the Policy and actual harvests are shown in Table 34A. A larger percentage of harvest occurred below Priest Rapids Dam compared to the expectation of their harvest share. The total harvest was greater above Priest Rapids Dam as prescribed by the Policy allocation. Fisheries below Priest Rapids Dam include sport fisheries from the mouth upstream to Priest Rapids Dam, mainstem commercial fisheries and Select Area commercial fisheries. Fisheries above Priest Rapids include Wanapum tribal, Colville tribal and mainstem sport fisheries.

Table 34A: Summer Chinook Harvest Sharing Above and Below Priest Rapid

	Below Priest Rapids Dam Share Allocation	Above Priest Rapids Dam Share Allocation	Harvest Below Priest Rapids Dam	Above Priest Rapids Dam Harvest	Below Priest Rapids Share Actual	Above Priest Rapids Dam Share Actual
2013	32.5%	67.5%	4,369	6,591	40%	60%
2014	35.7%	64.3%	5,627	6,599	46%	54%
2015	40.0%	60.0%	10,981	15,517	41%	59%
2016	38.2%	61.8%	7,322	7,973	48%	52%
2017	32.7%	67.3%	4,162	6,122	40%	60%

Table 34B shows the percentage of the harvest that was actually utilized by each fishery. This table shows that on average, the fisheries below Priest Rapids Dam utilized 87% of their allotted harvest and the fisheries above Priest Rapids Dam utilized 69% of their allotted harvest. Annual harvest sharing tables can be found in the **Additional Reference Materials**.

Table 34B: Percent of Summer Chinook Catch Sharing Above and Below Priest Rapids Dam Utilized

Below Priest Rapids Dam				Above Priest Rapids Dam			
	Postseason Allowed	Actual Harvest	% of Allowed		Postseason Allowed	Actual Harvest	% of Allowed
2013	4,766	4,369	92%	2013	7,889	6,591	84%
2014	6,502	5,627	87%	2014	10,692	6,599	62%
2015	13,560	10,981	81%	2015	20,979	15,517	74%
2016	8,377	7,322	87%	2016	13,611	7,973	59%
2017	4,746	4,162	88%	2017	8,981	6,122	68%
Average			87%	Average			69%

Question 35

Question paraphrase: What was the actual allocation sharing below Priest Rapids Dam and how did it compare to the Policy?

Policy citation: **Nontreaty Sharing Below Priest Rapids Dam** (summer Chinook) (pg. 16)

Specific question: *How do the allocation targets in this section compare to actual values for the years in question?*

Analysis: See response to Question #33 above.

Question 36

Question paraphrase: What was the actual allocation sharing of sockeye, fall Chinook and coho between sport and commercial fisheries and how did it compare to the Policy?

Policy citation: **Sockeye, Fall Chinook and Coho** Salmon (pg. 17)

Specific question: *For each of the species sections remaining in the report, the retrospective analysis/evaluation should be done in a similar manner as to the questions posed in this document for spring and summer Chinook. In comparison to the values on page 10, what were the actual impact sharing values beginning in 2013 (for **sockeye salmon**)?*

Analysis: The ESA Snake River sockeye impact allocations from the Policy and actual impacts are shown in Table 36A. The sport allocation increased from 70% in 2013 to 80% in 2017 and actual allocation used increased from 79% in 2013 to 95% in 2017. Sockeye sport fisheries in the lower Columbia (below Priest Rapids Dam) occur at a lower level than in the upper Columbia and are mostly caught incidentally to Chinook or steelhead fisheries.

Table 36A: Sockeye Impact Sharing

	Sport Share Allocation	Comm Share Allocation	Sport Actual Impacts	Comm Actual Impacts	Sport Share Actual	Comm Share Actual
2013	70%	30%	0.31%	0.08%	79%	21%
2014	70%	30%	0.18%	0.05%	79%	21%
2015	70%	30%	0.22%	0.09%	72%	28%
2016	70%	30%	0.27%	0.10%	73%	27%
2017	80%	20%	0.32%	0.02%	95%	5%

*In comparison to the values in Appendix C, what were the actual impact sharing values beginning in 2013 (for **tule fall Chinook salmon**)?*

The ESA tule fall Chinook impact allocations from the Policy and actual impacts are shown in Table 36B. The sport allocation increased from 70% in 2013 to 75% in 2017 and actual allocation used increased from 70% in 2013 to 91% in 2017.

Table 36B: Tule Fall Chinook ESA Impact Sharing

	Sport Share Allocation	Comm Share Allocation	Sport Tule Actual Impacts	Comm Tule Actual Impacts	Sport Share Actual	Comm Share Actual
2013	70%	30%	6.47%	2.81%	70%	30%
2014	70%	30%	5.80%	1.55%	79%	21%
2015	70%	30%	4.50%	2.90%	61%	39%
2016	70%	30%	5.14%	5.29%	49%	51%
2017	75%	25%	6.33%	0.66%	91%	9%

*In comparison to the values in Appendix D, what were the actual impact sharing values beginning in 2013 (for **Upriver Bright fall Chinook salmon**)?*

The ESA Upriver Bright fall Chinook impact allocations from the Policy and actual impacts are shown in Table 36C. The sport allocation increased from 70% in 2013 to 75% in 2017 and actual allocation used increased from 45% in 2013 to 64% in 2017.

ODFW rules prioritizes the allocation to the sport fishery for the most constraining stock (tule or Upriver Brights), whereas WDFW Policy prioritizes the allocation to the sport fishery of both stocks (tule and Upriver Brights) equally. There are very few scenarios where allocations of both stocks can be achieved, and in some cases can be competing objectives. The majority of the years of the Policy were more constrained by tule fall Chinook impacts versus Upriver Bright fall Chinook, thus limiting full access to Upriver Bright fall Chinook impacts. See response to Question #16 regarding non-concurrent regulations.

Table 36C: Upriver Bright Fall Chinook ESA Impact Sharing

	Sport Share Allocation	Comm Share Allocation	Sport URB Actual Impacts	Comm URB Actual Impacts	Sport Share Actual	Comm Share Actual
2013	70%	30%	4.95%	6.07%	45%	55%
2014	70%	30%	4.44%	7.79%	36%	64%
2015	70%	30%	6.50%	4.70%	58%	42%
2016	70%	30%	6.48%	8.14%	44%	56%
2017	75%	25%	7.73%	4.27%	64%	36%

*In comparison to the values in Appendix E, what were the actual impact sharing values beginning in 2013 (for **coho salmon**)?*

The Policy assigns commercial fisheries a sufficient share of the ESA-impact for Lower Columbia Natural coho to implement Select Area coho and fall Chinook fisheries and mainstem fall Chinook fisheries. The balance is provided to in-river mainstem sport fisheries to meet fishery

objectives. If these fisheries are expected to be unable to use all of the ESA-impacts, the remainder will be assigned to mainstem commercial coho fisheries.

Only from 2013-2015 did additional coho impacts remain for mainstem coho gillnets and coho tangle net fisheries to occur that translated with a range of harvest (3,210 to 62,101). Alternative gear pilot program began in 2013 and from 2013-2015 did additional coho impacts remain. There were no mainstem commercial fisheries or alternative gear fisheries targeting coho in 2017 due to a low forecasted run size.

Table 36D: Coho harvest and Sharing

Year	Commercial			Sport			Comm %	Sport %
	Mainstem	Select Area	Total	Buoy 10	Mainstem	Total		
2013	9,800	38,600	48,400	7,600	1,000	8,600	85%	15%
2014	70,400	166,900	237,300	57,700	5,800	63,500	79%	21%
2015	4,500	26,600	31,100	36,900	1,000	37,900	45%	55%
2016	1,100	30,300	31,400	9,200	1,300	10,500	75%	25%
2017	1,000	36,900	37,900	18,200	3,100	21,300	64%	36%
Average							70%	30%

Commercial Advisory Group/Public Comments:

During the Workgroup modeling, there was an expectation that the sport fisheries would not utilize all of their URB impacts and that the commercial fisheries would utilize those unused impacts. This has not occurred over the course of the Policy.

The Policy allocates opportunity for sport fisheries to catch fish, the opportunity is provided but sometimes the resulting harvest does not occur. The commercial fishery is able to fish in variable river/weather conditions and are able to catch their fish while as the sport fishery can be impacted by these same river/weather conditions.