

**Summary of Modeling Approach Changes from Past Model Option Outputs**

The following model option outputs vary from previous distributions in certain ways:

- All model outputs now include an assumption 'for hire' trips that vary from 5-15% depending on the season and the fishery - this increases LPII between \$4 and \$5.5 M from past outputs - see Agenda Item Summary for rationale
- '- Similar to past outputs, model results are shown without adjustments for non-concurrence or risk to funding. New outputs are also provided showing results of likely implementation constrained by non-concurrence and potential funding reductions.
- Outputs are now provided for: No Policy, January Staff Recommendation, March Staff Recommendation as likely implemented, Current OFWC Rules (as adopted), current OFWC Rules as likely implemented if cannot achieve concurrence or retain funding, WFWC Policy (as adopted) and WFWC Policy as likely implemented
- These "as likely implemented" outputs change dramatically from past outputs due to changes in assumed available allocation splits with explicit acknowledgement of OFWC fall sport allocations and WFWC fall commercial allocations, as well as potential loss of off-channel hatchery production

		Base		“% Delta”			
				No Policy		Pre-Policy Baseline	
		Avg 2017-21	2022	Avg 2017-21	2022	Avg 2017-21	2022
Pre-Policy Baseline (from Appendix C)	Trips	350,362					
	\$ EV	\$3,855,999					
	\$ LPI	\$27,005,903					
No Policy	Trips	405,637	405,637				
	\$ EV	\$5,879,367	\$5,751,001				
	\$ LPI	\$39,565,782	\$39,384,914				
OFWC Rule	Trips	425,630	425,630	4.93%	4.93%	21.48%	21.48%
	\$ EV	\$5,571,523	\$5,869,138	-5.24%	2.05%	44.49%	52.21%
	\$ LPI	\$40,644,321	\$41,063,660	2.73%	4.26%	50.66%	52.21%
OFWC Rule (as likely implemented)	Trips	421,527	421,527	3.92%	3.92%	20.31%	20.31%
	\$ EV	\$4,436,705	\$4,197,295	-24.54%	-27.02%	15.06%	8.85%
	\$ LPI	\$38,718,696	\$38,381,366	-2.14%	-2.55%	43.52%	42.27%
January Staff Recommendation	Trips	427,271	427,271	5.33%	5.33%	21.95%	21.95%
	\$ EV	\$5,084,486	\$5,382,101	-13.52%	-6.41%	31.86%	39.58%
	\$ LPI	\$40,088,735	\$40,508,074	1.32%	2.85%	48.60%	50.15%
Current Staff Recommendation	Trips	426,451	426,451	5.13%	5.13%	21.72%	21.72%
	\$ EV	\$4,731,910	\$5,138,633	-19.52%	-10.65%	22.72%	33.26%
	\$ LPI	\$39,526,670	\$40,099,743	-0.10%	1.81%	47.75%	49.89%
WFWC Policy	Trips	431,374	433,016	6.34%	6.75%	23.12%	23.59%
	\$ EV	\$3,531,163	\$3,181,387	-39.94%	-44.68%	-8.42%	-17.50%
	\$ LPI	\$38,226,833	\$37,864,666	-3.38%	-3.86%	41.70%	40.35%
WFWC Policy (as likely implemented)	Trips	421,527	421,527	3.92%	3.92%	20.31%	20.31%
	\$ EV	\$3,560,562	\$3,218,136	-39.44%	-44.04%	-7.66%	-16.54%
	\$ LPI	\$37,484,210	\$37,001,732	-5.26%	-6.05%	38.94%	37.16%

Option	Model Inputs	Fishery	Metric	2017	2018	2019	2020	2021	2022	
No Policy	Spring 40% allocation with mainstem tangle net fishery; Summer 50% with gillnet; Fall LRH Tule 41% with Z4-5 gillnet; Coho 6" gillnet 100%	Sport	Total Trips							
			W/O Policy Trips	405,637	405,637	405,637	405,637	405,637	405,637	
			Trip Δ	0	0	0	0	0	0	
			Trip Δ %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
			Local Personal Income Impact <sup>a</sup>	\$31,281,754	\$31,281,754	\$31,281,754	\$31,281,754	\$31,281,754	\$31,281,754	
		Commercial	Total Ex-Vessel Value							
			W/O Policy Ex-Vessel Value	\$5,925,113	\$5,925,113	\$5,922,983	\$5,866,786	\$5,756,838	\$5,751,001	
			Ex-Vessel Value Δ	\$0	\$0	\$0	\$0	\$0	\$0	
			Ex-Vessel Value Δ %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
			Local Personal Income Impact	\$8,348,485	\$8,348,485	\$8,345,483	\$8,266,301	\$8,111,385	\$8,103,160	
	Combined	Local Personal Income Impact <sup>f</sup>	\$39,630,239	\$39,630,239	\$39,627,237	\$39,548,055	\$39,393,139	\$39,384,914		
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	Contribution to Total Commercial Ex-Vessel Value by Fishery	Mainstem Gillnet	Spring Chinook	\$539,579	\$539,579	\$539,579	\$539,579	\$539,579	\$539,579	
			Summer Chinook	\$267,633	\$267,633	\$267,633	\$267,633	\$267,633	\$267,633	
			Z4-5 Fall Chinook	\$3,172,894	\$3,172,894	\$3,172,894	\$3,172,894	\$3,172,894	\$3,172,894	
			Coho	\$166,486	\$166,486	\$166,486	\$166,486	\$166,486	\$166,486	
		Select Area Gillnet	Spring Chinook	\$639,351	\$639,351	\$639,351	\$639,351	\$639,351	\$639,351	
			Fall Chinook	\$476,622	\$476,622	\$474,492	\$418,295	\$308,347	\$302,510	
			Coho	\$662,548	\$662,548	\$662,548	\$662,548	\$662,548	\$662,548	
		Mainstem Seine	Beach Chinook/Coho	\$0	\$0	\$0	\$0	\$0	\$0	
Purse Chinook/Coho			\$0	\$0	\$0	\$0	\$0	\$0		
Mainstem Tangle Net		Coho	\$0	\$0	\$0	\$0	\$0	\$0		
Total Commercial			\$5,925,113	\$5,925,113	\$5,922,983	\$5,866,786	\$5,756,838	\$5,751,001		
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Contribution to Total Sport Angler Trips by Fishery		Spring	Spring Chinook	126,422	126,422	126,422	126,422	126,422	126,422	
		Summer	Summer Chinook/Steelhead	53,580	53,580	53,580	53,580	53,580	53,580	
		Fall-Buoy 10	Fall Chinook/Coho	91,893	91,893	91,893	91,893	91,893	91,893	
	Fall-Mainstem	Fall Chinook/Coho	133,741	133,741	133,741	133,741	133,741	133,741		
	Total Sport			405,637	405,637	405,637	405,637	405,637	405,637	

<sup>a</sup> Local Personal Income Impact for the sport fishery adjusted for 2012-16 avg % guided trips for B-10 and 2012, 2014, 2015, and 2016 avg % guided trips for mainstem; @ \$221.48 based on IO-PAC model.

Updated 12-19-16, 1-6-17, and 1-19-17 with following changes:

-Mitchell Act Select Area Bright CHF releases capped at 1.0M (long-term expected 1.44M); expected and base ex-vessel adjusted down -\$50K to -\$117K effective 2020-22 (assumes MA cut is independent of HR Policy)

-Mitchell Act tule CHF releases capped at 3.875M (long-term expected 6.445M); expected and base ex-vessel adjusted down -\$2K to -\$57K effective 2019-22 (assumes MA cut is independent of HR Policy); Deep Rive CHF fishery terminates 2021

-Updated average SAFE harvest rates (all stocks) with 2016 results based on new stock composition data (COH=-\$150K; CHS=+\$28K to+\$46K; CHF=-\$31-82K)

-Updated average SAFE non-local fall Chinook value based on new stock composition data (~\$28,200)

-Reduced 2017 Select Area CHS value by ~\$52K (assume no Cathlamet Channel fishery due to restrictive commercial Willamette CHS allocation)

-Corrected small math error in 2016 fall mainstem commercial value (~0.2% increase to long-term expected ex-vessel)

-Total annual sport trips broken out by season/fishery.

Option	Model Inputs	Fishery	Metric	2017	2018	2019	2020	2021	2022		
<b>January Staff Recommendation<sup>a</sup></b> (zero Summer value with no gear identified)	Spring 20% with mainstem post-update tangle net fishery; Summer 0% (no access); Fall LRH Tule 30% non-CSA (32% w/CSA) with Z4-5 gillnet and Conservation Set Aside (CSA) fishery; Coho 6" gillnet 0%; Coho tangle net 100%; Harvest Reform SAFE Releases, 2017+ CHS brood @ 3.34M (2.2M + 250K Westport/current site + 500K Gnat Cr + 390K backfill for Coho cuts at current site), 2017+ SAB brood @ 1.0M, 2013+ Coho brood @ 5.255M (Mitchell Act adjustment)	Sport	Total Trips	427,271	427,271	427,271	427,271	427,271	427,271		
			W/O Policy Trips	405,637	405,637	405,637	405,637	405,637	405,637		
			Trip Δ	21,634	21,634	21,634	21,634	21,634	21,634		
			Trip Δ %	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%		
		Commercial	Local Personal Income Impact <sup>b</sup>	\$32,924,694	\$32,924,694	\$32,924,694	\$32,924,694	\$32,924,694	\$32,924,694	\$32,924,694	
			Total Ex-Vessel Value	\$5,149,094	\$5,014,897	\$4,967,287	\$5,026,540	\$5,264,608	\$5,382,100		
			W/O Policy Ex-Vessel Value	\$5,925,113	\$5,925,113	\$5,922,983	\$5,866,786	\$5,756,838	\$5,751,001		
			Ex-Vessel Value Δ	(\$776,020)	(\$910,216)	(\$955,696)	(\$840,246)	(\$492,230)	(\$368,901)		
			Ex-Vessel Value Δ %	-13.1%	-15.4%	-16.1%	-14.3%	-8.6%	-6.4%		
			Local Personal Income Impact	\$7,255,073	\$7,065,990	\$6,998,908	\$7,082,394	\$7,417,833	\$7,583,380		
			Combined	Local Personal Income Impact <sup>b</sup>	\$40,179,767	\$39,990,684	\$39,923,602	\$40,007,088	\$40,342,527	\$40,508,074	
			Contribution to Total Commercial Ex-Vessel Value by Fishery	Mainstem Gillnet	Spring Chinook	\$103,100	\$103,100	\$103,100	\$103,100	\$103,100	\$103,100
					Summer Chinook	\$0	\$0	\$0	\$0	\$0	\$0
					Z4-5 Fall Chinook	\$2,578,034	\$2,578,034	\$2,578,034	\$2,578,034	\$2,578,034	\$2,578,034
					Coho	\$0	\$0	\$0	\$0	\$0	\$0
				Select Area Gillnet	Spring Chinook	\$669,495	\$759,282	\$814,865	\$850,806	\$1,118,080	\$1,233,892
		Fall Chinook			\$635,608	\$473,780	\$365,115	\$388,427	\$359,220	\$360,901	
		Coho			\$948,863	\$886,707	\$892,180	\$892,180	\$892,180	\$892,180	
		Mainstem Seine		Beach Chinook/Coho	\$32,501	\$32,501	\$32,501	\$32,501	\$32,501	\$32,501	
				Purse Chinook/Coho	\$106,883	\$106,883	\$106,883	\$106,883	\$106,883	\$106,883	
Mainstem Tangle Net	Coho	\$74,610		\$74,610	\$74,610	\$74,610	\$74,610	\$74,610			
Total Commercial				\$5,149,094	\$5,014,897	\$4,967,288	\$5,026,541	\$5,264,608	\$5,382,101		
Contribution to Total Sport Angler Trips by Fishery	Spring	Spring Chinook		140,190	140,190	140,190	140,190	140,190	140,190		
	Summer	Summer Chinook/Steelhead		53,580	53,580	53,580	53,580	53,580	53,580		
	Fall-Buoy 10	Fall Chinook/Coho		95,079	95,079	95,079	95,079	95,079	95,079		
	Fall-Mainstem	Fall Chinook/Coho	138,421	138,421	138,421	138,421	138,421	138,421			
	Total Sport		427,271	427,271	427,271	427,271	427,271	427,271			

<sup>a</sup> Assumes General Fund and Endorsement funding authorized under SB 830 is available for additional Select Area production

<sup>b</sup> Local Personal Income Impact for the sport fishery adjusted for 2012-16 avg % guided trips for B-10 and 2012, 2014, 2015, and 2016 avg % guided trips for mainstem; @ \$221.48 based on IO-PAC model.

Updated 12-19-16, 1-6-17, 1-19-17, and 2-14-17 with following changes:

- Mitchell Act Coho production limit of 5.255M; reduced from long-term expected releases of 5.97M (~\$142K); Oregon SAFE Coho cuts backfilled with 390K SAFE spring Chinook
- Mitchell Act Select Area Bright CHF releases capped at 1.0M (long-term expected 1.44M); expected and base ex-vessel adjusted down -\$50K to -\$117K effective 2020-22 (assumes MA cut is independent of HR Policy)
- Mitchell Act tule CHF releases capped at 3.875M (long-term expected 6.445M); expected and base ex-vessel adjusted down -\$2K to -\$57K effective 2019-22 (assumes MA cut is independent of HR Policy); Deep River CHF fishery terminates 2021
- Updated average SAFE harvest rates (all stocks) with 2016 results based on new stock composition data (COH=-\$150K; CHS=+\$28K to+\$46K; CHF=-\$31-82K)
- Updated average SAFE non-local fall Chinook value based on new stock composition data (~\$28,200)
- Reduced 2017 Select Area CHS value by ~\$52K (assume no Cathlamet Channel fishery due to restrictive commercial Willamette CHS allocation)
- Corrected small math error in 2016 fall mainstem commercial value (~0.2% increase to long-term expected ex-vessel)
- Total annual sport trips broken out by season/fishery; gain in fall trips for 2017-2022 distributed to Buoy 10 and mainstem fisheries based on avg proportion of actual trips in 2013-16
- Fall sport angler-trips associated with the conservation set-aside in Rebalance models revised using updated values.

Option	Model Inputs	Fishery	Metric	2017	2018	2019	2020	2021	2022	
<b>Current Staff Recommendation<sup>a</sup></b>	Spring 20% with mainstem post-update tangle net fishery; Summer 15% (hook/line); Fall LRH Tule 25% non-CSA (27.5% w/ in-river CSA) with Z4-5 gillnet fishery; Coho 6" gillnet 0%; Coho tangle net 100%; Harvest Reform SAFE Releases, 2017+ CHS brood @ 3.7M (2.2M + 250K Westport/current site + 500K Gnat Cr + 390K backfill for Coho cuts at current site + 360K additional), 2017+ SAB brood @ 1.0M, 2013+ Coho brood @ 5.255M (Mitchell Act adjustment)	Sport	Total Trips	426,451	426,451	426,451	426,451	426,451	426,451	
			W/O Policy Trips	405,637	405,637	405,637	405,637	405,637	405,637	
			Trip Δ	20,814	20,814	20,814	20,814	20,814	20,814	
			Trip Δ %	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	
			Local Personal Income Impact <sup>b</sup>	\$32,859,409	\$32,859,409	\$32,859,409	\$32,859,409	\$32,859,409	\$32,859,409	
		Commercial	Total Ex-Vessel Value	\$4,750,822	\$4,653,374	\$4,605,764	\$4,665,017	\$4,984,568	\$5,138,633	
			W/O Policy Ex-Vessel Value	\$5,925,113	\$5,925,113	\$5,922,983	\$5,866,786	\$5,756,838	\$5,751,001	
			Ex-Vessel Value Δ	(\$1,174,291)	(\$1,271,739)	(\$1,317,219)	(\$1,201,769)	(\$772,270)	(\$612,368)	
			Ex-Vessel Value Δ %	-19.8%	-21.5%	-22.2%	-20.5%	-13.4%	-10.6%	
			Local Personal Income Impact	\$6,693,908	\$6,556,604	\$6,489,522	\$6,573,009	\$7,023,257	\$7,240,334	
	Combined	Local Personal Income Impact <sup>b</sup>	\$39,553,317	\$39,416,013	\$39,348,931	\$39,432,418	\$39,882,666	\$40,099,743		
	Contribution to Total Commercial Ex-Vessel Value by Fishery	Mainstem Gillnet	Spring Chinook	\$103,100	\$103,100	\$103,100	\$103,100	\$103,100	\$103,100	
			Summer Chinook	\$0	\$36,749	\$36,749	\$36,749	\$36,749	\$36,749	
			Z4-5 Fall Chinook	\$2,264,260	\$2,264,260	\$2,264,260	\$2,264,260	\$2,264,260	\$2,264,260	
			Coho	\$0	\$0	\$0	\$0	\$0	\$0	
		Select Area Gillnet	Spring Chinook	\$669,495	\$759,282	\$814,865	\$850,806	\$1,199,563	\$1,351,947	
			Fall Chinook	\$635,608	\$473,780	\$365,115	\$388,427	\$359,220	\$360,901	
			Coho	\$948,863	\$886,707	\$892,180	\$892,180	\$892,180	\$892,180	
		Mainstem Seine	Beach Chinook/Coho	\$12,798	\$12,798	\$12,798	\$12,798	\$12,798	\$12,798	
			Purse Chinook/Coho	\$42,088	\$42,088	\$42,088	\$42,088	\$42,088	\$42,088	
		Mainstem Tangle Net	Coho	\$74,610	\$74,610	\$74,610	\$74,610	\$74,610	\$74,610	
		Total Commercial			\$4,750,822	\$4,653,374	\$4,605,765	\$4,665,018	\$4,984,569	\$5,138,633
		Contribution to Total Sport Angler Trips by Fishery	Spring	Spring Chinook	140,190	140,190	140,190	140,190	140,190	140,190
Summer			Summer Chinook/Steelhead	53,580	53,580	53,580	53,580	53,580	53,580	
Fall-Buoy 10	Fall Chinook/Coho		94,747	94,747	94,747	94,747	94,747	94,747		
Fall-Mainstem	Fall Chinook/Coho		137,933	137,933	137,933	137,933	137,933	137,933		
Total Sport				426,451	426,451	426,451	426,451	426,451		

<sup>a</sup> Assumes General Fund and Endorsement funding authorized under SB 830 is available for additional Select Area production

<sup>b</sup> Local Personal Income Impact for the sport fishery adjusted for 2012-16 avg % guided trips for B-10 and 2012, 2014, 2015, and 2016 avg % guided trips for mainstem; @ \$221.48 based on IO-PAC model.

Updated 12-19-16, 1-6-17, 1-19-17, 2-14-17, and 3-2-17 with following changes:

-Mitchell Act Coho production limit of 5.255M; reduced from long-term expected releases of 5.97M (~\$142K); Oregon SAFE Coho cuts backfilled with 390K SAFE spring Chinook

-Mitchell Act Select Area Bright CHF releases capped at 1.0M (long-term expected 1.44M); expected and base ex-vessel adjusted down -\$50K to -\$117K effective 2020-22 (assumes MA cut is independent of HR Polic;

-Mitchell Act tule CHF releases capped at 3.875M (long-term expected 6.445M); expected and base ex-vessel adjusted down -\$2K to -\$57K effective 2019-22 (assumes MA cut is independent of HR Policy); Deep River CHF fishery terminates 20/

-Updated average SAFE harvest rates (all stocks) with 2016 results based on new stock composition data (COH=-\$150K; CHS=+\$28K to+\$46K; CHF=-\$31-82K)

-Updated average SAFE non-local fall Chinook value based on new stock composition data (~\$28,200)

-Reduced 2017 Select Area CHS value by ~\$52K (assume no Cathlamet Channel fishery due to restrictive commercial Willamette CHS allocation)

-Corrected small math error in 2016 fall mainstem commercial value (~0.2% increase to long-term expected ex-vessel)

-Total annual sport trips broken out by season/fishery; gain in fall trips for 2017-2022 distributed to Buoy 10 and mainstem fisheries based on avg proportion of actual trips in 2013-16

-Fall sport angler-trips revised using updated values.

-Added 360K additional SAFE spring Chinook production (2017+ broods).

-Summer access modelled with nMSF hook and line for OR and MSF hook and line for WA, and is based on full season avg angler catch rates in CHR sport fishery between 2002 and 2016; assumes 75% of summer GN participants would fish hook and line, and that they would fish at least 34 days (75% of full 45-day season). RCW77.50.110 currently prohibits angling gear for commercial salmon fishing so assume fishery could not start any earlier than 2018 pending rule change.

Option	Model Inputs	Fishery	Metric	2017	2018	2019	2020	2021	2022
<b>Current Rules<sup>a</sup></b>	Spring 20% with mainstem post-update tangle net fishery; Summer 20% (15% mainstem gillnet); Fall LRH Tule 35% non-CSA (34% w/CSA) with Z4-5 gillnet and reduced CSA fishery; Coho 6" gillnet 0%; Coho tangle net 100%; Harvest Reform SAFE Releases, 2017+ CHS brood @ 3.34M (2.2M + 250K Westport/current site + 500K Gnat Cr + 390K backfill for Coho cuts at current site), 2017+ SAB brood @ 1.0M, 2016+ Coho brood @ 5.255M (Mitchell Act adjustment)	Sport	Total Trips	425,630	425,630	425,630	425,630	425,630	425,630
			W/O Policy Trips	405,637	405,637	405,637	405,637	405,637	405,637
			Trip Δ	19,993	19,993	19,993	19,993	19,993	19,993
			Trip Δ %	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%
			Local Personal Income Impact <sup>b</sup>	\$32,794,045	\$32,794,045	\$32,794,045	\$32,794,045	\$32,794,045	\$32,794,045
		Commercial	Total Ex-Vessel Value	\$5,636,131	\$5,501,934	\$5,454,325	\$5,513,577	\$5,751,645	\$5,869,138
			W/O Policy Ex-Vessel Value	\$5,925,113	\$5,925,113	\$5,922,983	\$5,866,786	\$5,756,838	\$5,751,001
			Ex-Vessel Value Δ	(\$288,982)	(\$423,179)	(\$468,658)	(\$353,209)	(\$5,193)	\$118,137
			Ex-Vessel Value Δ %	-4.9%	-7.1%	-7.9%	-6.0%	-0.1%	2.1%
			Local Personal Income Impact	\$7,941,309	\$7,752,226	\$7,685,143	\$7,768,630	\$8,104,068	\$8,269,615
	Combined	Local Personal Income Impact <sup>b</sup>	\$40,735,354	\$40,546,271	\$40,479,188	\$40,562,675	\$40,898,113	\$41,063,660	
	Contribution to Total Commercial Ex-Vessel Value by Fishery	Mainstem Gillnet	Spring Chinook	\$103,100	\$103,100	\$103,100	\$103,100	\$103,100	\$103,100
			Summer Chinook	\$87,628	\$87,628	\$87,628	\$87,628	\$87,628	\$87,628
			Z4-5 Fall Chinook	\$3,052,935	\$3,052,935	\$3,052,935	\$3,052,935	\$3,052,935	\$3,052,935
			Coho	\$0	\$0	\$0	\$0	\$0	\$0
		Select Area Gillnet	Spring Chinook	\$669,495	\$759,282	\$814,865	\$850,806	\$1,118,080	\$1,233,892
			Fall Chinook	\$635,608	\$473,780	\$365,115	\$388,427	\$359,220	\$360,901
			Coho	\$948,863	\$886,707	\$892,180	\$892,180	\$892,180	\$892,180
		Mainstem Seine	Beach Chinook/Coho	\$14,898	\$14,898	\$14,898	\$14,898	\$14,898	\$14,898
			Purse Chinook/Coho	\$48,994	\$48,994	\$48,994	\$48,994	\$48,994	\$48,994
Mainstem Tangle Net		Coho	\$74,610	\$74,610	\$74,610	\$74,610	\$74,610	\$74,610	
<b>Total Commercial</b>			<b>\$5,636,131</b>	<b>\$5,501,934</b>	<b>\$5,454,325</b>	<b>\$5,513,578</b>	<b>\$5,751,646</b>	<b>\$5,869,138</b>	
Contribution to Total Sport Angler Trips by Fishery	Spring	Spring Chinook	140,190	140,190	140,190	140,190	140,190	140,190	
	Summer	Summer Chinook/Steelhead	53,580	53,580	53,580	53,580	53,580	53,580	
	Fall-Buoy 10	Fall Chinook/Coho	94,414	94,414	94,414	94,414	94,414	94,414	
	Fall-Mainstem	Fall Chinook/Coho	137,445	137,445	137,445	137,445	137,445	137,445	
	<b>Total Sport</b>		<b>425,630</b>	<b>425,630</b>	<b>425,630</b>	<b>425,630</b>	<b>425,630</b>	<b>425,630</b>	

<sup>a</sup> Assumes General Fund and Endorsement funding authorized under SB 830 is available for additional Select Area production

<sup>b</sup> Local Personal Income Impact for the sport fishery adjusted for 2012-16 avg % guided trips for B-10 and 2012, 2014, 2015, and 2016 avg % guided trips for mainstem; @ \$221.48 based on IO-PAC model.

Updated 12-19-16, 1-6-17, 1-19-17, and 2-14-17 with following changes:

- Mitchell Act Coho production limit of 5.255M; reduced from long-term expected releases of 5.97M (~\$142K); Oregon SAFE Coho cuts backfilled with 390K SAFE spring Chinook
- Mitchell Act Select Area Bright CHF releases capped at 1.0M (long-term expected 1.44M); expected and base ex-vessel adjusted down -\$50K to -\$117K effective 2020-22 (assumes MA cut is independent of HR Policy)
- Mitchell Act tule CHF releases capped at 3.875M (long-term expected 6.445M); expected and base ex-vessel adjusted down -\$2K to -\$57K effective 2019-22 (assumes MA cut is independent of HR Policy); Deep River CHF fishery terminates 2021
- Updated average SAFE harvest rates (all stocks) with 2016 results based on new stock composition data (COH=-\$150K; CHS=+\$28K to+\$46K; CHF=-\$31-82K)
- Updated average SAFE non-local fall Chinook value based on new stock composition data (~\$28,200)
- Reduced 2017 Select Area CHS value by ~\$52K (assume no Cathlamet Channel fishery due to restrictive commercial Willamette CHS allocation)
- Corrected small math error in 2016 fall mainstem commercial value (~0.2% increase to long-term expected ex-vessel)
- Total annual sport trips broken out by season/fishery; gain in fall trips for 2017-2022 distributed to Buoy 10 and mainstem fisheries based on avg proportion of actual trips in 2013-16
- Fall sport angler-trips associated with the conservation set-aside in Rebalance models revised using updated values.

Option	Model Inputs	Fishery	Metric	2017	2018	2019	2020	2021	2022
Current Rules <sup>a</sup> (as likely implemented)	Spring 20% with mainstem post-update tangle net fishery; Summer 10% (7.5% mainstem gillnet); Fall LRH Tule 25% with Z4-5 gillnet and no seine/CSA fishery; 9% of LRH allocation unused; Coho 6" gillnet 0%; Coho tangle net 100%; SAFE releases reduced to pre-Harvest Reform levels (1.55M spring Chinook, 4.17M Coho, and 1.0M SAB fall Chinook (Mitchell Act cap))	Sport	Total Trips	421,527	421,527	421,527	421,527	421,527	421,527
			W/O Policy Trips	405,637	405,637	405,637	405,637	405,637	405,637
			Trip Δ	15,890	15,890	15,890	15,890	15,890	15,890
			Trip Δ %	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%
			Local Personal Income Impact <sup>b</sup>	\$32,467,378	\$32,467,378	\$32,467,378	\$32,467,378	\$32,467,378	\$32,467,378
		Commercial	Total Ex-Vessel Value	\$4,735,510	\$4,601,313	\$4,369,478	\$4,281,608	\$4,195,614	\$4,197,295
			W/O Policy Ex-Vessel Value	\$5,925,113	\$5,925,113	\$5,922,983	\$5,866,786	\$5,756,838	\$5,751,001
			Ex-Vessel Value Δ	(\$1,189,603)	(\$1,323,800)	(\$1,553,505)	(\$1,585,178)	(\$1,561,224)	(\$1,553,706)
			Ex-Vessel Value Δ %	-20.1%	-22.3%	-26.2%	-27.0%	-27.1%	-27.0%
			Local Personal Income Impact	\$6,672,334	\$6,483,251	\$6,156,594	\$6,032,786	\$5,911,620	\$5,913,988
	Combined	Local Personal Income Impact <sup>b</sup>	\$39,139,712	\$38,950,629	\$38,623,972	\$38,500,164	\$38,378,998	\$38,381,366	
	Contribution to Total Commercial Ex-Vessel Value by Fishery	Mainstem Gillnet	Spring Chinook	\$103,100	\$103,100	\$103,100	\$103,100	\$103,100	\$103,100
			Summer Chinook	\$43,814	\$43,814	\$43,814	\$43,814	\$43,814	\$43,814
			Z4-5 Fall Chinook	\$2,260,020	\$2,260,020	\$2,260,020	\$2,260,020	\$2,260,020	\$2,260,020
			Coho	\$0	\$0	\$0	\$0	\$0	\$0
		Select Area Gillnet	Spring Chinook	\$669,495	\$759,282	\$814,865	\$703,684	\$646,895	\$646,895
			Fall Chinook	\$635,608	\$473,780	\$365,115	\$388,427	\$359,220	\$360,901
			Coho	\$948,863	\$886,707	\$707,955	\$707,955	\$707,955	\$707,955
		Mainstem Seine	Beach Chinook/Coho	\$0	\$0	\$0	\$0	\$0	\$0
			Purse Chinook/Coho	\$0	\$0	\$0	\$0	\$0	\$0
Mainstem Tangle Net		Coho	\$74,610	\$74,610	\$74,610	\$74,610	\$74,610	\$74,610	
Total Commercial			\$4,735,510	\$4,601,313	\$4,369,479	\$4,281,609	\$4,195,615	\$4,197,295	
Contribution to Total Sport Angler Trips by Fishery		Spring	Spring Chinook	140,190	140,190	140,190	140,190	140,190	140,190
		Summer	Summer Chinook/Steelhead	53,580	53,580	53,580	53,580	53,580	53,580
	Fall-Buoy 10	Fall Chinook/Coho	92,753	92,753	92,753	92,753	92,753	92,753	
	Fall-Mainstem	Fall Chinook/Coho	135,004	135,004	135,004	135,004	135,004	135,004	
	Total Sport			421,527	421,527	421,527	421,527	421,527	

<sup>a</sup> Assumes \$640K General Fund and \$522K Other Fund authorized under SB 830 is not available for enhanced Select Area production

<sup>b</sup> Local Personal Income Impact for the sport fishery adjusted for 2012-16 avg % guided trips for B-10 and 2012, 2014, 2015, and 2016 avg % guided trips for mainstem; @ \$221.48 based on IO-PAC model.

Updated 12-19-16, 1-6-17, 1-19-17, 2-14-17, and 3-2-17 with following changes:

-SAFE Coho and spring Chinook production reduced to pre-Reform levels (4.17M and 1.55M, respectively)

-Mitchell Act Select Area Bright CHF releases capped at 1.0M (long-term expected 1.44M); expected and base ex-vessel adjusted down -\$50K to -\$117K effective 2020-22 (assumes MA cut is independent of HR Policy)

-Mitchell Act tule CHF releases capped at 3.875M (long-term expected 6.445M); expected and base ex-vessel adjusted down -\$2K to -\$57K effective 2019-22 (assumes MA cut is independent of HR Policy); Deep River CHF fishery terminates 2021

-Updated average SAFE harvest rates (all stocks) with 2016 results based on new stock composition data (COH=-\$150K; CHS=+\$28K to+\$46K; CHF=-\$31-82K)

-Updated average SAFE non-local fall Chinook value based on new stock composition data (~\$28,200)

-Reduced 2017 Select Area CHS value by ~\$52K (assume no Cathlamet Channel fishery due to restrictive commercial Willamette CHS allocation)

-Corrected small math error in 2016 fall mainstem commercial value (~0.2% increase to long-term expected ex-vessel)

-Total annual sport trips broken out by season/fishery; gain in fall trips for 2017-2022 distributed to Buoy 10 and mainstem fisheries based on avg proportion of actual trips in 2013-16

-Fall sport angler-trips revised using updated values

-Mainstem summer Chinook value (\$43.8K) assumes Oregon gill net fishery only based on half of available guideline

Option	Model Inputs	Fishery	Metric	2017	2018	2019	2020	2021	2022
<b>Washington Fish and Wildlife Commission January 14th Policy<sup>a</sup></b>	Spring 20% allocation for SAFE only; Summer 20% with gear TBD/no value; Fall LRH Tule 25% with Z4-5 gillnet and reduced beach & purse seine Z 1-5 MSF fishery thru 2018; 2019-22 seine fishery based on 50:50 LRH split between Z4-5 nMSF purse and Z1-5 MSF mixed seine; No Coho 6" gillnet; Coho tangle net 100%; includes current plan SAFE releases, 2017+ SAB brood @ 1.0M, 2017+ CHS brood @2.95M; 2016+ Coho brood @ 5.255M (Mitchell Act adjustment)	Sport	Total Trips	428,913	428,913	433,016	433,016	433,016	433,016
			W/O Policy Trips	405,637	405,637	405,637	405,637	405,637	405,637
			Trip Δ	23,276	23,276	27,379	27,379	27,379	27,379
			Trip Δ %	5.7%	5.7%	6.7%	6.7%	6.7%	6.7%
			Local Personal Income Impact <sup>b</sup>	\$33,055,424	\$33,055,424	\$33,382,091	\$33,382,091	\$33,382,091	\$33,382,091
		Commercial	Total Ex-Vessel Value	\$4,419,153	\$4,284,956	\$2,894,467	\$2,953,720	\$3,103,515	\$3,181,388
			W/O Policy Ex-Vessel Value	\$5,925,113	\$5,925,113	\$5,922,983	\$5,866,786	\$5,756,838	\$5,751,001
			Ex-Vessel Value Δ	(\$1,505,961)	(\$1,640,158)	(\$3,028,516)	(\$2,913,066)	(\$2,653,323)	(\$2,569,613)
			Ex-Vessel Value Δ %	-25.4%	-27.7%	-51.1%	-49.7%	-46.1%	-44.7%
			Local Personal Income Impact	\$6,226,586	\$6,037,503	\$4,078,304	\$4,161,791	\$4,372,852	\$4,482,575
	Combined	Local Personal Income Impact <sup>b</sup>	\$39,282,010	\$39,092,927	\$37,460,395	\$37,543,882	\$37,754,943	\$37,864,666	
	Contribution to Total Commercial Ex-Vessel Value by Fishery	Mainstem Gillnet	Spring Chinook	\$0	\$0	\$0	\$0	\$0	\$0
			Summer Chinook	\$0	\$0	\$0	\$0	\$0	\$0
			Z4-5 Fall Chinook	\$2,035,290	\$2,035,290	\$0	\$0	\$0	\$0
			Coho	\$0	\$0	\$0	\$0	\$0	\$0
		Select Area Gillnet	Spring Chinook	\$669,495	\$759,282	\$814,865	\$850,806	\$1,029,807	\$1,105,999
			Fall Chinook	\$635,608	\$473,780	\$365,115	\$388,427	\$359,220	\$360,901
			Coho	\$948,863	\$886,707	\$892,180	\$892,180	\$892,180	\$892,180
		Mainstem Seine	Beach Chinook/Coho	\$12,891	\$12,891	\$51,736	\$51,736	\$51,736	\$51,736
			Purse Chinook/Coho	\$42,395	\$42,395	\$695,962	\$695,962	\$695,962	\$695,962
Mainstem Tangle Net		Coho	\$74,610	\$74,610	\$74,610	\$74,610	\$74,610	\$74,610	
Total Commercial			\$4,419,153	\$4,284,956	\$2,894,468	\$2,953,721	\$3,103,515	\$3,181,387	
Contribution to Total Sport Angler Trips by Fishery	Spring	Spring Chinook	140,190	140,190	140,190	140,190	140,190	140,190	
	Summer	Summer Chinook/Steelhead	53,580	53,580	53,580	53,580	53,580	53,580	
	Fall-Buoy 10	Fall Chinook/Coho	95,744	95,744	97,406	97,406	97,406	97,406	
	Fall-Mainstem	Fall Chinook/Coho	139,398	139,398	141,840	141,840	141,840	141,840	
	Total Sport			428,913	428,913	433,016	433,016	433,016	433,016

<sup>a</sup> Assumes General Fund and Endorsement funding authorized under SB 830 is available for additional Select Area production

<sup>b</sup> Local Personal Income Impact for the sport fishery adjusted for 2012-16 avg % guided trips for B-10 and 2012, 2014, 2015, and 2016 avg % guided trips for mainstem; @ \$221.48 based on IO-PAC model.

Updated 12-19-16, 1-5-17, 1-17-17, and 3-2-17 with following changes:

-Modeled through 2022 with fall commercial seine only after 2018.

-Commercial upriver spring Chinook allocation 20% for SAFE fisheries only; summer Chinook 20% with gear TBD (no value); LRH 25% with gillnets allowed Z4-5 in 2017-18 (20% seine thereafter); Coho tangle net fishery at 2013-16 average.

-2017+ brood SAFE spring Chinook releases at 2.95M assumed for Harvest Reform

-Mitchell Act Coho production limit of 5.255M; reduced from long-term expected releases of 5.97M (~\$142K)

-Mitchell Act Select Area Bright CHF releases capped at 1.0M (long-term expected 1.44M); expected and base ex-vessel adjusted down -\$50K to -\$117K effective 2020-22 (assumes MA cut is

-Mitchell Act tule CHF releases capped at 3.875M (long-term expected 6.445M); expected and base ex-vessel adjusted down -\$2K to -\$57K effective 2019-22 (assumes MA cut is independent of HR

-Updated average SAFE harvest rates (all stocks) with 2016 results based on new stock composition data (COH=-\$150K; CHS=+\$28K to+\$46K; CHF=-\$31-82K)

-Updated average SAFE non-local fall Chinook value based on new stock composition data (~\$28,200)

-Reduced 2017 Select Area CHS value by ~\$52K (assume no Cathlamet Channel fishery due to restrictive commercial Willamette CHS allocation)

-Corrected small math error in 2016 fall mainstem commercial value (~0.2% increase to long-term expected ex-vesse

-Fall sport angler-trips revised using updated values

-Total annual sport trips broken out by season/fishery; gain in fall trips for 2017-2022 distributed to Buoy 10 and mainstem fisheries based on avg proportion of actual trips in 2013-16



Option	Model Inputs	Fishery	Metric	2017	2018	2019	2020	2021	2022	
<b>Washington Fish and Wildlife Commission January 14th Policy<sup>a</sup></b> (as likely implemented)	Spring 20% allocation for SAFE only; Summer 15% hook and line; Fall LRH Tule 25% with Z4-5 gillnet and reduced beach & purse seine Z 1-5 MSF fishery thru 2018; 2019-22 seine fishery based on 50:50 LRH split between Z4-5 nMSF purse and Z1-5 MSF mixed seine; No Coho 6" gillnet; Coho tangle net 100%; includes current plan SAFE releases, 2017+ SAB brood @ 1.0M, 2017+ CHS brood @2.95M; 2016+ Coho brood @ 5.255M (Mitchell Act adjustment)	Sport	Total Trips	421,527	421,527	421,527	421,527	421,527	421,527	
			W/O Policy Trips	405,637	405,637	405,637	405,637	405,637	405,637	
			Trip Δ	15,890	15,890	15,890	15,890	15,890	15,890	
			Trip Δ %	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	
			Local Personal Income Impact <sup>b</sup>	\$32,467,378	\$32,467,378	\$32,467,378	\$32,467,378	\$32,467,378	\$32,467,378	
		Commercial	Total Ex-Vessel Value	\$4,419,153	\$4,321,705	\$2,931,216	\$2,990,469	\$3,140,264	\$3,218,136	
			W/O Policy Ex-Vessel Value	\$5,925,113	\$5,925,113	\$5,922,983	\$5,866,786	\$5,756,838	\$5,751,001	
			Ex-Vessel Value Δ	(\$1,505,961)	(\$1,603,409)	(\$2,991,767)	(\$2,876,317)	(\$2,616,574)	(\$2,532,865)	
			Ex-Vessel Value Δ %	-25.4%	-27.1%	-50.5%	-49.0%	-45.5%	-44.0%	
			Local Personal Income Impact	\$6,226,586	\$6,089,282	\$4,130,083	\$4,213,570	\$4,424,631	\$4,534,354	
		Combined	Local Personal Income Impact <sup>b</sup>	\$38,693,964	\$38,556,660	\$36,597,461	\$36,680,948	\$36,892,009	\$37,001,732	
		Contribution to Total Commercial Ex-Vessel Value by Fishery	Mainstem Gillnet	Spring Chinook	\$0	\$0	\$0	\$0	\$0	\$0
				Summer Chinook	\$0	\$36,749	\$36,749	\$36,749	\$36,749	\$36,749
				Z4-5 Fall Chinook	\$2,035,290	\$2,035,290	\$0	\$0	\$0	\$0
				Coho	\$0	\$0	\$0	\$0	\$0	\$0
			Select Area Gillnet	Spring Chinook	\$669,495	\$759,282	\$814,865	\$850,806	\$1,029,807	\$1,105,999
				Fall Chinook	\$635,608	\$473,780	\$365,115	\$388,427	\$359,220	\$360,901
				Coho	\$948,863	\$886,707	\$892,180	\$892,180	\$892,180	\$892,180
			Mainstem Seine	Beach Chinook/Coho	\$12,891	\$12,891	\$51,736	\$51,736	\$51,736	\$51,736
				Purse Chinook/Coho	\$42,395	\$42,395	\$695,962	\$695,962	\$695,962	\$695,962
Mainstem Tangle Net	Coho		\$74,610	\$74,610	\$74,610	\$74,610	\$74,610	\$74,610		
Total Commercial				\$4,419,153	\$4,321,705	\$2,931,217	\$2,990,469	\$3,140,264	\$3,218,136	
Contribution to Total Sport Angler Trips by Fishery	Spring		Spring Chinook	140,190	140,190	140,190	140,190	140,190	140,190	
	Summer		Summer Chinook/Steelhead	53,580	53,580	53,580	53,580	53,580	53,580	
	Fall-Buoy 10	Fall Chinook/Coho	92,753	92,753	92,753	92,753	92,753	92,753		
	Fall-Mainstem	Fall Chinook/Coho	135,004	135,004	135,004	135,004	135,004	135,004		
	Total Sport			421,527	421,527	421,527	421,527	421,527		

<sup>a</sup> Assumes General Fund and Endorsement funding authorized under SB 830 is available for additional Select Area production

<sup>b</sup> Local Personal Income Impact for the sport fishery adjusted for 2012-16 avg % guided trips for B-10 and 2012, 2014, 2015, and 2016 avg % guided trips for mainstem; @ \$221.48 based on IO-PAC model.

Updated 12-19-16, 1-5-17, 1-17-17, and 3-2-17 with following changes:

-Modeled through 2022 with fall commercial seine only after 2018.

-Commercial upriver spring Chinook allocation 20% for SAFE fisheries only; summer Chinook 15% with hook and line; LRH 25% with gillnets allowed Z4-5 in 2017-18 (20% seine thereafter); Coho tangle net fishery at 2013-16 average.

-2017+ brood SAFE spring Chinook releases at 2.95M assumed for Harvest Reform

-Mitchell Act Coho production limit of 5.255M; reduced from long-term expected releases of 5.97M (~\$142K)

-Mitchell Act Select Area Bright CHF releases capped at 1.0M (long-term expected 1.44M); expected and base ex-vessel adjusted down -\$50K to -\$117K effective 2020-22 (assumes MA cut is

-Mitchell Act tule CHF releases capped at 3.875M (long-term expected 6.445M); expected and base ex-vessel adjusted down -\$2K to -\$57K effective 2019-22 (assumes MA cut is independent of HR

-Updated average SAFE harvest rates (all stocks) with 2016 results based on new stock composition data (COH=-\$150K; CHS=+\$28K to+\$46K; CHF=-\$31-82K)

-Updated average SAFE non-local fall Chinook value based on new stock composition data (~\$28,200)

-Reduced 2017 Select Area CHS value by ~\$52K (assume no Cathlamet Channel fishery due to restrictive commercial Willamette CHS allocation)

-Corrected small math error in 2016 fall mainstem commercial value (~0.2% increase to long-term expected ex-vessel)

-Fall sport angler-trips revised using updated values.

-Summer access modelled with nMSF hook and line for OR and MSF hook and line for WA, and is based on full season avg angler catch rates in CHR sport fishery between 2002 and 2016; assumes 75% of summer GN participants would fish hook and line, and

-Total annual sport trips broken out by season/fishery; gain in fall trips for 2017-2022 distributed to Buoy 10 and mainstem fisheries based on avg proportion of actual trips in 2013-16