

Summary of Modelling Approach for Comparison of Policy Options

- Based on observed results from 2013-2018 (run sizes, angler trips, ex-vessel value, etc.), the model estimates fishery outcomes in out-years using various inputs with respect to ESA impact allocations, mainstem commercial gear types, and Select Area production levels.
- Out-year projections for angler trips and commercial ex-vessel value are compared to expected values for these metrics in the absence of the Harvest Reform Policy.
- The "without policy" baselines for angler trips and ex-vessel value represent an average annual expectation for out-years, based on 2013-2018 observed results adjusted to what they would have been with pre-Reform (2010-2012 average) allocations and Select Area releases.
- Out-year modelling results are not intended to be predictive, but instead provide a relative comparison to the expected baseline for different policy options.

Summary of Modelling Results for Policy Review Committee Fishery Scenarios (February 6, 2019)

2012 Pre-Policy Baseline ^a	Trips	350,362			
	\$ EV	\$3,855,999			
	\$ LPII ^b	\$27,005,903			
				% Delta Relative to "No Policy" Baseline	
Scenario	Metric	2019-2023 Avg	2024	2019-2023 Avg	2024
Freeze Transition (2016)	Trips	349,709	349,709	2.8%	2.8%
	\$ EV	\$4,303,964	\$4,371,077	-13.0%	-11.7%
	\$ LPII ^b	\$34,659,740	\$34,772,228	-1.0%	-0.7%
Current Oregon Policy	Trips	352,506	352,506	3.6%	3.6%
	\$ EV	\$4,065,599	\$4,581,953	-17.8%	-7.4%
	\$ LPII ^b	\$34,470,705	\$35,336,157	-1.5%	0.9%
Current Washington Policy	Trips	356,109	356,109	4.7%	4.7%
	\$ EV	\$3,022,334	\$3,314,068	-38.9%	-33.0%
	\$ LPII ^b	\$33,013,403	\$33,502,373	-5.7%	-4.3%
No Loss of Economic Benefit Potential #1	Trips	350,705	350,705	3.1%	3.1%
	\$ EV	\$4,462,363	\$4,978,717	-9.8%	0.6%
	\$ LPII ^b	\$34,990,068	\$35,855,520	0.0%	2.4%
No Loss of Economic Benefit Potential #2	Trips	350,705	350,705	3.1%	3.1%
	\$ EV	\$4,473,023	\$4,989,378	-9.6%	0.8%
	\$ LPII ^b	\$35,007,935	\$35,873,387	0.0%	2.5%

^a Assumes static run sizes in future years

^b Combined LPII for sport and commercial fisheries.

Option	Model Inputs ^a	Fishery	Metric	2019	2020	2021	2022	2023	2024	
Freeze Transition (2016)	Spring 30% allocation (pre-update commercial buffer), with pre-update mainstem tangle net and post-update tangle net/gillnet; Summer 30% with gillnets; Fall LRH tule/URB ≥30% with Zone 4-5 gillnet; beach and purse seine MSF (100%); Coho 6" gillnet (100%); Coho tangle net (100%); SAFE releases: 2018+ CHS brood @ 2.2M, 2020+ SAB brood @ 1.0M (Mitchell Act cap), 2018+ Coho brood @ 5.255M (Mitchell Act cap)	Sport	Total Angler Trips	349,709	349,709	349,709	349,709	349,709	349,709	
			Without Policy Angler Trips	340,198	340,198	340,198	340,198	340,198		
			Angler Trip Δ	9,511	9,511	9,511	9,511	9,511		
			Angler Trip Δ %	2.8%	2.8%	2.8%	2.8%	2.8%		
			Local Personal Income Impact	\$27,445,948	\$27,445,948	\$27,445,948	\$27,445,948	\$27,445,948		
		Commercial	Total Ex-Vessel Value	\$4,229,789	\$4,237,721	\$4,394,477	\$4,336,126	\$4,321,705	\$4,371,077	
			Without Policy Ex-Vessel Value	\$4,948,463	\$4,948,463	\$4,948,463	\$4,948,463	\$4,948,463	\$4,948,463	
			Ex-Vessel Value Δ	(\$718,673)	(\$710,742)	(\$553,985)	(\$612,337)	(\$626,757)	(\$577,385)	
			Ex-Vessel Value Δ %	-14.5%	-14.4%	-11.2%	-12.4%	-12.7%	-11.7%	
			Local Personal Income Impact	\$7,089,470	\$7,102,764	\$7,365,500	\$7,267,698	\$7,243,528	\$7,326,280	
	Contribution to Total Commercial Ex-Vessel Value by Fishery	Combined	Local Personal Income Impact	\$34,535,418	\$34,548,712	\$34,811,448	\$34,713,646	\$34,689,476	\$34,772,228	
			Mainstem Gillnet	Spring Chinook	\$313,257	\$313,257	\$313,257	\$313,257	\$313,257	\$313,257
		Mainstem Gillnet	Summer Chinook	\$153,809	\$153,809	\$153,809	\$153,809	\$153,809	\$153,809	
			Zone 4-5 Fall Chinook	\$1,581,695	\$1,581,695	\$1,581,695	\$1,581,695	\$1,581,695	\$1,581,695	
			Coho	\$96,427	\$96,427	\$96,427	\$96,427	\$96,427	\$96,427	
			Select Area Gillnet	Spring Chinook	\$996,017	\$1,092,537	\$1,222,113	\$1,126,250	\$1,066,346	\$1,066,346
		Select Area Gillnet	Fall Chinook	\$219,083	\$213,480	\$221,779	\$259,290	\$304,774	\$354,146	
			Coho	\$788,774	\$705,789	\$724,671	\$724,671	\$724,671	\$724,671	
			Mainstem Seine	Beach Chinook/Coho	\$8,534	\$8,534	\$8,534	\$8,534	\$8,534	\$8,534
		Mainstem Seine	Purse Chinook/Coho	\$22,453	\$22,453	\$22,453	\$22,453	\$22,453	\$22,453	
			Mainstem Tangle Net	Coho	\$49,740	\$49,740	\$49,740	\$49,740	\$49,740	\$49,740
		Contribution to Total Sport Angler Trips by Fishery	Total Commercial		\$4,229,789	\$4,237,721	\$4,394,477	\$4,336,126	\$4,321,705	\$4,371,077
				Spring	Spring Chinook	115,398	115,398	115,398	115,398	115,398
Spring	Summer		Summer Chinook	22,350	22,350	22,350	22,350	22,350	22,350	
	Fall-Buoy 10		Fall Chinook/Coho	90,002	90,002	90,002	90,002	90,002	90,002	
Fall-Buoy 10	Fall-Mainstem		Fall Chinook/Coho	121,959	121,959	121,959	121,959	121,959	121,959	
	Total Sport			349,709	349,709	349,709	349,709	349,709	349,709	

^a Percentage in parentheses for seine, Coho 6" gillnet, and Coho tangle net fisheries indicates modelled fishery scale relative to fisheries during 2013-2018.

-Select Area releases of Coho, tule CHF, and Select Area Bright CHF are capped at 5.255M, 3.875M, and 1.0M, respectively, due to Mitchell Act production limitations. Expected ex-vessel values were adjusted down accordingly effective 2020 return year.

-"Without Policy" angler trips and ex-vessel value represent the average number of trips and average ex-vessel value expected for 2013-2018 had the Harvest Reform Policy not been implemented. These averages are used as the baseline values for 2019-2024.

-Local Personal Income Impact is a measure of the impact to local economies in the Oregon/Washington region associated with angler trips in the lower Columbia River sport fishery (e.g. gas, food, lodging, guide fees, etc.), and the impact to local economies of lower Columbia River commercially landed salmon (e.g. value to processors, wholesalers, etc.). Sport and commercial value multipliers from the 2016 Input-Output Pacific Fisheries (I-O PAC) model were applied to total angler trips and ex-vessel value for the respective fisheries. Different multipliers were applied to estimated guided and non-guided angler trips in the sport fishery.

Option	Model Inputs ^a	Fishery	Metric	2019	2020	2021	2022	2023	2024	
Current Oregon Policy	Spring 20% allocation (no commercial buffer), with mainstem post-update tangle net fishery if not all ESA impacts expected to be used in SAFE; Summer 20% with alternative gear (assumes 0 value if no approved gear); Fall LRH tule/URB ≥30% with Zone 4-5 gillnet; beach and purse seine MSF ((100% scale); limited to ≤2% of commercial impacts used for most constraining stock); No Coho 6" gillnet; Coho tangle net (100%); SAFE releases: 2018+ CHS brood @ 3.7M, 2020+ SAB brood @ 1.0M (Mitchell Act cap), 2018+ Coho brood @ 5.255M (Mitchell Act cap)	Sport	Total Angler Trips	352,506	352,506	352,506	352,506	352,506	352,506	
			Without Policy Angler Trips	340,198	340,198	340,198	340,198	340,198	340,198	
			Angler Trip Δ	12,308	12,308	12,308	12,308	12,308	12,308	
			Angler Trip Δ %	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	
			Local Personal Income Impact	\$27,656,432	\$27,656,432	\$27,656,432	\$27,656,432	\$27,656,432	\$27,656,432	
		Commercial	Total Ex-Vessel Value	\$3,762,010	\$3,769,942	\$3,926,698	\$4,336,762	\$4,532,581	\$4,581,953	
			Without Policy Ex-Vessel Value	\$4,948,463	\$4,948,463	\$4,948,463	\$4,948,463	\$4,948,463	\$4,948,463	
			Ex-Vessel Value Δ	(\$1,186,452)	(\$1,178,521)	(\$1,021,764)	(\$611,701)	(\$415,882)	(\$366,509)	
			Ex-Vessel Value Δ %	-24.0%	-23.8%	-20.6%	-12.4%	-8.4%	-7.4%	
			Local Personal Income Impact	\$6,305,434	\$6,318,728	\$6,581,464	\$7,268,764	\$7,596,973	\$7,679,725	
		Combined	Local Personal Income Impact	\$33,961,866	\$33,975,160	\$34,237,896	\$34,925,196	\$35,253,405	\$35,336,157	
		Contribution to Total Commercial Ex-Vessel Value by Fishery	Mainstem Gillnet	Spring Chinook	\$95,714	\$95,714	\$95,714	\$95,714	\$95,714	\$95,714
				Summer Chinook	\$0	\$0	\$0	\$0	\$0	\$0
				Zone 4-5 Fall Chinook	\$1,581,695	\$1,581,695	\$1,581,695	\$1,581,695	\$1,581,695	\$1,581,695
				Coho	\$0	\$0	\$0	\$0	\$0	\$0
			Select Area Gillnet	Spring Chinook	\$996,017	\$1,092,537	\$1,222,113	\$1,594,665	\$1,745,000	\$1,745,000
				Fall Chinook	\$219,083	\$213,480	\$221,779	\$259,290	\$304,774	\$354,146
				Coho	\$788,774	\$705,789	\$724,671	\$724,671	\$724,671	\$724,671
			Mainstem Seine	Beach Chinook/Coho	\$8,534	\$8,534	\$8,534	\$8,534	\$8,534	\$8,534
				Purse Chinook/Coho	\$22,453	\$22,453	\$22,453	\$22,453	\$22,453	\$22,453
	Mainstem Tangle Net	Coho	\$49,740	\$49,740	\$49,740	\$49,740	\$49,740	\$49,740		
	Total Commercial		\$3,762,010	\$3,769,942	\$3,926,698	\$4,336,762	\$4,532,581	\$4,581,953		
Contribution to Total Sport Angler Trips by Fishery	Spring	Spring Chinook	115,398	115,398	115,398	115,398	115,398	115,398		
	Summer	Summer Chinook	25,147	25,147	25,147	25,147	25,147	25,147		
	Fall-Buoy 10	Fall Chinook/Coho	90,002	90,002	90,002	90,002	90,002	90,002		
	Fall-Mainstem	Fall Chinook/Coho	121,959	121,959	121,959	121,959	121,959	121,959		
	Total Sport		352,506	352,506	352,506	352,506	352,506	352,506		

^a Percentage in parentheses for seine, Coho 6" gillnet, and Coho tangle net fisheries indicates modelled fishery scale relative to fisheries during 2013-2018.

-Select Area releases of Coho, tule CHF, and Select Area Bright CHF are capped at 5.255M, 3.875M, and 1.0M, respectively, due to Mitchell Act production limitations. Expected ex-vessel values were adjusted down accordingly effective 2020 return year.

-"Without Policy" angler trips and ex-vessel value represent the average number of trips and average ex-vessel value expected for 2013-2018 had the Harvest Reform Policy not been implemented. These averages are used as the baseline values for 2019-2024.

-Local Personal Income Impact is a measure of the impact to local economies in the Oregon/Washington region associated with angler trips in the lower Columbia River sport fishery (e.g. gas, food, lodging, guide fees, etc.), and the impact to local economies of lower Columbia River commercially landed salmon (e.g. value to processors, wholesalers, etc.). Sport and commercial value multipliers from the 2016 Input-Output Pacific Fisheries (I-O PAC) model were applied to total angler trips and ex-vessel value for the respective fisheries. Different multipliers were applied to estimated guided and non-guided angler trips in the sport fishery.

Option	Model Inputs ^a	Fishery	Metric	2019	2020	2021	2022	2023	2024
Current Washington Policy (Model input details confirmed by WDFW staff)	Spring 20% allocation (no commercial buffer) for SAFE only; Summer 20% with alternative gear (assumes 0 value if no approved gear); Fall LRH tule/URB ≥20% with beach and purse seine MSF (1500%); No Coho 6" gillnet; Coho tangle net (100%); SAFE releases: 2018+ CHS brood @ 2.95M, 2020+ SAB brood @ 1.0 (Mitchell Act cap), 2018+ Coho brood @ 5.255M (Mitchell Act cap)	Sport	Total Angler Trips	356,109	356,109	356,109	356,109	356,109	356,109
			Without Policy Angler Trips	340,198	340,198	340,198	340,198	340,198	340,198
			Angler Trip Δ	15,911	15,911	15,911	15,911	15,911	15,911
			Angler Trip Δ %	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%
			Local Personal Income Impact	\$27,947,727	\$27,947,727	\$27,947,727	\$27,947,727	\$27,947,727	\$27,947,727
		Commercial	Total Ex-Vessel Value	\$2,833,453	\$2,841,384	\$2,998,140	\$3,173,996	\$3,264,696	\$3,314,068
			Without Policy Ex-Vessel Value	\$4,948,463	\$4,948,463	\$4,948,463	\$4,948,463	\$4,948,463	\$4,948,463
			Ex-Vessel Value Δ	(\$2,115,010)	(\$2,107,079)	(\$1,950,322)	(\$1,774,466)	(\$1,683,767)	(\$1,634,395)
			Ex-Vessel Value Δ %	-42.7%	-42.6%	-39.4%	-35.9%	-34.0%	-33.0%
			Local Personal Income Impact	\$4,749,096	\$4,762,390	\$5,025,126	\$5,319,875	\$5,471,895	\$5,554,646
	Combined	Local Personal Income Impact	\$32,696,823	\$32,710,117	\$32,972,853	\$33,267,602	\$33,419,622	\$33,502,373	
	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
			Zone 4-5 Fall Chinook	\$0	\$0	\$0	\$0	\$0	\$0
			Coho	\$0	\$0	\$0	\$0	\$0	\$0
		Select Area Gillnet	Spring Chinook	\$996,017	\$1,092,537	\$1,222,113	\$1,360,458	\$1,405,673	\$1,405,673
			Fall Chinook	\$219,083	\$213,480	\$221,779	\$259,290	\$304,774	\$354,146
			Coho	\$788,774	\$705,789	\$724,671	\$724,671	\$724,671	\$724,671
		Mainstem Seine	Beach Chinook/Coho	\$214,778	\$214,778	\$214,778	\$214,778	\$214,778	\$214,778
Purse Chinook/Coho			\$565,060	\$565,060	\$565,060	\$565,060	\$565,060	\$565,060	
Mainstem Tangle Net		Coho	\$49,740	\$49,740	\$49,740	\$49,740	\$49,740	\$49,740	
Total Commercial			\$2,833,453	\$2,841,384	\$2,998,140	\$3,173,996	\$3,264,696	\$3,314,068	
Contribution to Total Sport Angler Trips by Fishery		Spring	Spring Chinook	115,398	115,398	115,398	115,398	115,398	115,398
		Summer	Summer Chinook	25,147	25,147	25,147	25,147	25,147	25,147
		Fall-Buoy 10	Fall Chinook/Coho	91,532	91,532	91,532	91,532	91,532	91,532
	Fall-Mainstem	Fall Chinook/Coho	124,032	124,032	124,032	124,032	124,032	124,032	
	Total Sport			356,109	356,109	356,109	356,109	356,109	

^a Percentage in parentheses for seine, Coho 6" gillnet, and Coho tangle net fisheries indicates modelled fishery scale relative to fisheries during 2013-2018

-Select Area releases of Coho, tule CHF, and Select Area Bright CHF are capped at 5.255M, 3.875M, and 1.0M, respectively, due to Mitchell Act production limitations. Expected ex-vessel values were adjusted down accordingly effective 2020 return year.

-"Without Policy" angler trips and ex-vessel value represent the average number of trips and average ex-vessel value expected for 2013-2018 had the Harvest Reform Policy not been implemented. These averages are used as the baseline values for 2019-2024.

-Local Personal Income Impact is a measure of the impact to local economies in the Oregon/Washington region associated with angler trips in the lower Columbia River sport fishery (e.g. gas, food, lodging, guide fees, etc.), and the impact to local economies of lower Columbia River commercially landed salmon (e.g. value to processors, wholesalers, etc.). Sport and commercial value multipliers from the 2016 Input-Output Pacific Fisheries (I-O PAC) model were applied to total angler trips and ex-vessel value for the respective fisheries. Different multipliers were applied to estimated guided and non-guided angler trips in the sport fishery.

Option	Model Inputs ^{a, b}	Fishery	Metric	2019	2020	2021	2022	2023	2024		
No Loss of Economic Benefit Potential #1	Spring 25% allocation (no commercial buffer), with mainstem post-update tangle net fishery if not all ESA impacts expected to be used in SAFE; Summer 5% for SAFE only; Fall LRH tule/URB ≥35% with Zone 4-5 gillnet; no seine; Coho 6" gillnet (50%); Coho tangle net (100%); SAFE releases: 2018+ CHS brood @3.7M, 2020+ SAB brood @ 1.0M (Mitchell Act cap), 2018+ Coho brood @ 5.255M (Mitchell Act cap)	Sport	Total Angler Trips	350,705	350,705	350,705	350,705	350,705	350,705		
			Without Policy Angler Trips	340,198	340,198	340,198	340,198	340,198	340,198		
			Angler Trip Δ	10,507	10,507	10,507	10,507	10,507	10,507		
			Angler Trip Δ %	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%		
			Local Personal Income Impact	\$27,510,786	\$27,510,786	\$27,510,786	\$27,510,786	\$27,510,786	\$27,510,786		
		Commercial	Total Ex-Vessel Value	\$4,158,775	\$4,166,706	\$4,323,462	\$4,733,526	\$4,929,345	\$4,978,717		
			Without Policy Ex-Vessel Value	\$4,948,463	\$4,948,463	\$4,948,463	\$4,948,463	\$4,948,463	\$4,948,463		
			Ex-Vessel Value Δ	(\$789,688)	(\$781,756)	(\$625,000)	(\$214,937)	(\$19,117)	\$30,255		
			Ex-Vessel Value Δ %	-16.0%	-15.8%	-12.6%	-4.3%	-0.4%	0.6%		
			Local Personal Income Impact	\$6,970,443	\$6,983,737	\$7,246,473	\$7,933,773	\$8,261,982	\$8,344,734		
		Combined	Local Personal Income Impact	\$34,481,229	\$34,494,523	\$34,757,259	\$35,444,559	\$35,772,768	\$35,855,520		
		Contribution to Total Commercial Ex-Vessel Value by Fishery		Mainstem Gillnet	Spring Chinook	\$171,080	\$171,080	\$171,080	\$171,080	\$171,080	\$171,080
					Summer Chinook	\$0	\$0	\$0	\$0	\$0	\$0
					Zone 4-5 Fall Chinook	\$1,885,867	\$1,885,867	\$1,885,867	\$1,885,867	\$1,885,867	\$1,885,867
Coho	\$48,214				\$48,214	\$48,214	\$48,214	\$48,214	\$48,214		
Select Area Gillnet	Spring Chinook			\$996,017	\$1,092,537	\$1,222,113	\$1,594,665	\$1,745,000	\$1,745,000		
	Fall Chinook			\$219,083	\$213,480	\$221,779	\$259,290	\$304,774	\$354,146		
	Coho			\$788,774	\$705,789	\$724,671	\$724,671	\$724,671	\$724,671		
Mainstem Seine	Beach Chinook/Coho			\$0	\$0	\$0	\$0	\$0	\$0		
	Purse Chinook/Coho			\$0	\$0	\$0	\$0	\$0	\$0		
Mainstem Tangle Net	Coho			\$49,740	\$49,740	\$49,740	\$49,740	\$49,740	\$49,740		
Total Commercial					\$4,158,775	\$4,166,706	\$4,323,462	\$4,733,526	\$4,929,345	\$4,978,717	
Contribution to Total Sport Angler Trips by Fishery				Spring	Spring Chinook	115,398	115,398	115,398	115,398	115,398	115,398
				Summer	Summer Chinook	25,147	25,147	25,147	25,147	25,147	25,147
				Fall-Buoy 10	Fall Chinook/Coho	89,237	89,237	89,237	89,237	89,237	89,237
		Fall-Mainstem	Fall Chinook/Coho	120,922	120,922	120,922	120,922	120,922	120,922		
		Total Sport		350,705	350,705	350,705	350,705	350,705	350,705		

^a Percentage in parentheses for seine, Coho 6" gillnet, and Coho tangle net fisheries indicates modelled fishery scale relative to fisheries during 2013-2018.

^b Model inputs for commercial allocations and allowable gears were adjusted to achieve no commercial economic loss when Select Area production enhancements are fully realized (2024).

-Select Area releases of Coho, tule CHF, and Select Area Bright CHF are capped at 5.255M, 3.875M, and 1.0M, respectively, due to Mitchell Act production limitations. Expected ex-vessel values were adjusted down accordingly effective 2020 return year.

-"Without Policy" angler trips and ex-vessel value represent the average number of trips and average ex-vessel value expected for 2013-2018 had the Harvest Reform Policy not been implemented. These averages are used as the baseline values for 2019-2024.

-Local Personal Income Impact is a measure of the impact to local economies in the Oregon/Washington region associated with angler trips in the lower Columbia River sport fishery (e.g. gas, food, lodging, guide fees, etc.) and the impact to local economies of lower Columbia River commercially landed salmon (e.g. value to processors, wholesalers, etc.). Sport and commercial value multipliers from the 2016 Input-Output Pacific Fisheries (I-O PAC) model were applied to total angler trips and ex-vessel value for the respective fisheries. Different multipliers were applied to estimated guided and non-guided angler trips in the sport fishery.

Option	Model Inputs ^{a, b}	Fishery	Metric	2019	2020	2021	2022	2023	2024	
No Loss of Economic Benefit Potential #2	Spring 20% allocation (no commercial buffer) for SAFE only; Summer 20% with gillnets; Fall LRH tule/URB ≥35% with Zone 4-5 gillnet; beach and purse seine MSF (100%); Coho 6" gillnet (100%); Coho tangle net (100%); SAFE releases: 2018+ CHS brood @ 3.7M, 2020+ SAB brood @ 1.0M (Mitchell Act cap), 2018+ Coho brood @ 5.255M (Mitchell Act cap)	Sport	Total Angler Trips	350,705	350,705	350,705	350,705	350,705	350,705	
			Without Policy Angler Trips	340,198	340,198	340,198	340,198	340,198	340,198	
			Angler Trip Δ	10,507	10,507	10,507	10,507	10,507	10,507	
			Angler Trip Δ %	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	
		Commercial	Local Personal Income Impact	\$27,510,786	\$27,510,786	\$27,510,786	\$27,510,786	\$27,510,786	\$27,510,786	\$27,510,786
			Total Ex-Vessel Value	\$4,169,435	\$4,177,366	\$4,334,123	\$4,744,186	\$4,940,006	\$4,989,378	
			Without Policy Ex-Vessel Value	\$4,948,463	\$4,948,463	\$4,948,463	\$4,948,463	\$4,948,463	\$4,948,463	
			Ex-Vessel Value Δ	(\$779,028)	(\$771,096)	(\$614,340)	(\$204,276)	(\$8,457)	\$40,915	
			Ex-Vessel Value Δ %	-15.7%	-15.6%	-12.4%	-4.1%	-0.2%	0.8%	
			Local Personal Income Impact	\$6,988,311	\$7,001,605	\$7,264,341	\$7,951,641	\$8,279,850	\$8,362,601	
		Combined	Local Personal Income Impact	\$34,499,097	\$34,512,391	\$34,775,127	\$35,462,427	\$35,790,636	\$35,873,387	
		Contribution to Total Commercial Ex-Vessel Value by Fishery	Mainstem Gillnet	Spring Chinook	\$0	\$0	\$0	\$0	\$0	\$0
				Summer Chinook	\$102,540	\$102,540	\$102,540	\$102,540	\$102,540	\$102,540
				Zone 4-5 Fall Chinook	\$1,885,867	\$1,885,867	\$1,885,867	\$1,885,867	\$1,885,867	\$1,885,867
Coho	\$96,427			\$96,427	\$96,427	\$96,427	\$96,427	\$96,427		
Select Area Gillnet	Spring Chinook		\$996,017	\$1,092,537	\$1,222,113	\$1,594,665	\$1,745,000	\$1,745,000		
	Fall Chinook		\$219,083	\$213,480	\$221,779	\$259,290	\$304,774	\$354,146		
	Coho		\$788,774	\$705,789	\$724,671	\$724,671	\$724,671	\$724,671		
Mainstem Seine	Beach Chinook/Coho		\$8,534	\$8,534	\$8,534	\$8,534	\$8,534	\$8,534		
	Purse Chinook/Coho		\$22,453	\$22,453	\$22,453	\$22,453	\$22,453	\$22,453		
Mainstem Tangle Net	Coho		\$49,740	\$49,740	\$49,740	\$49,740	\$49,740	\$49,740		
Total Commercial			\$4,169,435	\$4,177,366	\$4,334,123	\$4,744,186	\$4,940,006	\$4,989,378		
Contribution to Total Sport Angler Trips by Fishery	Spring	Spring Chinook	115,398	115,398	115,398	115,398	115,398	115,398		
	Summer	Summer Chinook	25,147	25,147	25,147	25,147	25,147	25,147		
	Fall-Buoy 10	Fall Chinook/Coho	89,237	89,237	89,237	89,237	89,237	89,237		
	Fall-Mainstem	Fall Chinook/Coho	120,922	120,922	120,922	120,922	120,922	120,922		
	Total Sport			350,705	350,705	350,705	350,705	350,705		

^a Percentage in parentheses for seine, Coho 6" gillnet, and Coho tangle net fisheries indicates modelled fishery scale relative to fisheries during 2013-2018.

^b Model inputs for commercial allocations and allowable gears were adjusted to achieve no commercial economic loss when Select Area production enhancements are fully realized (2024).

-Select Area releases of Coho, tule CHF, and Select Area Bright CHF are capped at 5.255M, 3.875M, and 1.0M, respectively, due to Mitchell Act production limitations. Expected ex-vessel values were adjusted down accordingly effective 2020 return year.

-"Without Policy" angler trips and ex-vessel value represent the average number of trips and average ex-vessel value expected for 2013-2018 had the Harvest Reform Policy not been implemented. These averages are used as the baseline values for 2019-2024.

-Local Personal Income Impact is a measure of the impact to local economies in the Oregon/Washington region associated with angler trips in the lower Columbia River sport fishery (e.g. gas, food, lodging, guide fees, etc.), and the impact to local economies of lower Columbia River commercially landed salmon (e.g. value to processors, wholesalers, etc.). Sport and commercial value multipliers from the 2016 Input-Output Pacific Fisheries (I-O PAC) model were applied to total angler trips and ex-vessel value for the respective fisheries. Different multipliers were applied to estimated guided and non-guided angler trips in the sport fishery.