

## **Fiscal and Economic Impact Statement for the May 10, 2013 Hearing In the Matter of Rules Relating to Columbia River Fishery Management for 2013 and Beyond**

**Background:** In September 2012, the Fish and Wildlife Commissions in Oregon and Washington appointed the Columbia River Fishery Management Workgroup (Workgroup) and tasked it with developing recommendations for management strategies for Columbia River recreational and commercial fisheries for 2013 and beyond. The Workgroup's approach to developing its recommendations for an alternative management framework for non-tribal Columbia River recreational and commercial fisheries included incorporating concepts in Oregon Governor Kitzhaber's proposal as well as additional details developed by Oregon and Washington Fish and Wildlife staff and refining the recommendations through the deliberative process conducted by the Workgroup. The final management framework is determined by the respective Fish and Wildlife Commissions in Oregon and Washington. A key element of the management framework recommended by the Workgroup is phasing out the use of non-selective gill nets in mainstem Columbia River commercial fisheries. To avoid significant economic harm to commercial fishers, the approach would include a transition period (2013-2016) as well as additional efforts to enhance salmon returns to off-channel areas. After this transition period, only selective gear or techniques will be permitted for commercial use in the Columbia River mainstem, but gill nets would continue to be permitted in off-channel areas. A fixed framework would be used to assign shares of ESA-impacts and harvestable surplus to each of the Columbia River non-tribal fisheries (Spring Chinook, Summer Chinook, Sockeye, Tule Fall Chinook, Upriver Bright Fall Chinook, Coho, Chum, and White Sturgeon) for both the transition period and for the years beyond 2016. More detailed background, discussion of plan details, and an impact analysis are found in Management Strategies for Columbia River Recreational and Commercial Fisheries: 2013 and Beyond, hereafter referred to as "Management Plan."

### **Statement of Cost of Compliance**

#### **1. Impact on state agencies, units of local government and the public (ORS 183.335(2)(b)(E)):**

The proposed rules will affect state agencies, units of local government and the public, respectively, as discussed below.

**A.** The state agencies that would be affected by adoption of these rules are the Oregon Department of Fish and Wildlife (ODFW) and Oregon State Police (OSP). Under these proposed rules, OSP would likely need to increase total enforcement effort in the lower Columbia River due to the expected rise in recreational angling effort and the increased complexity in the commercial fishery rules. This increase would be equivalent to one additional trooper (1.0 FTE) at a cost of \$330,000 in the 2013-15 biennium. Another additional trooper (2.0 FTE total; \$495,000 total) will be phased in during the following biennium (2015-17) which results in an estimated biennial cost of \$600,000 thereafter. After alternative commercial gears are tested and decided on near the end of the transition period, the fiscal needs of OSP will be reassessed during the associated rule making at that time.

The expected fiscal impacts to ODFW are the following:

- 1.** There would be additional costs associated with the enhancement of select or off-channel areas on the Lower Columbia River. In the 2013-2015 biennium, enhancements of off-channel areas will focus on:
  - Acclimating relocated spring Chinook and coho, and rearing new Select Area Bright fall Chinook for release at existing off-channel sites, and sampling enhanced fisheries.
  - Evaluating the feasibility of providing more fishing time to commercially harvest salmon at existing off-channel sites.

- Evaluating the feasibility of expanding the fishable area of existing off-channel sites.
- Evaluating up to three new off-channel sites to determine their potential to produce meaningful numbers of fish for commercial harvest.

The estimated expenditures are \$3,899,710 and are detailed in Policy Option Package 125 for the 2013-2015 ODFW budget.

2. As part of the transition efforts in the Management Plan, ODFW will continue its ongoing partnership with Washington for alternative gear testing. Gear that is or may be tested include beach seines, purse seines, tangle nets, fish wheels, rod-and-reel, etc. In addition to its ongoing program, the department is seeking \$2 million in federal funds (NOAA/Mitchell Act) in Policy Option Package 114: Experimental Fishing Gear to aid this effort.

3. Commercial salmon landings would likely be impacted by the plan. The impact analysis in the Management Plan assesses differing scenarios based on the species, the fishery location (mainstem, off-channel areas), and the time of the year the fisheries take place. The analysis evaluates the effects of changing the shares of ESA-impacts and harvestable surplus assigned to commercial and recreational fisheries from the “current” levels to “transition period” levels (2013-2016) and to longer term levels (2017-2021). Table 1 presents the modeled results for annual ex-vessel value of the commercial non-tribal harvest of Columbia River salmon for the three different time periods considered. These results are drawn from a revised version of Table C.5 from the Management Plan.

Relative to the modeled “current” baseline, the estimated annual ex-vessel value of all commercial in-river salmon landings would be \$18,000 higher in 2013 and \$761,000 higher in 2016 during the “transition period.” For the years modeled in the “long-term” period, it is estimated that ex-vessel value would increase between \$232,000 early on and \$519,000 later on, compared to the current value. This analysis assumes that, in the future, salmon returns would be similar to current levels. It also assumes species-specific prices (\$/lb) would remain similar to current levels; average prices from 2009-2011 were used in the modeled baseline. Fluctuations in fish returns and prices are common, though hard to forecast, and could materially affect the actual future values of the commercial fisheries regardless of management actions taken. All values are in constant dollars; that is, future salmon prices, ex-vessel values and personal income values do not include any potential inflationary or deflationary effects.

These changes in ex-vessel value of these landings would result in increases to the Ad Valorem (AV) (3.15% of salmon landings value) revenue collected by ODFW from the Columbia River commercial salmon fishery. For the transition period, the estimated rise in AV revenue ranges between \$600 and \$24,000 above the “current” modeled level of about \$120,000. For the long-term period, the AV increases would range between \$7,300 and \$16,000 relative to the modeled “current” conditions. As overall annual AV revenue for all commercial fisheries has averaged \$2.9 million from 2010 to 2012, these projected changes in AV revenue would not exert a significant fiscal impact on ODFW operations. In a similar vein, there would be small changes to the revenues flowing to the Restoration and Enhancement Program from a surcharge on commercial salmon landings (\$0.05/pound) and no significant impact would be expected.

Note that impacts on the commercial fisheries for white sturgeon, shad, herring and crayfish in the Columbia River are not included in this analysis because they represent a small portion of the overall value of the Columbia River commercial fisheries or because the allocation shares are not anticipated to change substantively as a result of these proposed rules. Thus, these fisheries would not be expected to affect the results of the analysis given the approach in the Management Plan.

**Table 1. Ex-vessel value and local personal income impacts of in-river commercial harvest of Columbia River salmon under the modeled current baseline and under the proposed management plan.**

		<b>Ex-vessel Value (modeled)</b>	<b>Difference from Current</b>	<b>Local Personal Income Impacts</b>	<b>Difference from Current</b>
	<b>Current</b>	\$3,813,317		\$7,169,036	
<b>Transition</b>	<b>2013</b>	\$3,831,422	\$18,105	\$7,203,073	\$34,037
	<b>2014</b>	\$3,979,280	\$165,963	\$7,481,046	\$312,010
	<b>2015</b>	\$4,077,023	\$263,706	\$7,664,803	\$495,767
	<b>2016</b>	\$4,574,326	\$761,009	\$8,599,733	\$1,430,697
<b>Long-term</b>	<b>2017</b>	\$4,045,072	\$231,755	\$7,604,735	\$435,699
	<b>2018</b>	\$4,229,637	\$416,320	\$7,951,718	\$782,682
	<b>2019</b>	\$4,293,675	\$480,358	\$8,072,109	\$903,073
	<b>2020</b>	\$4,330,133	\$516,816	\$8,140,650	\$971,614
	<b>2021</b>	\$4,332,339	\$519,022	\$8,144,797	\$975,761

4. Based on projected overall numbers of salmon available for commercial harvest during the transition period and long term, we assume it is unlikely that significant changes in the number of gillnet permit renewals, commercial fishing licenses purchased, and fishing boat licenses purchased would result from the proposed rules. Therefore, no significant changes in revenues related to those sales would be anticipated.

It is possible that changes in the permit process may result from implementation of the Management Plan. For example, Columbia River commercial fishing permits may be issued for each type of gear allowed. Workload associated with this would be absorbed by current staff and would not represent a significant additional cost to ODFW.

**B.** Units of local government could be affected by these rules. Changes in the number of commercial and recreational trips could result from the proposed rules and could mean changes in parking fee and moorage fee revenues received by the Port Authorities and other local governments. There would likely be additional overnight recreational fishing trips that would mean more nights spent in local accommodations along the Columbia River. Hotel tax revenues could increase for locations such as the City of Astoria. These potential changes cannot be estimated given the limited available data, though no significant changes from the current levels of any local agencies' operations or expenditures would be expected to result from the adoption of these rules.

**C.** The public could be affected by the adoption of these rules.

**Commercial Fishing**

Commercial salmon landings can benefit both commercial fishermen and the local communities where the landings are made. As can be seen in Table 1, the annual ex-vessel value of commercial Columbia River salmon landings are estimated to increase by between 0.5% and 20% in the transition period, compared to the “current” period. Longer-term, it is estimated that the ex-vessel value could range from 6% to 14% increase from “current” levels. These impacts would not necessarily be distributed equally across the commercial in-river salmon fishing fleet, as cost structures and other factors vary from boat to boat.

According to the PFMC’s 2011 Review of Ocean Salmon, local personal income impacts of the in-river commercial salmon fishery on Oregon Columbia River communities has averaged about \$5.2 million over the five-period of 2007-2011 (in Table IV-19). This equates to an average multiplier of about 1.88 with respect to the ex-vessel value of the fishery. Combining that multiplier with the modeled ex-vessel values in Table 1, it is estimated that, relative to the

current levels, annual local personal income would be approximately \$34,000 to \$1.43 million higher during the transition period and \$436,000 to \$976,000 higher during the 2017-2021 period. Economic impacts related to the commercial fisheries for white sturgeon, shad, herring and crayfish are not included in this analysis because the expected economic contribution of these fisheries is low and no allocation shifts are contemplated for them.

After the transition period (approximately 2017), only selective gear or techniques will be permitted for commercial use in the Columbia River mainstem. As a result, commercial fishermen will likely need to obtain some different gear/equipment than currently used to gillnet fish. These rules do not establish what gear types would be allowed or required during the transition period or beyond. Further rulemaking and an economic analysis of the then legally permissible alternatives will be required at that time. The Commission is aware that the legislature may authorize new gear types, and staff has analyzed the general effects of several of these, as a way to place the economic effects of the current rulemaking into an even larger perspective.

In some cases (e.g., beach or purse seining), crew in addition to the owner/operator will need to be hired to run the operation. These new expenditures would be spent at least in part in local Columbia River communities and then recirculated through those economies via the multiplier effect. Given that the permissible gear or techniques have yet to be determined and that it is unclear how commercial fishermen will respond to the new management rules, it is not possible to estimate the level of new expenditures and thus the economic impact they may have at this time.

An important portion of the local economic impacts relate to the wholesale dealers and processors who process and retail the commercially landed salmon. Given that more fish landed and greater ex-vessel values are forecast for the commercial non-tribal Columbia River salmon fisheries for both the transition period and the longer term, no overall adverse impacts to local dealer/processor businesses as a whole would be expected if this plan were adopted.

### **Recreational Fishing**

A fee similar to Washington's Columbia River Endorsement is proposed for Oregon recreational anglers in the Management Plan. It is anticipated that recreational anglers may be required to pay an \$11.00 fee to fish on the Columbia River. Estimating that about 50% of Combined Angling Harvest Tag purchasers fish the Columbia River, then about 90,000 anglers would pay the fee. Revenues associated with this new fee would be approximately \$1 million per year, or \$2 million per biennium. These revenues would be used to help implement Columbia River fishery management and reform rules, to enhance fisheries, economic benefits, and native fish conservation. It is possible that a portion of anglers may forego fishing the Columbia River due to the increased cost to do so, but it is difficult to estimate the magnitude of this effect.

A central part of the proposed plan is to transfer portions of the commercial allocation in the mainstem Columbia River to recreational interests in a phased way. With potentially more fish available to recreational anglers in the mainstem in the transition and long-term periods, it is forecasted that the number of angler trips would increase in response. Appendix C of the Management Plan reports the forecast change in angler trips. Relative to current conditions, it is projected that there would be 45,061 and 75,091 more angler trips per year on average in the transition period and longer term, respectively.

Economic impacts are associated with angler trips because the anglers will spend money on gas, food, lodging, guides, etc. during their trips. These trip-related expenditures could be spent near the angler's residence, the point of access on the Columbia River, and anywhere in between, though a greater proportion of expenditures would likely be concentrated in local Columbia River communities. Expenditures on equipment are not included here because anglers would not

likely increase spending on fishing equipment in response to fishing a small number of additional days. A portion of the angler trip-related expenditures would be recirculated through the local economies where it was spent (multiplier effect). We use an average for expenditures per angler trip derived from Oregon-specific estimates in the preliminary 2011 U.S. Fish and Wildlife Survey state overview -- \$63/trip. We use an average for the personal income impact from angler expenditures drawn from PFMC's 2011 Review of Ocean Salmon -- \$40/trip. These values are somewhat lower than those reported by NOAA National Marine Fisheries Service for marine anglers in Oregon (Gentner and Steinback, 2008). Those mean expenditure estimates are \$203.82, \$111.16, and \$72.84 (2011\$) for Oregon residents making party/charter, private/rental, and shore trips, respectively. Recent studies involving Columbia River recreational salmon fishing (Southwick and Associates Inc., 2009; The Research Group, 2006) used estimates from the 2008 NOAA report or its predecessor from 2001.

Table 2 presents the estimated changes in expenditures and local personal income impacts associated with increased angler trips forecast under the Management Plan. Compared to the current conditions, the total annual economic impacts are estimated to be increases of about \$4.6 million and \$7.7 million during the transition period and the long-term, respectively.

**Table 2. The estimated number of recreational angler trips, annual change in angler expenditures, and annual change in local personal income impact under the Management Plan.**

	# Angler trips	Forecast increase in angler trips (#)	Annual change in angler expenditures	Annual change in personal income Impact	Total
<b>Current</b>	350,362				
<b>Transition</b>	395,423	45,061	\$2,838,843	\$1,802,440	\$4,641,283
<b>Long Term</b>	425,453	75,091	\$4,730,733	\$3,003,640	\$7,734,373

**Enhancement of Off-Channel Areas**

Additional investment in enhancement of off-channel areas (see 1.A.1 above) would likely result in additional personal income in Clatsop county and perhaps Columbia county. More ODFW staff would be stationed in those counties, mostly for limited terms, in order to conduct the proposed work and that staff would spend money on housing, food, entertainment, etc. in the local Columbia River communities. A similar economic impact could result from additional OSP troopers being potentially based in the area. The magnitude of these economic impacts cannot be determined due to limited information (e.g., we don't know where people will reside and for how long).

**2. Cost of compliance effect on small business (ORS 183.336):**

**a. Estimate the number of small businesses and types of business and industries with small businesses subject to the rule:**

The types of businesses and industries with small businesses subject to the rule would include Columbia River non-tribal gillnet fishermen, fish dealers who receive Columbia River commercial non-tribal salmon landings, recreational fishing guides, food and beverage stores, gasoline stations, sporting good stores, general merchandise stores, accommodation businesses, food services and drinking places, and marinas.

Regarding estimates of the number of small businesses affected or potentially affected by the rule, there were 292 gillnet permits renewed in 2012 and 17 dealers who received Columbia River commercial non-tribal salmon landings in 2012 (three-year average = 21) (ODFW data). According to the Oregon State Marine Board, there were 102 licensed recreational fishing guides

who had the Lower Columbia River (LCR) Endorsement in 2012 (three-year average = 99). It is likely that a number of private Charter Boats also fish the Lower Columbia River, but that number cannot be estimated with current data.

Combining Oregon Employment Department 2011 data for small businesses in Clatsop and Columbia Counties, there were 59 food and beverage stores, 30 gasoline stations, 15 general merchandise stores, 79 accommodation businesses, 256 food services and drinking places. Sporting good stores are a subset of the category “Sporting goods, hobby, book and music stores”, of which there were 35 in 2011. Some small businesses in Multnomah County of the categories listed above would likely be impacted by the rule, but given the size of the county population and high number of businesses it is difficult to estimate how many in a precise way.

Oregon State Marine Board data indicates that there are currently 53 private marinas along the Columbia River in Clatsop, Columbia, and Multnomah counties. In addition, there are 24 private marinas along the Multnomah Channel, 1 on the Skipanon River in Warrenton, and 8 on the Willamette River in Multnomah County. Overall, 86 private marinas are potentially subject to the rule.

**b. Projected reporting, recordkeeping and other administrative activities required for compliance, including costs of professional services:**

No significant changes in these costs are expected for the small businesses subject to the rule.

**c. Equipment, supplies, labor and increased administration required for compliance:**

Under the Management Plan, gillnet fishermen can continue to fish with gillnets in designated off-channel areas of the Columbia River during the transition period and long term. Those who fish the Columbia mainstem can continue to do so with gillnets through at least 2016 (the transition period), after which they would be required to switch to more selective gears and techniques that prove effective during the transition period. This rule does not establish what gear types would be allowed as alternative selective gear during the transition period or beyond. Further rulemaking and an economic analysis of the then legally permissible alternatives will be required at that time. At that point, the outcome of the research occurring during the transition period will be available to assist the Commission in evaluating the options it will then choose among.

Although it is impossible to predict the outcome of ongoing gear research, we can provide some preliminary capital and operating cost information as an example regarding three possible gear options currently being studied--tangle nets, beach seines and purse seines--as part of the larger policy development regarding Columbia River salmon management and subject to specific review in a future rulemaking process, of which the current rules are an important initial step.

Changing type of gear would likely mean incurring new equipment costs. In addition, more fishers are needed to effectively use beach (3-4 people per crew per boat) and purse seines (4-5 people per crew per boat) than for gillnets and tangle nets, which can be operated by one or two people per crew per boat. Table 3 displays some preliminary assumptions of rough costs for fishing with gillnets/tangle nets, beach seines and purse seines. In some cases, main vessels used for gillnetting could also be applied to beach seining and thus those fishers would not need to purchase a different main vessel. More accurate numbers for costs and effectiveness will be determined by ongoing research during the transition period prior to final selection of alternative gears and rule making. It is also important to note that the Management Plan assumes new funds to assist in the implementation of the plan and to help reduce costs to individuals.

**Table 3. Example of preliminary assumptions for capital costs, annual costs, and daily operating costs for commercial gear types (gillnet/tangle net, beach seine, purse seine) for Columbia River commercial salmon fisheries.**

	Gillnet/Tangle nets	Beach Seine	Purse Seine
<b>Capital costs - One-time</b>			
Main vessel	\$25,000	\$25,000	\$125,000
Skiff	\$0	\$10,000	\$20,000
Net	\$4,000	\$10,000	\$15,000
Rigging	\$5,000	\$8,000	\$30,000
	<u>\$34,000</u>	<u>\$53,000</u>	<u>\$190,000</u>
<b>Annual costs</b>			
Insurance	\$0	\$2,000	\$2,000
Net repair ~10-day season	\$667	\$1,667	\$2,500
Net repair ~20-day season	\$1,333	\$3,333	\$5,000
<b>Daily operating costs</b>			
Crew	\$0	\$750	\$1,050
Fuel	\$150	\$200	\$350
	<u>\$150</u>	<u>\$950</u>	<u>\$1,400</u>

**d. A description of the manner in which the agency proposing the rule involved small businesses in the development of the rule.**

Representatives of several affected small business types participated as direct advisors to the Columbia River Fishery Management Workgroup, including fish dealers, commercial fishers, fishing guides, and sporting good stores. In addition, public testimony from many small business owners provided information to the workgroup. The Commission heard hours of testimony from dozens of affected small businesses at two prior Commission hearings on this subject, which directly shaped the current version of these rules.

The plan is written to be fully compatible with legislative direction on the goals of fish and wildlife management in Oregon.

We do not believe that a less intrusive or less costly alternative adaptation to only small business is consistent with the purpose of the rule.

**References**

Experimental Fishing Gear. Policy Option Package 114. ODFW 2013-2015 Budget.

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U.S. Fish and Wildlife. 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation: State Overview. Preliminary Estimates. Issued September 2012.

Documents referenced in this analysis are available for review at the headquarters building of the Oregon Department of Fish and Wildlife.