Additional Information for Fish and Wildlife Commission Consideration in Updating

Columbia River Basin Salmon Management Policy

January 12, 2017

Washington Department of Fish and Wildlife
Olympia, Washington

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1.0 Introduction

The Washington Fish and Wildlife Commission (Commission) adopted in January 2013 a Columbia River Salmon Management policy (Policy) to "promote orderly fisheries (particularly in waters in which the states of Washington and Oregon have concurrent jurisdiction), advance the conservation and recovery of wild salmon and steelhead, and maintain of enhance the economic well-being and stability of the fishing industry in the state." Additional information on the rationale for the adoption of the Policy can be found in WDFW (2013).

The Policy provides a cohesive set of guiding principles and a progressive series of actions to improve the management of salmon in the Columbia River basin. The Policy states that:

> "The actions will be evaluated and, as appropriate, progressively implemented in a transitional period occurring from 2013 through 2016. There is uncertainty in this presumptive path forward, including the development and implementation of alternative selective fishing gear, secure funding for enhanced hatchery production, and the expansion or development of off-channel fishing areas. Consequently, the Commission recognizes that management decisions in the transitional period, and subsequent years, must be informed by fishery monitoring (biological and economic) and may be modified as necessary to meet the stated purpose of this policy."

With the transition period ending at the close of 2016, the Commission is considering options to update the Policy. The three options under consideration are described in detail on the Washington Department of Fish and Wildlife (Department or WDFW) website at http://wdfw.wa.gov/conservation/fisheries/lower_columbia/options.html and summarized below (Table 1):

> Option 1 (Freeze Transition). Maintain the presumptive path described in the current policy through 2022. The presumptive path for the transition period provides 70% of the share of spring Chinook and summer Chinook, and up to 70% of fall Chinook impacts to recreational fishers. Adaptively manage fisheries to achieve conservation, management, and economic objectives.
>
> Option 2 (modified Oregon Department of Fish and Wildlife "Rebalance" scenario, see http://www.dfw.state.or.us/agency/commission/minutes/17/01_jan/index.asp). Maintain the presumptive path for commercial-recreational sharing of spring and fall Chinook, provide 80% of summer Chinook for recreational fisheries, further enhance spring chinook production in off-channel areas, and explicitly provide for a period of two years a gillnet fishery in zones 4 and 5 targeting upriver bright fall Chinook salmon. Adaptively manage fisheries to achieve conservation, management, and economic objectives.

Table 1. Comparison of three options under consideration for updating the Columbia River Basin Salmon Management policy.

Spring Chinook (subject to adaptive management provisions)

Option 1 Extend Transition	Option 2 ODFW Staff Proposal	Option 3 Current Policy
70% Recreational 30% Commercial	80% Recreational 20% Commercial	80% Recreational 20% Commercial
• Tangle nets allowed in mainstem	• Mainstem non-gill net selective gear after run update • Commercial fishery limited to unused impacts from recreational & off-channel fisheries	No mainstem commercial fishery

Summer Chinook (subject to adaptive management provisions)

Option 1 Extend Transition	Option 2 ODFW Staff Proposal	Option 3 Current Policy
70% Recreational 30% Commercial	80% Recreational 20% Commercial	Not Specified
• Gill nets allowed in mainstem	• 75% of commercial impacts allowed for mainstem fisheries with non-gill net selective gear • Unused impacts transferred to recreational fishery upstream of Bonneville or to spawning escapement	

Fall Chinook (subject to adaptive management provisions)

Option 1 Extend Transition	Option 2 Explicit Gillnet Fishery 2017-2018	Option 3 Current Policy
≤ 70% Recreational ≥ 30% Commercial	≤ 80% Recreational ≥ 20% Commercial	≤ 80% Recreational ≥ 20% Commercial
• Adaptive management provisions for fall Chinook commercial fisheries.	• Explicitly provides for gillnet fishery above Lewis R. in 2017 & 2018	• Adaptive management provisions for fall Chinook commercial fisheries.

Option 3 (Full Implementation). Maintain the present policy and presumptive path, including adaptive management of the fisheries to achieve conservation, management, and economic objectives.

This document is intended to provide information that the Commission may find useful in the consideration of those options. It is not intended to reiterate all the information that has been provided in previous presentations or in public comment to the Commission. It does provide an enhanced description of the Columbia River Compact, economic analyses of the fisheries, and as required by the Commission Budget Policy 2015-17, an assessment of the expenditures and revenue associated with Columbia River salmon fishery management, monitoring, and hatchery production.

2.0 Columbia River Compact

RCW 77.04.12 of the Fish and Wildlife Code of the State of Washington includes guidance to the Department to "promote orderly fisheries".

In the early 20th century, providing for orderly fisheries proved problematic due to inconsistencies in the fishery rules promulgated by the states of Oregon and Washington. To address this concern, the states requested and Congress ratified a Columbia River Compact (Compact) in 1918.

Additional information on the Compact is provided below, as well answers to several questions regarding the Compact that have occurred during the consideration of the Policy.

2.1 Background

When Congress split the Washington Territory from Oregon Territory in 1853, most people assumed that both Territories would have joint, or "concurrent," jurisdiction over offenses committed on the Columbia River where it formed their common boundary. With full concurrent jurisdiction, both states would have the power to enforce their own laws across the entire breadth of the Columbia River. But this led to conflicts in enforcement and management where laws differed. Early court rulings ultimately limited each State's jurisdiction.

The general rule is that each state can always enforce its laws on its side of the river, *but* it can enforce its laws on the other state's side only if that state has a substantially similar law. Because many fishing activities are hard to manage without considering the practical and conservation issues that transcend a split river, there was a desire for consistent management and regulation regimes.

In 1915, as a consequence of the concerns over the need for joint and consistent fishery management on the Columbia River, delegates from the legislatures of both Oregon and Washington recommended that the two states adopt a compact, to be submitted to Congress

for ratification, that would allow Columbia River fish laws to be modified "only by-joint agreement of said states."

In 1918, Congress ratified the Columbia River Compact. As adopted, the Compact provides as follows (emphasis added):

> **"All laws and regulations** now existing [as of 1915], or which may be **necessary for regulating, protecting, or preserving fish in the waters of the Columbia River,** over which the States of Oregon and Washington have concurrent jurisdiction, or any other waters within either of said States, which would affect said concurrent jurisdiction, **shall be made, changed, altered, and amended in whole or in part, only with the mutual consent and approbation of both States**."

This is currently found at RCW 77.75.010. Oregon has similarly adopted this text in its own statutes.

2.2 Frequently Asked Questions

1) *Where does the Compact apply?*

   The Compact, and the state analogues, say it applies to "any ... waters" over which Oregon and Washington have concurrent jurisdiction, together with "any other waters" in either State "which would affect" their concurrent jurisdiction. Potentially, that includes the entire Oregon and Washington portions of the Columbia River Basin. By custom, however, the states have interpreted and applied the Compact phrase "any ... waters" much more narrowly - to the mainstem where the Columbia River forms the Oregon-Washington boundary.

2) *Does the Compact require complete consistency between Oregon's and Washington's licensing and fishery regulations?*

   On its face, the Compact provisions appear to require, without exception, consistency in fishery regulations that relate to affected waters. Legislative history supports this conclusion as well.

   Despite the apparent textual requirement for consistency in all fishery regulations, courts have allowed differences to exist. Examples:

   a. 1919 Oregon law limiting issuance of fishing licenses to US citizens, but with no similar restriction in Washington. *See Olin v. Kitzmiller*, 259 U.S. 260 (1922), aff'g 268 F. 348 (9t" Cir. 1920).

   b. Oregon initiative banning fish wheels and beach seines did not violate the Compact. *See, P.J. McGowan & Sons, Inc. v. Van Winkle*, 21 F.2d 76 (D. Or. 1927)

   c. Washington initiative banning fish traps and wheels did not violate the Compact. *See State ex rel. Gile v. Huse*, 183 Wash. 560, 49 P.2d 25 (1935)

The judicial perspective seems to be that the Compact only bars the two states from enacting laws *that are more permissive* than the regulatory environment as of 1915. Accordingly, each state may be free to enact laws that are more restrictive than the 1915 environment without the consent of the other. But these decisions are quite old, and our understanding of the interrelated nature of fishery management has evolved, including the nuanced way that conservation outcomes need to be managed. Whether Courts will continue to countenance different regulatory environments will thus likely depend on the facts of each case.

3.0 Off-Channel Hatchery Production

Increasing hatchery production in off-channel areas was included as one strategy in the Policy to offset the phasing out of commercial gill net fishing opportunities in the mainstem of the Columbia River. Guiding Principle 10 states "Enhance the economic benefits of off-channel commercial fisheries in a manner consistent with conservation and wild stock recovery objectives."

The Oregon Department of Fish and Wildlife (ODFW) and WDFW have assessed the status of hatchery production relative to targets established during the development of the Policy. Production in the off-channel areas during the Transition period was 93% of the target for spring Chinook, 82% of target for bright fall Chinook, and 97 % of target for coho (Table 2).

However, achieving the previously defined Longterm (2017+) targets for bright fall Chinook and coho salmon is unlikely. Monitoring of the composition of naturally-spawning fall Chinook and coho salmon has found that some hatchery program modifications may be necessary to reduce the incidence of the hatchery-origin spawners. NOAA Fisheries is currently conducting a Section 7 consultation for funding of Mitchell Act hatchery programs. The environmental baseline for the consultation will include a number of inter-related hatchery programs that are funded through other sources. The consultation package will analyze a limit of 1.0 million bright fall Chinook (45% of target) and 5.26 million coho salmon (86% of target) (Table 2). Although fall tule Chinook salmon were not anticipated to be a major contributor to the economic value of the off-channel areas, the consultation package includes the elimination of the Deep River net pen program.

When the hatchery production is less than the target value, fewer economic benefits will accrue to the commercial fishery than anticipated. The economic analyses for the commercial fishery provided in sections 3.1.2 and 3.1.3 include all program modifications currently under evaluation in the Mitchel Act consultation.

Table 2. Off-Channel production of spring Chinook, bright fall Chinook, and coho salmon in the Transition period (2013-2016) and in the Longterm (2017+). The proposed production Bright Chinook and coho salmon for the Longterm is the production that is under evaluation in the NOAA Fisheries Section 7 consultation for Mitchell Act funded programs.

Production Type	Transition			Longterm		
	Actual	Target	% Target	Proposed	Target	% Target
Spring Chinook	1.85M	1.95M	93%	2.20M 1/ 3.34M 2/	2.20M	100% 152%
Bright Chinook	1.59M	1.95M	82%	1.00M	2.20M	45%
Coho	4.91M	5.09M	97%	5.26M	6.09	86%

1/ Option 1 and Option 3

2/ Option 2

4.0 Economic Analysis

RCW 77.04.12 of the Fish and Wildlife Code of the State of Washington includes guidance to the Department regarding the economic well-being of the fishing industry. It states: "In a manner consistent with this goal [conservation], the department shall seek to maintain the economic well-being and stability of the fishing industry in the state."

The following economic information is provided to assist the Commission in evaluating the options with respect to this guidance. The model to conduct the economic analysis of ex-vessel value and angler trips was developed by ODFW.

4.1 Commercial Fishery

4.1.1 Ex-Vessel Value

Pre-Policy Commercial Fisher Economic Return History: Information on commercial fishery catches and the ex-vessel value for the years 2005-2011 was presented to the Commission during the development and consideration of the Policy in 2012 and 2013.

The average annual ex-vessel value of the commercial fishery in 2005 through 2011 was **$3.5 million (M)** or, expressed in 2015 dollars, **$3.8M**.

Transition Period Commercial Fisher Economic Returns: The average ex-vessel value of the commercial fishery during the transition period was **$5.5M**. The value of the commercial fishery during the transition period was affected by multiple factors, including changes in the commercial-recreational sharing of impacts, increased hatchery production in off-channel areas, ESA-impact limits, and the returns of spring Chinook, summer Chinook, fall Chinook, and coho salmon. The above average returns of upriver bright fall Chinook were a significant factor.

If the Policy would not have been in effect in the transition period, the average annual ex-vessel value of the commercial fishery is projected to have been **$5.9M**.

Future Projected Economic Returns: The following projected ex-vessel values for the commercial fishery in 2017-2022 are based upon certain averages for salmon abundance, value per fish, and anticipated hatchery production. The lower end of the range assumes the average abundance that occurred prior to policy adoption in 2013, and includes the same range of years (2005-2011) included in presentations to the Commission at that time. The higher end of the range assumes continuation of the average abundance experienced during the Transition phase of the Policy - 2013-2016.

Three important points regarding the projected economic returns are:

1) Option 2, as modelled, includes a zone 4 and 5 gill net fishery directed at upriver bright fall Chinook salmon through 2022 rather than for just 2017 and 2018. This modelling choice was made to more clearly demonstrate the effect of the inclusion of this fishery on the ex-vessel value.
2) Option 3, as modelled, does not invoke the adaptive management provisions of the current Policy, and therefore provides no mainstem gill net fisheries.
3) The analysis illustrates a range of ex-vessel values that could occur as salmon abundance varies from the lower levels of 2005-2011 to the higher levels observed in 2013-2016. The actual ex-vessel value in each year will be the result of a complex interaction of impact limits, impact sharing, market value, and salmon abundance.

Ranges are provided for each of the three policy choices under consideration:

Option 1	$4,173,000 – $5,591,000
Option 2	$2,980,000 – $3,992,000
Option 3	$2,434,000 – $3,261,000

Comparisons: The preceding analyses provide the information to address two related, but different questions. The first question is primarily concerned with how the ex-vessel value of the commercial fishery will be affected by each of the Policy options. Potentially, the ex-vessel value of the commercial fishery could decline but the economic well-being and stability of the fishing industry (commercial and recreational) maintained. The second question addresses more directly the maintenance of the commercial fishery component of the fishing industry by comparing the projected ex-vessel value for each option with the average ex-vessel value that existed in the years prior to the Policy (2005-2011).

1) *What is the projected average ex-vessel value of the commercial fishery in 2017-2022 for each of the three policy choices, compared to what would have occurred in the absence of the policy, and assuming the 2013-2016 average salmon abundance will continue into the future?*

2013-2015 Base Value	$5,925,000	Percent Reduction (-)
Option 1	$5,591,000	- 5%
Option 2	$3,992,000	- 33%
Option 3	$3,261,000	- 45%

2) *What is the projected range of annual ex-vessel value of the commercial fishery in 2017-2022, compared to the average economic return prior experienced to policy adoption in 2012, assuming a range of economic values as follows: a low value equal to the 2005-2011 average abundance for all salmon species (lower abundance for upriver bright fall Chinook) and high value equal to the 2013-2016 average abundance (higher abundance for upriver bright fall Chinook)?*

2005-2011 Base Value	$3,835,000 (2015 $)	% Reduction (-) or Increase (+)
Option 1	$4,173,000 – $5,591,000	+9% to +46%
Option 2	$2,980,000 – $3,992,000	-22% to +4%
Option 3	$2,434,000 – $3,261,000	-37% to -15%

Effect of Commercial Share on Option 2: In the analysis above, Option 2 was modelled with a 20% share of the lower Columbia River fall Chinook salmon impacts provided to the commercial fishery. To assess the effect of the share on the ex-vessel value, model runs were conducted with the share ranging from 20% (presumptive Longterm value) to 30% (presumptive Transition value). The projected ex-vessel value ranged from $2.980M – $3.992M at a 20% share to $3.753M – $5.088M at a 30% share (Fig. 1).

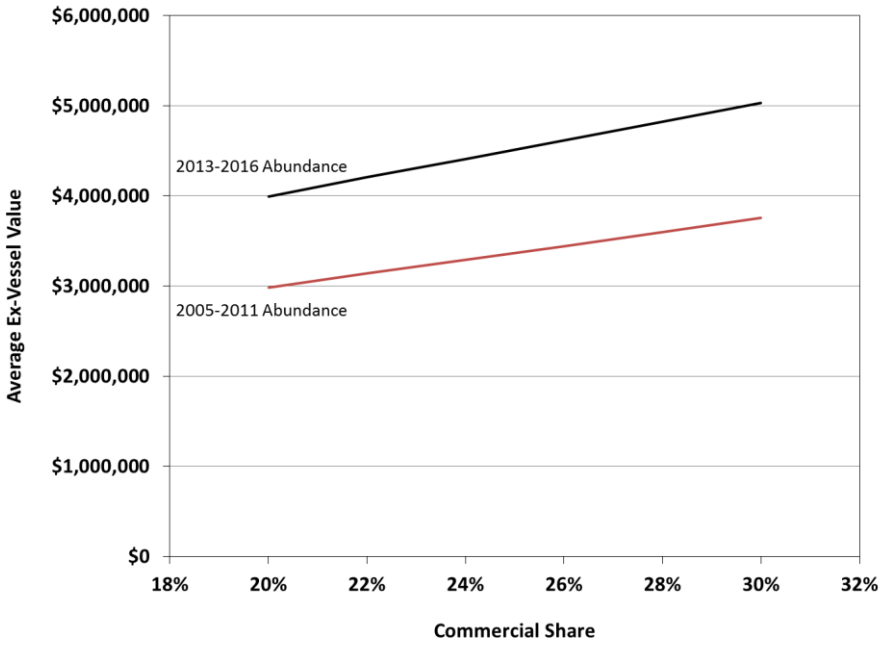

Figure 1. Effect of commercial share for lower Columbia River fall Chinook salmon on the ex-vessel value of the commercial fishery. Lower line is for 2005-2011 abundance; upper line for 2013-2016 abundance. All other model inputs from Option 2.

4.1.2 Economic Impact

The ex-vessel value of a commercial fishery is frequently used to track the performance of the fishery or compare alternative policy options. It does not, however, provide a measure of the broader income impacts to the community. Income impacts are an economic metric, however, that estimates the amount of income generated by the economic linkages associated with commercial fisheries. As PFMC (2016) noted, "while reductions in fishing-related income impacts may not necessarily reflect a net loss in income coastwide (e.g., other economic activities or activity in other places may be substituted in some cases), the reductions likely do indicate losses to businesses and individuals in affected communities that depend on fishing-related activities for their livelihood."

For this analysis, we used two estimates of the economic multiplier: 1) a value of 1.6 (PFMC 2016) used in the ODFW analysis; and 2) a value of 2.24 (TCW Economics 2008) that the Department has used in previous analyses.

Caution should be used in comparing the estimated economic impact of recreational and commercial fisheries. When TCW (2008) was published, the Department stated "Although the study estimates net economic values and economic impacts of both commercial and recreational fisheries, it is not sufficiently comprehensive and the values are not estimated with adequate precision to warrant a comparative analysis of the two fisheries." In presenting the

economic analysis for coastal fisheries, PFMC (2016) states "Note that exvessel revenues shown for the commercial troll fishery in Table 9 and income impact values shown for the recreational fishery in Table 10 are not directly comparable. More directly comparable measures of short-term economic impacts from commercial and recreational salmon fisheries appear in Figures 3 and 4, which show estimated community income impacts under the Council-adopted commercial troll and recreational fishery management measures, respectively, compared to historic levels in real (inflation-adjusted) dollars."

The 2005-2011 average income and projected income generated by each option is:

Economic Multiplier: 1.6
2005-2011 Base Value $6,100,000 (2015 $)
Option 1 $6,700,000 – $8,900,000
Option 2 $4,800,000 – $6,400,000
Option 3 $3,900,000 – $5,200,000

Economic Multiplier: 2.24
2005-2011 Base Value $8,600,000 (2015 $)
Option 1 $9,300,000 – $12,500,000
Option 2 $6,700,000 – $8,900,000
Option 3 $5,500,000 – $7,300,000

4.1.3 Value per Fisher

The average ex-vessel value per license holder landing in Washington was computed for the years 2013-2016. Note that the analysis does not include the value of commercial catch that a license holder made in Oregon. The average value per license holder with a landing ranged from $11,162 to $14,102 in 2013 through 2016 (Table 3). Generally, about 40% - 50% of the unique licenses with a landing had a value of less than $5,000 (Fig. 2).

Table 3. The average ex-vessel value per license landing in Washington.

Year	Average Ex-Vessel Value	Number Unique Licenses
2013	$11,277	154
2014	$12,335	172
2015	$11,162	176
2016	$14,102	161

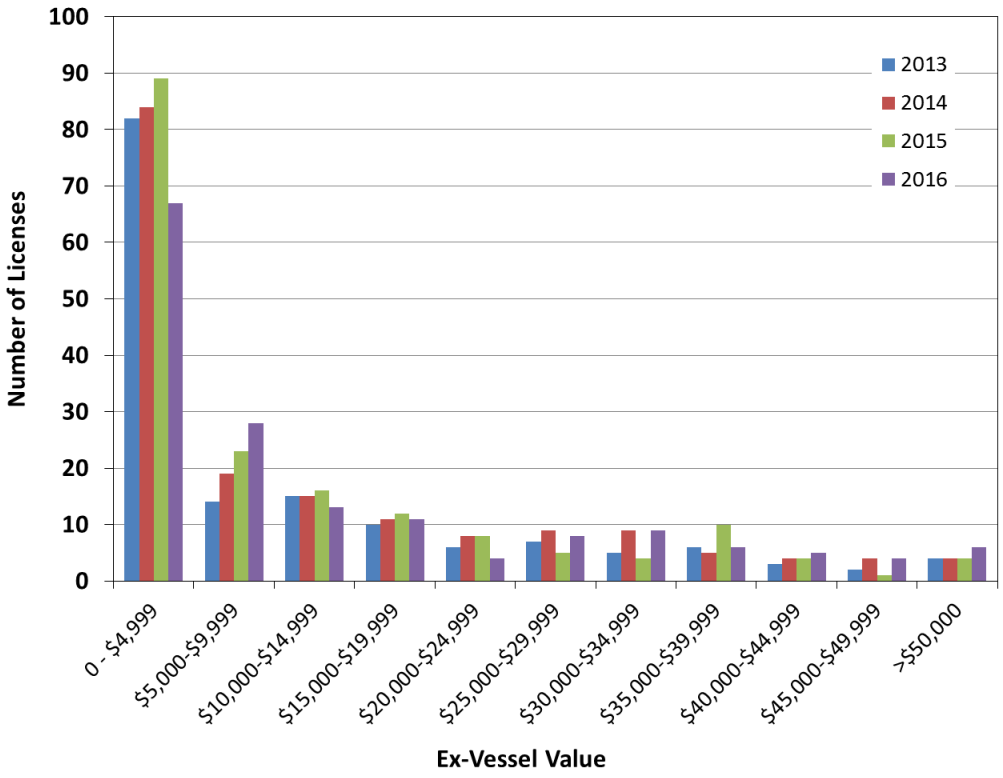

Figure 2. Distribution of ex-vessel value for Columbia River commercial fishery salmon landings in Washington.

4.2 Recreational Fishery

The economic analysis for the recreational fishery is based on the projected increase in the number of angler trips relative to what would have occurred in 2013-2016 in the absence of the Policy. Each angler trip is estimated to generate $65.40 of local personal income (PFMC 2016). This is the estimated value for non-guided trips – the estimate for a guided trip is $221.48 (PFMC 2016). Although we do not currently have estimates of the number of guided trips in the Columbia River, they certainly do occur. For this reason, the projected income for the recreational fishery should be considered a minimum.

Income per Angler Trip: $65.40

Base Value:	$26,500,000 (405,637 angler trips)
Option 1	$27,500,000 (420,243 angler trips)
Option 2	$28,300,000 (433,016 angler trips)
Option 3	$28,300,000 (433,016 angler trips)

Note that the angler trips and projected income for the recreational fishery is the same for options 2 and 3. This is because the number of angler trips is predicted strictly from the share

provided to the recreational fishery. Since the share is the same (≤ 80%) for options 2 and 3, the current construction of the model does not project a difference in angler trips.

5.0 Expenditures and Revenue

The Commission Budget Policy for 2015-17 includes the following direction:

> *"Cost Benefit Analysis and Budget Decisions: Salmon Fishery Activities*
> The Director will provide a report to the Commission that includes all the available information relative to the costs of providing and managing sport and commercial fisheries including enforcement, monitoring, and hatchery production costs. The Director will include in his report a breakdown of the revenue sources that support the activities (GFS, federal, local, DJ). Within existing resources, the Director will also report to the Commission the Department's best estimates of the economic benefits and license revenues that are derived by the state from each major salmon fishery, e.g. Puget Sound, Willapa Bay, and the Columbia River.
>
> It is the policy of the Department that consideration be given to the comparable economic and agency revenue benefits of respective fisheries as various cuts, fee increases, and policy changes are proposed and discussed by budget decision-makers."

The following information is provided to address this request.

5.1 Fish Program Expenditures

The 2011-2013 biennium is the most recent period for which an accounting of expenditures for salmon fishery management, fishery monitoring, and hatchery production is available for the commercial and recreational fisheries. However, we do not anticipate substantial changes in the costs and fund sources between biennia.

The primary fund source for Fish Program expenditures in the Columbia River basin is federal and local contracts (Fig. 3). Of the total estimated expenditure of $7.9 million for the commercial fishery, 93% was from federal and local contracts. Similarly, 87% of the $15.8 million expended for recreational fisheries originated from federal and local sources. The reliance on federal and local fund sources for the Columbia River basin is not surprising given the extensive federal and local mitigation requirements. The second most important fund source was the state general fund - $0.4M for the commercial fishery and $0.7M for the recreational fishery. The Columbia River Salmon and Steelhead Endorsement (CRRSE) was also an important source of funding for the recreational fishery.

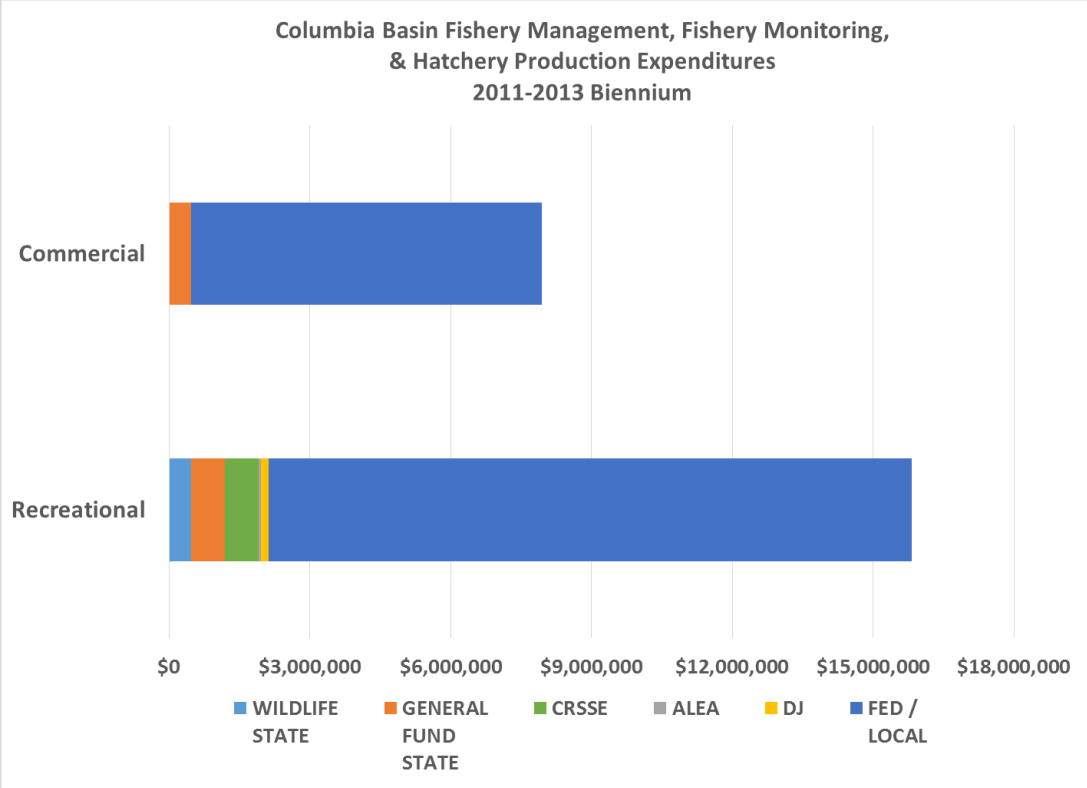

Figure 3. Fish Program expenditures for salmon fishery management, fishery monitoring, and hatchery production in the Columbia River basin, 2011-2013 biennium.

5.2 Revenue

5.2.1 Commercial Fishery

The commercial fishery generates revenue through the Enhanced Food Fish Excise tax on landings and through license fees. The excise tax fluctuates from year to year based on the abundance of returning salmon and fishing opportunities provided to commercial fishers. The tax is collected by the Department of Revenue (DOR) and deposited in the state general fund. The Department has estimated the tax collected from the commercial fish ticket database. The average 2013-2016 revenue generated from the Columbia River commercial salmon fishery was $113,691. Estimates of the revenue generated for the general fund in each year are provided below:

2013	$97,591
2014	$119,218
2015	$110,389
2016	$127,568

There is no commercial fishery license fee specific to Columbia River. The Department issues gill net licenses for access for both a combination Grays Harbor/Columbia River and a Willapa

Bay/Columbia River salmon gillnet license. The total license revenue generated to the state wildlife fund for these licenses in 2016 was $122,570 (Table 4).

Table 4. License revenue in 2016 from Grays Harbor/Columbia River and a Willapa Bay/Columbia River salmon gillnet licenses.

		FY16		FY17 to Date	
Type	**License**	QTY	Revenue	QTY	Revenue
R	Salmon Gill Net (L) - Grays Harbor/Columbia River	39	22,815	20	11,700
N	Salmon Gill Net (L) - Grays Harbor/Columbia River	1	890	1	890
R/T	Salmon Gill Net (L) - Grays Harbor/Columbia River	3	465	2	310
N/T	Salmon Gill Net (L) - Grays Harbor/Columbia River	0	-	0	-
R	Salmon Gill Net (L) - Willapa Harbor	132	77,220	53	31,005
N	Salmon Gill Net (L) - Willapa Harbor	6	5,340	2	1,780
R/T	Salmon Gill Net (L) - Willapa Harbor	4	620	3	465
N/T	Salmon Gill Net (L) - Willapa Harbor	1	460	0	
R/E	Salmon Gill Net(L)-Grays Harbor/Columbia River-Waiver	25	5,125	42	8,610
N/E	Salmon Gill Net(L)-Grays Harbor/Columbia River-Waiver	0	-	0	-
R/E	Salmon Gill Net (L) - Willapa Harbor - Waiver	47	9,635	44	9,020
N/E	Salmon Gill Net (L) - Willapa Harbor - Waiver	0	-	0	-
	Totals	**258**	**$ 122,570**	**167**	**$ 63,780**

R: Resident
N: Non Resident
R/T: Resident Transfer
N/T:Non Resident Transfer
R/E: Resident Waiver
N/E: Non Resident Waiver

5.2.2 Recreational Fishery

The recreational fishery generates revenue through the purchase of freshwater, combination, or temporary licenses, the CRSSE, the Dingell-Johnson (DJ) federal tax, and through state taxes on expenditures related to recreational fishery. The latter is not included in this report as it would require substantial work to collate, and the resulting revenue does not accrue to the state wildlife account.

For Fiscal Year 2016 the total revenue generated by customers who purchased either an Annual Freshwater, Annual Combination, or Temporary Combination Fishing license and a Columbia River Salmon Steelhead Endorsement was $8,92,254.

License Revenue	$6,709,241
Endorsement Revenue	$1,583,013
Total	$8,292,254

It is not possible to directly identify the portion of the DJ tax revenue that can be attributed to Columbia River basin recreational fisheries. The DJ excise tax apportionment to states is based on 60 percent of each state's licensed anglers and 40 percent of its land and water area.

The latest DJ federal apportionment for federal fiscal year (FFY) 2016 was based on state fiscal year 2015 license data. The Department reported 688,025 individual fishing license buyers to the U.S. Fish and Wildlife Service (USFWS) to support the latest DJ apportionment calculation. In state fiscal year 2015, the Department sold 225,833 CRSSEs, which can be deduced as 33 percent of qualifying fishing licensees reported to the Service purchased a CRSSE.

The DJ apportionment to Washington State for FFY 2016 was $7.4 million, 33 percent of that amount is $2.4 million.

Our best estimate of the annual revenue generated for the Department by anglers who fish in the Columbia River basin for salmon or steelhead is approximately $10.7 million.

6.0 References

Pacific Fishery Management Council (PFMC). 2016. Preseason Report III: Council Adopted Management Measures and Environmental Assessment Part 3 for 2016 Ocean Salmon Fishery Regulations: RIN 0648-XD843. (Document prepared for the Council and its advisory entities). PFMC, Portland, OR. 45pp.

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