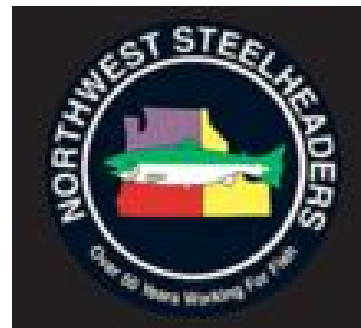


Oregon Fish and Wildlife Commission

Update on Columbia River Harvest Reform Transition Update



Conservation – Selective Fisheries

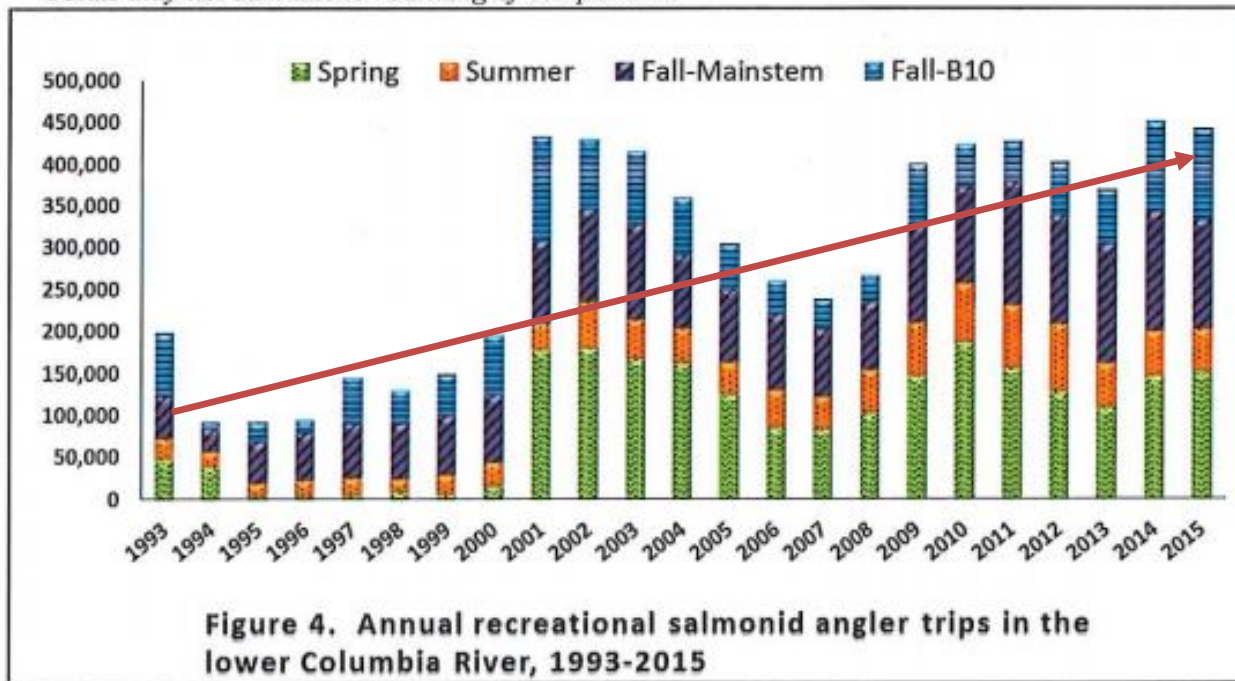
- 13 ESA-listed salmonid stocks pass through the lower the Lower Columbia River
 - Selective harvest/off-channel harvests
- Hatchery reform/litigation
 - Hatchery Genetic Mgmt Plans (HGMPs)
 - Mitchell Act Litigation – threatens 55 hatcheries and 1/3 of CR hatchery production
- Concerns about bycatch
 - Steelhead, sturgeon, etc.

Optimizing Economics

Table 17. Recreational salmonid angler trips downstream of Bonneville Dam, 2012 – 2015.

	Angler Trips			
	2012	2013	2014	2015
Spring	127,900	109,700	145,600	151,200
Summer	80,700	52,000	53,700	50,600
Fall – B10	65,100	65,800	107,500	108,300
Fall - mainstem	128,800	141,500	143,900	131,400
Total ^a	402,600	368,900	450,800	441,400

^a Totals may not sum due to rounding of components.



- 2014 & 2015 – >\$28 million in economic value – lower river only. (\$63.91/angler trip) – WDFW mult).

Optimizing Economics

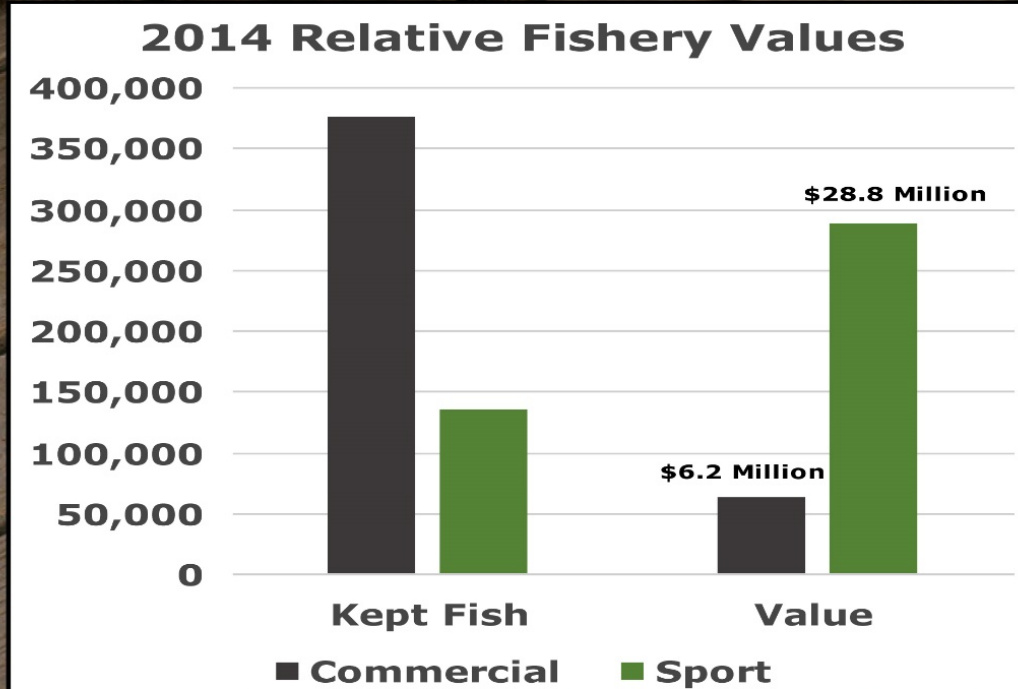
2014 RELATIVE FISHERY VALUES

COMMERCIAL

SPORT

\$16.57-Average landing Value

\$214.78-Expenditure per fish



Source: ODFW, WDFW-Angler trips and harvest; ODFW landings values; WDFW angler trip expenditures. Ave. Expenditure per sport-caught fish: \$214.78. Trip expenditures do not include durable goods such as boat, trailers, electronics, rods, reels, etc. \$16.57 Average landing Value for Commercial fish.

* Commercial multiplier * 2.24 (WDFW) = \$37.12

Optimizing Economics

Table 20. Ex-vessel value of Chinook and Coho salmon in lower Columbia River commercial fisheries, 2012 – 2015.

	2012	2013	2014	2015
Mainstem	\$2,043,762	\$3,285,674	\$3,693,268 ^a	\$3,472,107 ^b
Select Area	\$1,303,897	\$2,096,146	\$2,474,179	\$1,589,991
Total	\$3,347,659	\$5,381,820	\$6,167,447	\$5,062,098

^a Value of pilot 2014 research seine fishery not included in mainstem commercial fishery total because ESA impacts (research) for the fishery were not part of the commercial sub-allocation.

^b Value of 2015 commercial seine fishery included because ESA impacts for the fishery were included in the commercial sub-allocation.

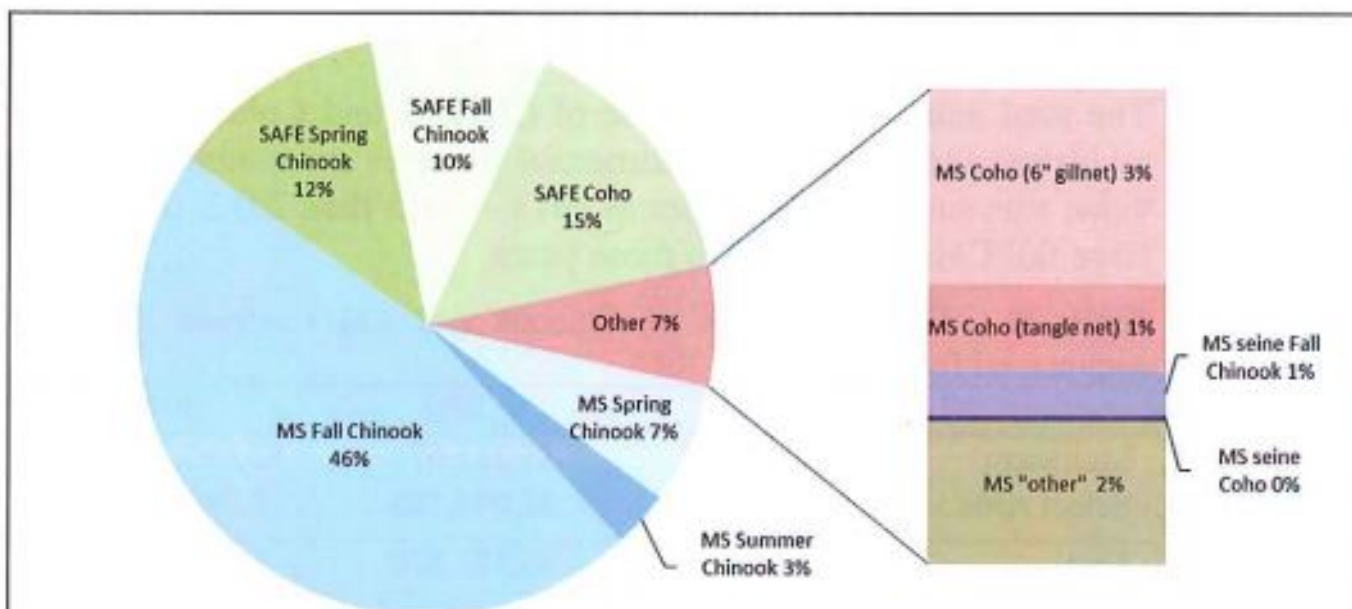
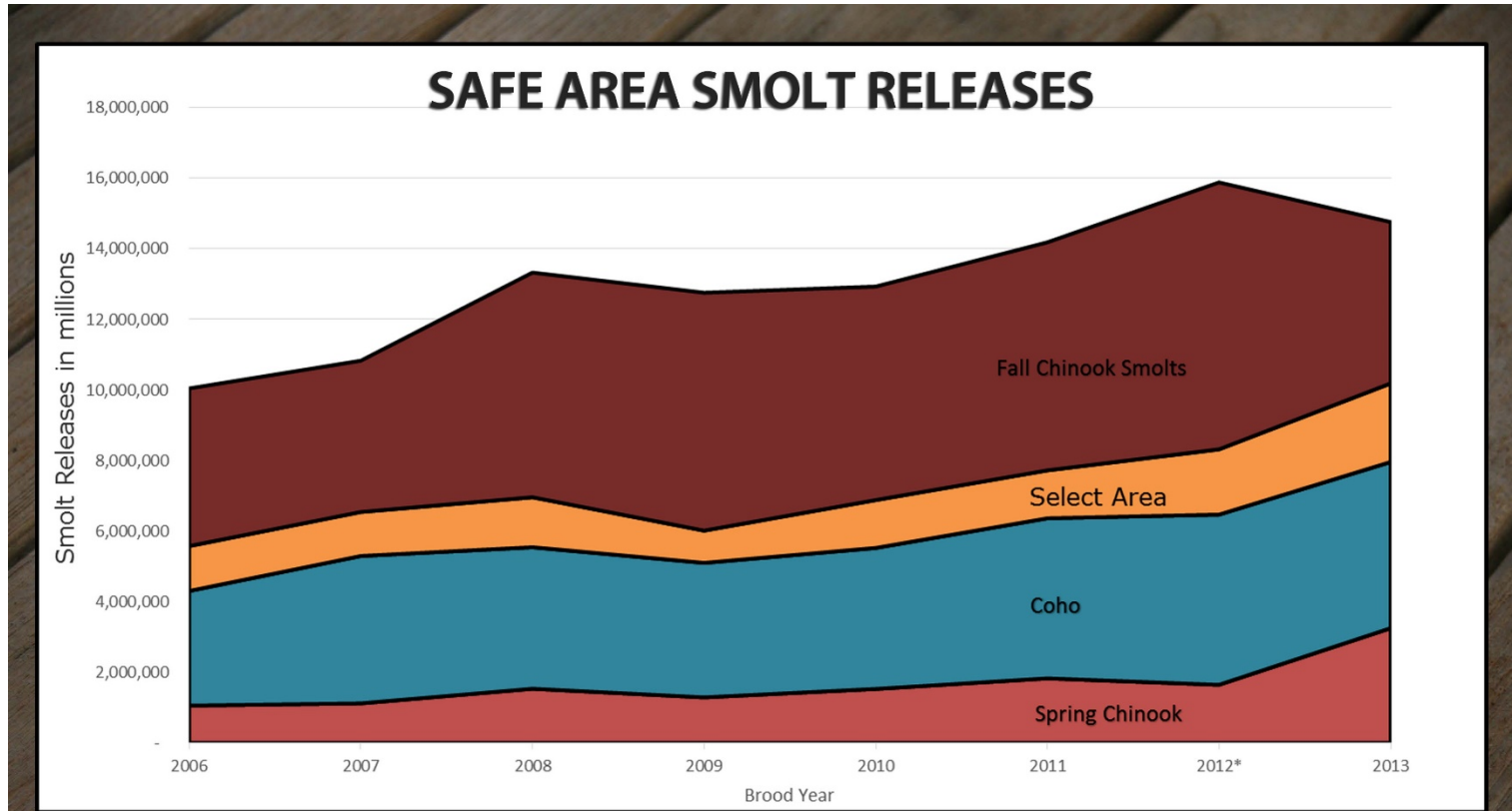


Figure 6. Average percent ex-vessel value of non-Indian mainstem (MS) and Select Area (SAFE) commercial salmon fisheries in the lower Columbia River, 2013-15

Optimizing Economics/Conservation



Source ODFW, WDFW. Note: Brood Year reflects the year in which eggs were taken. ChS and CO are reared for 2 years before release; SAB and ChF, 1 year.

ODFW Revenue - Funding Management and Conservation

Columbia River Sport

- 174,300 anglers purchased CRE in 2015 (\$9.75 annual / \$1 daily) = \$1,250,000*
- License/tag revenue from 174,300 anglers (\$55 avg revenue) = \$9,500,000*
- Dingell Johnson Federal Excise Tax (est.) = \$2,500,000

\$13,250,000

*Source: ODFW

Columbia River Commercial

- Commercial fish fund fee revenue = \$94,474*
- R&E surcharge (\$.05/lb) on salmon landings = \$63,100*
- Gillnet salmon permit fee \$32,592*
- Comm fishing boat license revenue = \$33,500*

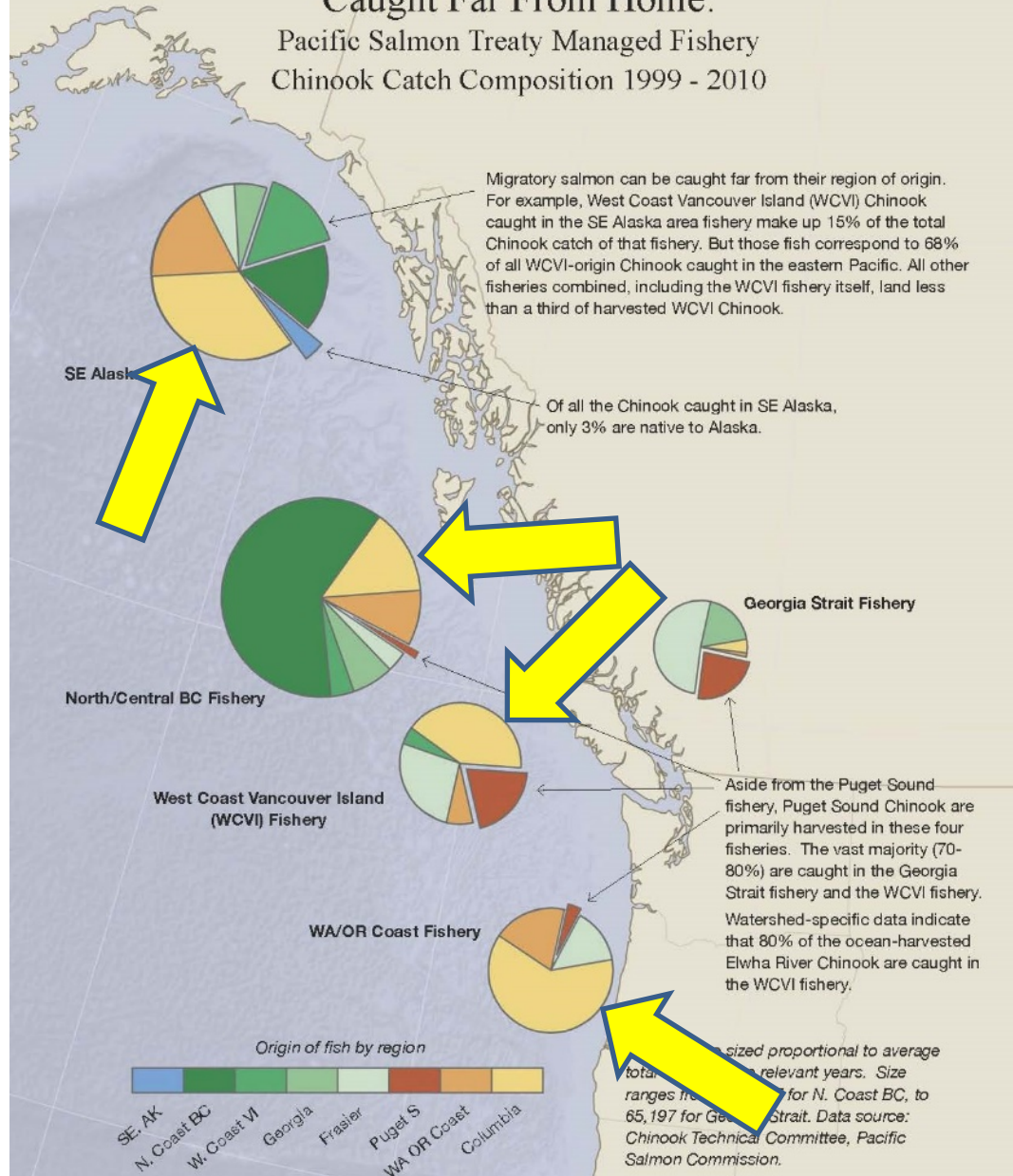
\$223,676

*Source: Fiscal Impact Statement, M81, (2007-2011)

Social Equity

Figure 1

Caught Far From Home: Pacific Salmon Treaty Managed Fishery Chinook Catch Composition 1999 - 2010



Social Equity

Economy

Alaska commercial fishermen shatter all-time salmon harvest record

Cordova Times | September 24, 2013

2015 Alaska Salmon Harvest Projection

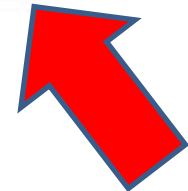
thousands of fish

	Chinook	Sockeye	Coho	Pink	Keta	Total	10-yr Avg. Harvest
Southeast Region Total	N/A	1,111	2,918	58,000	9,265	71,294	
Prince William Sound	9	4,548	434	51,415	2,902	59,308	
Cook Inlet	7	4,189	162	1825	238	6,421	
Bristol Bay	0	40,520	133	1	751	41,405	
Central Region Total	16	49,257	820	53,241	3,891	65,611	
Kodiak Area	22	3,632	281	14,300	711	18,946	
Chignik	7	1,588	87	551	246	2,479	
South Peninsula & Aleutians	7	1,774	199	14,019	767	16,766	
North Peninsula	1	1,322	51	106	219	1,699	
Westward Region Total	38	8,316	618	28,976	1,944	39,893	
AYK Region Total	1	90	315	50	2,115	2,571	
Statewide Total	N/A	58,773	4,580	140,268	17,216	220,837	
5-yr Avg harvest	389	38,017	4,420	121,177	17,043	181,045	
10-yr Avg harvest	460	40,500	4,360	116,411	17,203	178,933	

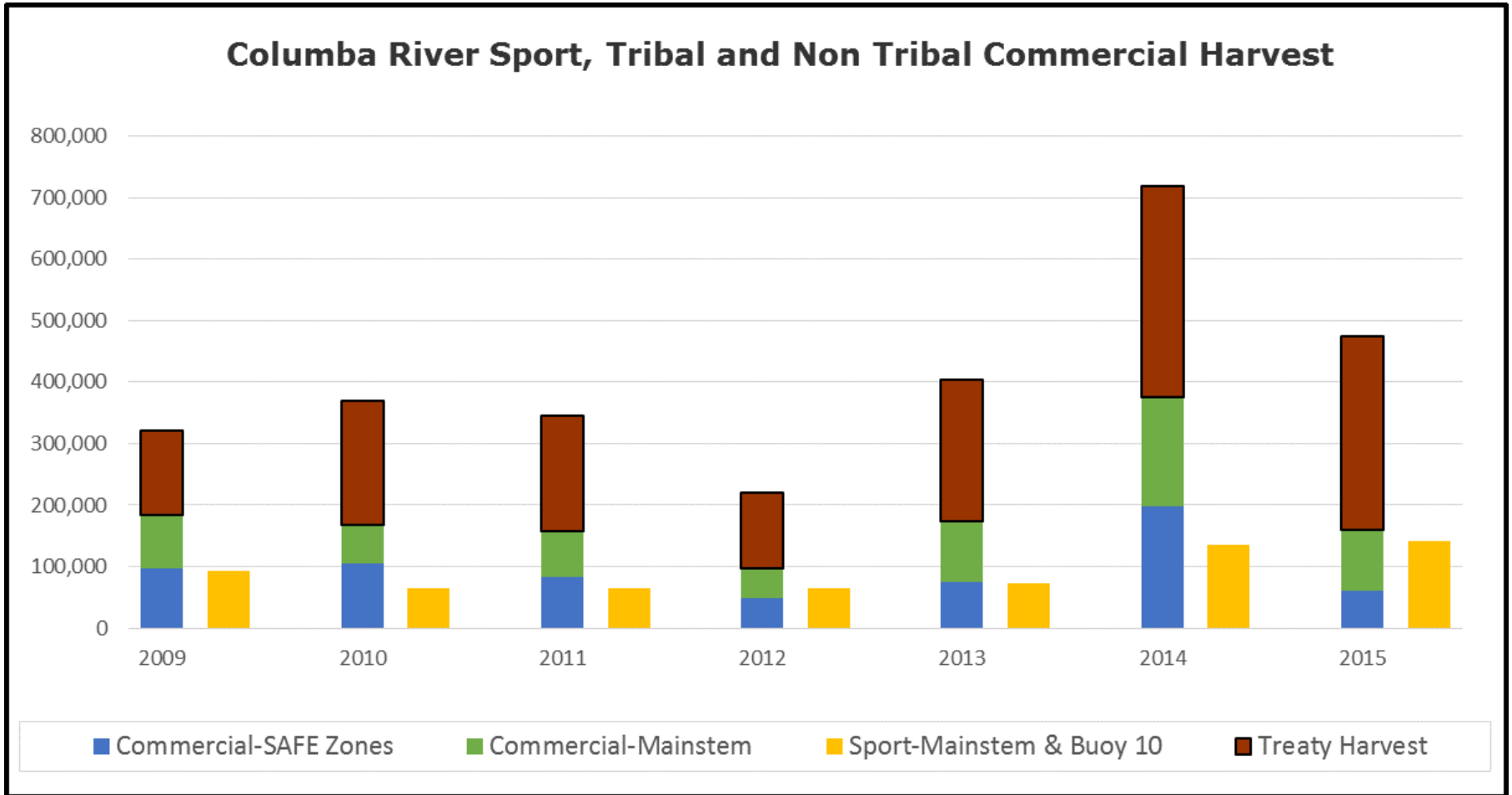
Source: Alaska Department of Fish and Game

Totals may not match due to rounding

* SE Region forecast not yet available.



Social Equity



SB 830/CR Reforms - a win-win during one of Oregon's greatest recessions

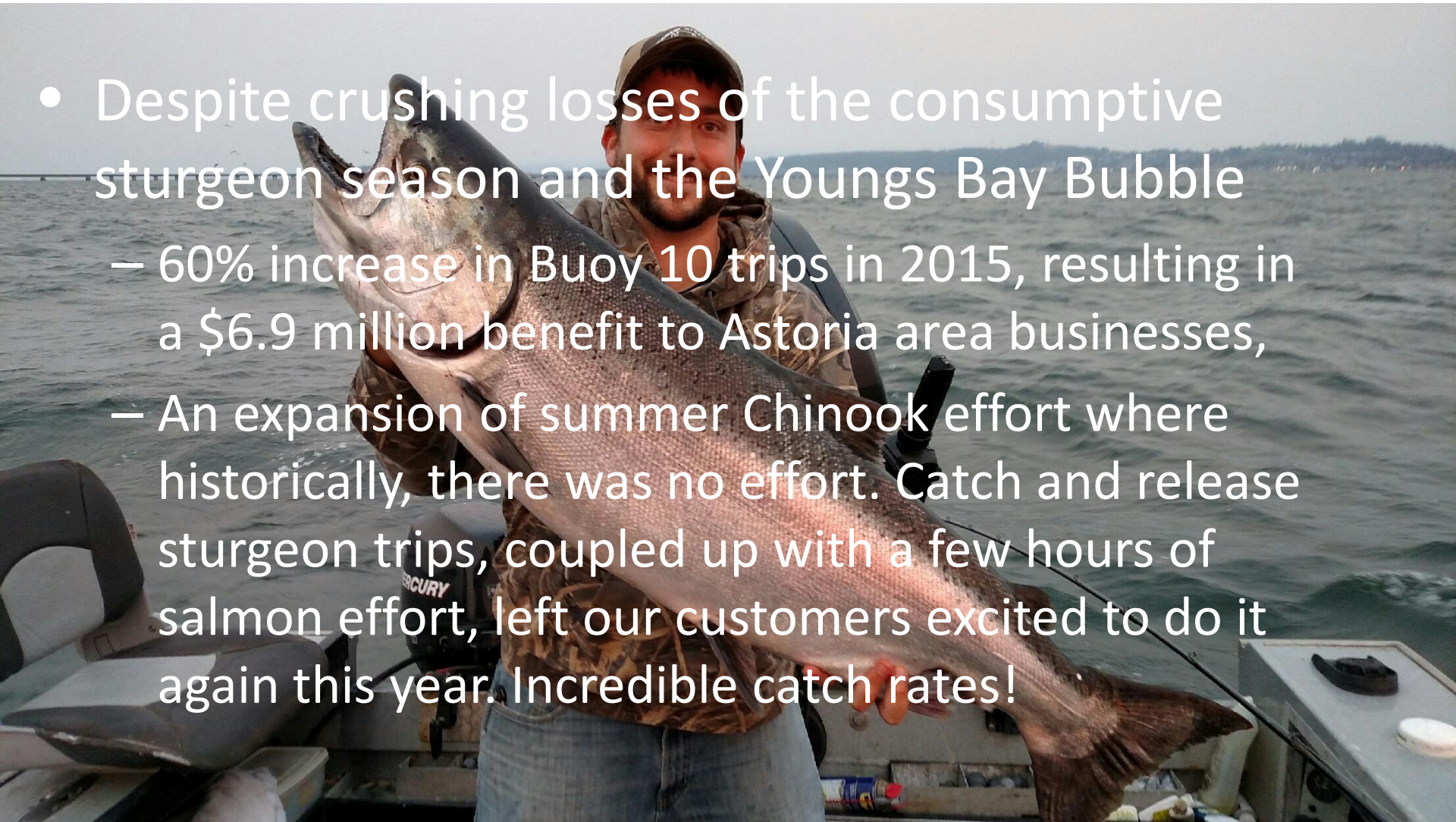
- Job growth was essential to Oregon's fiscal health
- Sportfishing was finally gaining traction as an industry
- The potential for growth was great, especially given our hard fought judicial wins for a flow and spill regime that dramatically improved survival of Columbia River salmon
- A better utilization of Snake River impacts due to lower mortality rates of sport-caught salmon

Governor Kitzhaber didn't want to cause harm to the commercial fleet and neither do we

- The plan is **EXCEEDING** its objectives:
 - 2014: Ex-vessel values EXCEEDED modeled values by 75% (mainstem and SAFE)
 - 2014: SAFE area coho landings were 150% higher than the previous high in 2003
 - Despite a poor coho showing, 2015 data suggests ex-vessel values will AGAIN surpass modeled expectations

Working for the sport fleet too

- Despite crushing losses of the consumptive sturgeon season and the Youngs Bay Bubble
 - 60% increase in Buoy 10 trips in 2015, resulting in a \$6.9 million benefit to Astoria area businesses,
 - An expansion of summer Chinook effort where historically, there was no effort. Catch and release sturgeon trips, coupled up with a few hours of salmon effort, left our customers excited to do it again this year. Incredible catch rates!



Spring Chinook trips up too



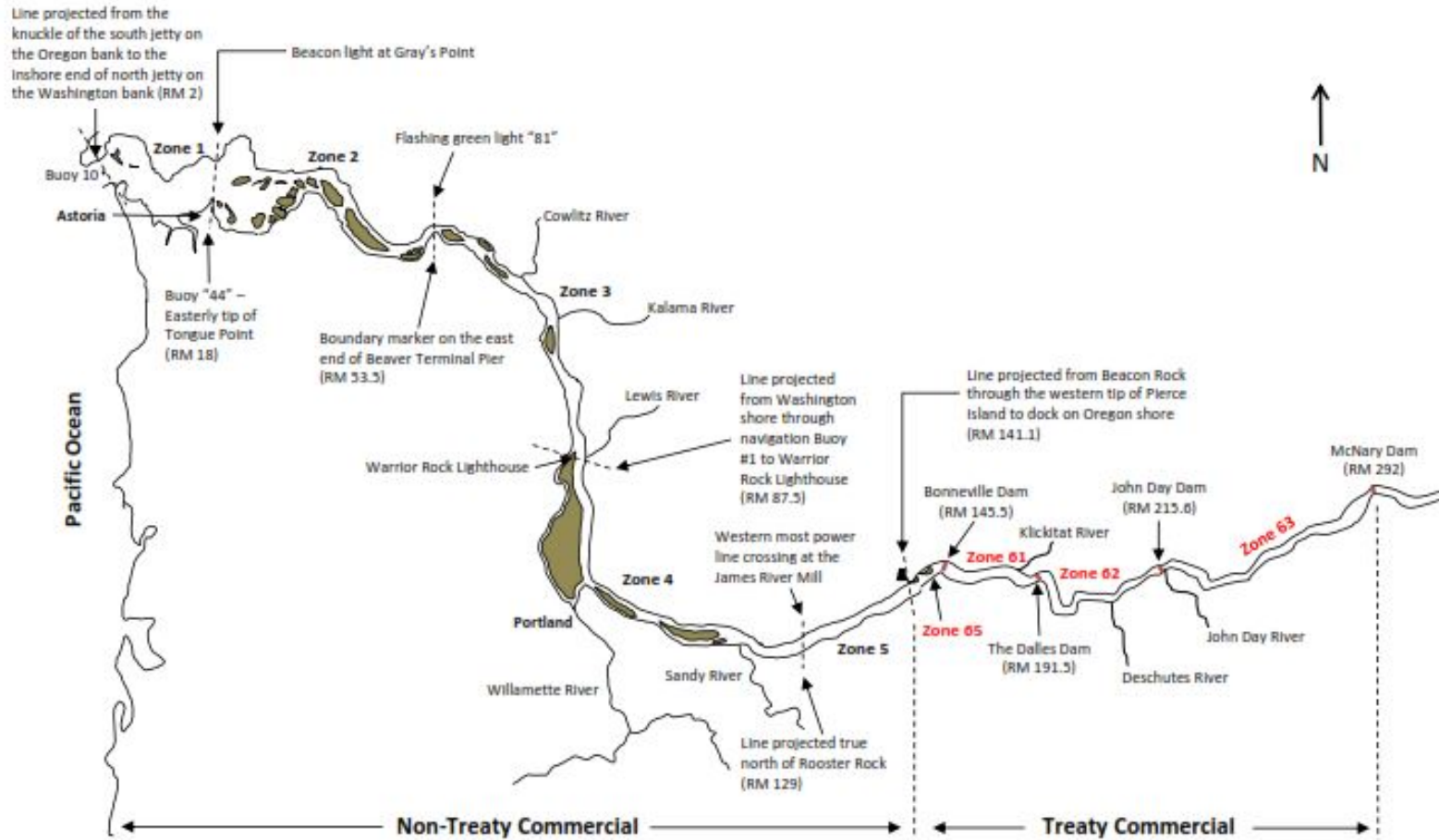
- Over 151,000 angler trips in 2015 – a 40% increase over 2013 and an estimated overall economic value of \$9.7 million.
- It appears effort is up in 2016 so far, spring Chinook catch in February of 2016 was as good as it was in 2003. People are fishing because they believe they have a chance at a spring Chinook, largely due to the lack of directed gillnet fisheries on the mainstem Columbia.

Selective Gear Testing (2009-2011)



- (2011): Purse Seine – 17,334 total catch/23 mortalities; Beach Seine – 12,054 total catch/6 mortalities. Grand total – 29,388 total catch / 29 mortalities – Observed Mortality Rate of 1/10th of 1% Steelhead – 2,892 handled/1 mortality.
- (2014): US v. OR Technical Advisory Committee (TAC) adopts nonsensical release mortality rates for purse seines: Chinook: 22.5%; Coho: 28.9%; Steelhead: 3.3%

Fall Gillnet Fishery



Commercial Fishing Zones on the Columbia River Below McNary Dam