Willapa Bay Salmon Management Policy C-3622 Comprehensive Review Document Public Meeting

Chad Herring
Anadromous Resources Policy Analyst

Washington Department of FISH and WILDLIFE

Presentation Outline

- Intent and Development
- Objectives
- Report Card
- Review Document Conclusion and Commissioner's Emphasis Questions
- Public Comment

Policy C-3622 Intent and Development

Policy Intent and Development

Intent

- Provide general guidance and management objectives for salmon management in Willapa Bay

Policy development

- September 2014 through June 2015
- Ad-Hoc Willapa Bay Advisory Group
- Commercial and recreational stakeholders

Public Input

- 4 public workshops/meetings
- 4 advisory group meetings
- 1 workshop for Pacific County Commissioners
- 6 presentations to Fish &Wildlife Commission (FWC)

Policy timeframe

- adopted June 2015 expires in 2023

Policy C-3622 Objectives

Policy Objectives

- Achieve restoration of wild salmon
- Avoid ESA designation
- Maintain or enhance economic well-being
- Appropriate distribution of fishing opportunities
- Enhanced transparency, information sharing, and improved technical rigor
- Restore and maintain public trust and support

Policy C-3622 Report Card

Policy C-3622 Report Card

Guiding Principles		
Prioritize restoration and conservation of wild salmon		Mixed, on-going
Work with partners to protect and restore habitat productivity		Mixed, on-going
Implement improved broodstock management		Mixed, pHOS not met in all areas
Investigate and promote the development and implementation of alternative selective gear		Mixed, only tangle nets tested
Work through the Pacific Salmon Commission and PFMC to promote conservation objectives		Mixed, on-going
Monitoring, sampling and enforcement programs to account for species impacts		Yes, implemented
In-season management actions to meet conservation and management objectives		Yes, implemented
Transparency of salmon management and catch accounting		Yes, implemented
Improved fishery management and technical tools		Mixed, on-going
Promote mark-selective fisheries		Yes, implemented

Policy C-3622 Report Card

Species Specific Guidance - Chinook Management		
Population designations - Willapa River; primary, Naselle River; contributing		Yes, implemented
20% impact rate on Willapa and Naselle River natural origin Chinook		Yes, pre-season
		No, post-season
Prioritize recreation fishing opportunities		Yes, implemented
Alternative gear set aside		Yes, pre-season
		No, post-season
Timing of commercial fisheries		Yes, implemented
Hatchery production		Mixed, not in all facilities

Policy C-3622 Report Card

Species Specific Guidance - Coho Management		
Population designations		Yes, implemented
Achieve aggregate spawner goal		Yes, pre-season
		No, post-season
Prioritize commercial fishing opportunities		Yes, implemented

Policy C-3622 Report Card

Species Specific Guidance - Chum Management		
Population designations		Yes, implemented
Achieve aggregate spawner goal		Yes, pre-season
		No, post-season
Prioritize commercial fishing opportunities		Yes, implemented
10% impact rate cap		Yes, implemented

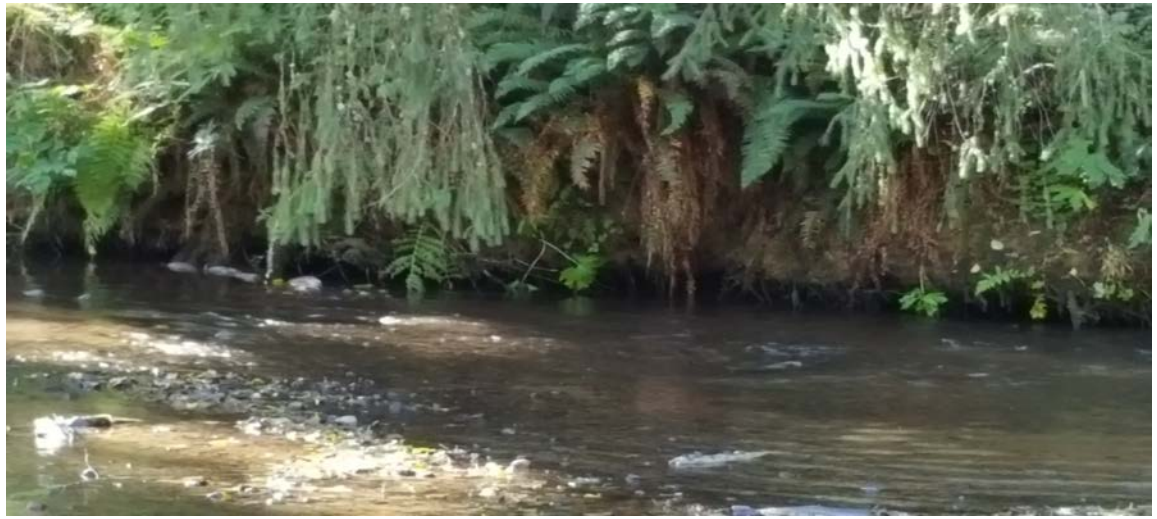
Policy C-3622 Report Card

Adaptive Management		
Conduct annual fishery management review		Yes
Improve in-season management		Mixed, on-going
Review spawner goals		Mixed, on-going
Comprehensive hatchery assessment		Yes
Ocean ranching report		Yes

Review Conclusion and Commissioner's Emphasis Questions

Comprehensive Review Conclusion

- Policy implementation has produced mixed results
- Preseason fishery planning has been shaped to meet policy objectives
- Increased fisheries monitoring and developed management tools
- Increased transparency and information sharing
- Natural origin spawning escapements for Chinook and chum have improved
- Coho abundances have declined across the North Pacific
- Commercial fisheries saw reduced catch and value, likely impacting effort
- Recreational fisheries saw increased catch and harvest proportions of Chinook and coho
- Reductions in hatchery Chinook programs will impact fishery sectors in the future
- Changes to recreational freshwater openings and bag limits have led to some enforcement challenges and negative landowner interactions



Commissioner's Emphasis Question #1

" What are the aggregate fishery impact rates and status of achieving the conservation goals of each species in the four years of policy implementation in comparison to the four-year period prior to the policy adoption?"

Discussion on pg. 27

Commissioner's Emphasis Question #1

- Post-season aggregate fishery impact rates
- Natural origin fish for Chinook and coho
- Fishery management objectives
  - Chinook – 20%
  - Chum – 10%
- % impact reduction
  - 56% Chinook
  - 27% coho
  - 65% chum

Year	Chinook	Coho	Chum
2011	24.6%	43.5%	4.2%
2012	42.2%	45.6%	38.1%
2013	28.1%	28.7%	9.6%
2014	57.2%	34.5%	12.4%
Avg. 11-14	***38.0%***	***38.1%***	***16.1%***
2015	22.2%	25.5%	6.8%
2016	21.5%	23.2%	6.6%
2017	14.5%	33.2%	2.8%
2018	8.1%	29.2%	6.4%
Avg. 15-18	***16.6%***	***27.8%***	***5.6%***

Commissioner's Emphasis Question #1

- Post-season aggregate spawning escapements
- Natural origin for Chinook and coho
- Chinook below goal in all years
  - 5% increase
- Coho only made objective in 2016
  - 52% decrease
  - Decrease in coho throughout the North pacific
- Chum made 3 out of 4
  - 29% increase

Year	Chinook	Coho	Chum
	obj = 4,353	**obj = 13,600**	**obj = 35,400**
2011	3,331	27,108	65,764
2012	2,057	18,648	25,519
2013	1,669	22,480	23,642
2014	1,936	46,760	25,612
Avg. 11-14	*2,248*	*28,749*	*35,134*
2015	2,043	10,366	44,147
2016	1,580	24,950	78,725
2017	3,008	8,750	20,191
2018	2,821	11,408	38,582
Avg. 15-18	*2,363*	*13,869*	*45,411*

Commissioner's Emphasis Question #4

"What is the average ex-vessel value of the commercial fishery landings in the four years of policy implementation in comparison to a four-year base period prior to the policy adoption, normalized to eliminate the variations in annual run sizes and annual price per pound?"

Discussion on pg. 97

Commissioner's Emphasis Question #4

- Post-season ex-vessel values normalized by runsize and price per pound
- Chinook decreased by 78%
- Coho decreased by 51%
- Chum decreased by 78%

Year	Chinook	Coho	Chum	Total
2011	$5.22	$4.22	$0.05	$9.48
2012	$4.51	$3.42	$3.83	$11.76
2013	$4.79	$1.85	-	$6.64
2014	$4.57	$2.87	$1.18	$8.62
Average	*$4.77*	*$3.09*	*$1.69*	*$9.13*
2015	$1.22	$0.29	$0.57	$2.08
2016	$1.41	$2.48	$0.52	$4.42
2017	$1.05	$1.48	-	$2.53
2018	$0.60	$1.80	$0.06	$2.46
Average	*$1.07*	*$1.51*	*$0.38*	*$2.87*

GDP adjusted to 4th quarter 2019

Commissioner's Emphasis Question #5

"What is the number of angler trips during the four years of policy implementation in comparison to a four-year base period prior to the policy adoption, normalized to eliminate the variability of annual run sizes?"

Discussion on pg. 93

Commissioner's Emphasis Question #5

Year	Angler trips	Angler trips/ Run size
2011	14,388	2.72
2012	10,043	2.21
2013	5,328	2.01
2014	12,668	2.61
Average	*10,607*	*2.39*
2015	21,453	4.95
2016	27,961	11.49
2017	21,500	5.85
2018	9,254	2.91
Average	*20,042*	*6.30*

- Angler trips calculated for Marine Area 2-1
- Catch per unit effort (CPUE) data unavailable for freshwater fisheries
  - Different watersheds targeting different species
  - Hatchery supplemented vs. non supplemented streams
- Pre policy data uses average CPUE data observed during 2015-18 monitoring
  - CPUE of 0.259
- MA 2-1 angler trips increased 189%
  - 263% when accounting for annual runsizes

Commissioner's Emphasis Question #14

"With the understanding that department staff as a whole is constantly in a mode of incorporating improvements in technical fishery management capabilities as new approaches or refinements are vetted, even when minor, what are the three most significant advancements in technical fishery management capabilities for Willapa Bay salmon over the course of the Policy to date?"

Discussion on pg. 33

Commissioner's Emphasis Question #14

- Increased monitoring of estuarine recreational and commercial fisheries
  - Allows for real time estimates of harvest/impacts and effort
  - Ability to compare preseason predicted values to in-season estimates
  - Adaptive management in order to ensure attainment of fishery management objectives

- In-season runsize update model for coho
  - Utilizes historic temporal catch per unit effort (CPUE) data from commercial fisheries
  - Adaptive management in order to ensure attainment of fishery management objectives

- Coded wire tag (CWT) based analysis of hatchery contributions to estuary fisheries
  - Ability to predict river specific Chinook harvest/impact rates in estuary fisheries
  - Updated annually from commercial and recreational fishery monitoring
  - CWT programs reconfigured in 2016 to increase accuracy and precision of estimates

Commissioner's Emphasis Question #17

"Has there been an increase in the overall number of natural-origin chinook spawners in the Willapa basin, or an increase in specific river systems?"

Discussion on pg. 66

Commissioner's Emphasis Question #17

Year	Willapa Bay NOS goal: 4,353		North/Smith Primary NOS goal: 991		Willapa River Primary NOS goal: 1,181		Naselle River Contributing NOS goal: 1,546	
	NOS	HOS	NOS	HOS	NOS	HOS	NOS	HOS
2011	3,331	13,998	298	0	1,473	3,494	1,415	9,240
2012	2,057	9,035	168	0	1,191	2,319	581	6,294
2013	1,669	6,530	113	0	481	1,621	767	3,390
2014	1,936	8,107	99	89	784	2,196	975	4,150
Avg. 11-14	**2,248**	**9,418**	**170**	**22**	**982**	**2,408**	**935**	**5,769**
2015	2,043	5,488	173	0	1,064	2,476	483	1,048
2016	1,580	4,592	194	0	575	2,420	597	1,786
2017	3,008	6,276	206	0	1,219	3,746	1,172	403
2018	2,821	3,371	366	0	1,623	1,923	679	814
Avg. 15-18	**2,363**	**4,932**	**235**	**0**	**1,120**	**2,641**	**733**	**1,013**

Commissioner's Emphasis Question #17

Year	Bear River			Palix River			Nemah River		
	Stabilizing NOS goal: 306			Stabilizing NOS goal: 104			Stabilizing NOS goal: 204		
	NOS	HOS	Total	NOS	HOS	Total	NOS	HOS	Total
2011	25	0	25	23	0	23	97	1264	1361
2012	15	0	15	11	0	11	91	422	513
2013	60	0	60	23	0	23	225	1519	1744
2014	30	0	30	29	0	29	19	1672	1691
Average 11-14	**33**	**0**	**33**	**22**	**0**	**22**	**108**	**1,219**	**1,327**
2015	211	0	211	77	144	221	35	1820	1855
2016	31	0	31	17	16	33	166	370	536
2017	120	0	120	42	0	42	249	2127	2376
2018	0	0	0	52	0	52	101	634	735
Average 15-18	**91**	**0**	**91**	**47**	**40**	**87**	**138**	**1,238**	**1,376**

Commissioner's Emphasis Question #21

"What has been the chinook recreational fishery impact rate 2015-18 and the four years prior to Policy adoption?"

Discussion on pg. 59

Commissioner's Emphasis Question #21

- Recreational impact rate on natural origin Chinook in Willapa Bay fisheries
  - Marine and freshwater
- Mark selective fisheries across all years
- 28% increase in impact rate
- Active marine area monitoring led to more robust accounting of impacts
  - Occurred incrementally through policy implementation years
  - Not apples to apples comparison

Year	Chinook Impact Rate
2011	3.33%
2012	4.45%
2013	8.58%
2014	6.04%
Average 11-14	*5.60%*
2015	10.32%
2016	9.25%
2017	6.31%
2018	2.95%
Average 15-18	*7.21%*

Commissioner's Emphasis Question #27

"What are the actual fall chinook production and release location specifics for the hatcheries listed and how does this compare to the four years prior to Policy adoption?"

Discussion on pg. 62

Commissioner's Emphasis Question #27

Brood Year	Facility		
	Forks Creek Hatchery	Nemah Hatchery	Naselle Hatchery
2011	3,189,750	2,143,965	878,100
2012	3,227,824	2,670,865	940,800
2013	3,166,719	3,260,505	850,000
2014	3,221,073	3,264,062	749,265
Average	*3,201,342*	*2,834,849*	*854,541*
2015	379,192	3,259,623	788,229
2016	368,537	3,185,438	2,499,279
2017	365,864	3,358,383	2,531,859
2018	374,500	3,359,009	2,567,614
Average	*372,023*	*3,290,613*	*2,096,745*

- All releases of Chinook smolts are conducted on-station

Commissioner's Emphasis Question #33

"Over the course of 2015-18, was the policy intent of this provision, including 3.a and 3.b, achieved? If any of the fishery impact rate specifications were implemented 2015-18, what were the pre-season and post-season fishery impact rates for those particular years?"

Discussion on pg. 82

Commissioner's Emphasis Question #33

- Chum fishery management objective #3
  - Unless goal met 2 consecutive years
  - 10% impact rate cap and no fisheries from Oct. 15-31
  - Achieved in 2017
    - Pre-season plan to require release
- 3.a calls for a 10% impact rate cap if;
  - Spawners less than goal in 3 out of 5 previous years
  - Fisheries planned to meet 10% rate cap in all years
  - Post season estimates lower than preseason prediction
- 3.b calls for a 5% impact rate cap if;
  - Forecast < 85% of escapement objective
  - Was not required in all years

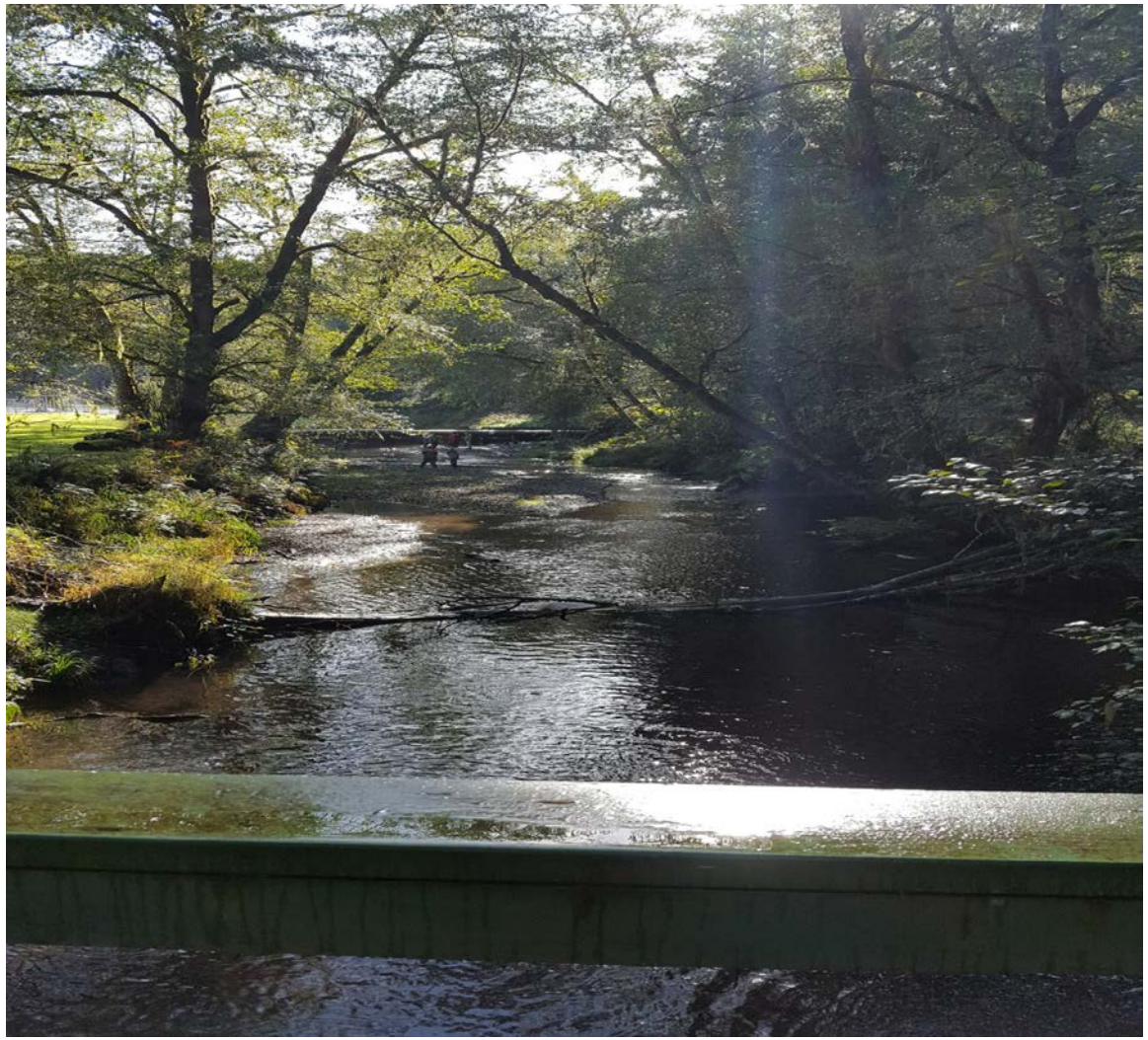
Year	Preseason Prediction	Postseason Estimate
2015	10.0%	6.8%
2016	9.9%	6.6%
2017	10.0%	2.8%
2018	9.0%	6.4%
Average	*9.7%*	*5.6%*

Public Comment

Public Comment

- 12 Advisory group or public meetings/workshops
  - Between Jan 23, 2018 and Aug 18, 2020
  - Agendas, meeting materials, and audio on webpage
  - Notes attached as Appendix 6
  - https://wdfw.wa.gov/about/advisory/wbsag

- Comments submitted through online portal and/or Willapabay@dfw.wa.gov
  - 21 Comments submitted to date
  - https://wdfw.wa.gov/about/commission/willapa-bay-policy-review



Public Comment

- The policy has ruined current sport and commercial fisheries
- Eliminate commercial gillnets use in Willapa Bay
- Increase hatchery production to return to old fish numbers
- Percentage based harvesting by applying and removing limits
- Stop distinguishing between hatchery fish and wild fish. There is no differences in genetics based on WDFW study
- Lack of collaboration on the Willapa Policy with advisors outside WDFW
- Commercial opportunity is not economically feasible
- Policy was never fully implemented
- Payback was never implemented when harvest rate was exceeded
- Can the North River protection be made permanent
- Abandon current C-3622 policy
- Don't shift Forks Creek egg production to Nemah and Naselle
- No clear metrics for hatchery reform
- Pre-policy pHOS numbers were due to hatchery operations
- Differences in NOR:HOR ratios in fisheries vs spawning grounds
- More education with FWC regarding how habitat restoration works in WA. There is confusion on whose job duty it is.
- Maximize hatchery production at all facilities
- Eliminate harvest priorities for specific fishery sectors
- Survival of Chinook is poor in Naselle and Nemah rivers

Questions