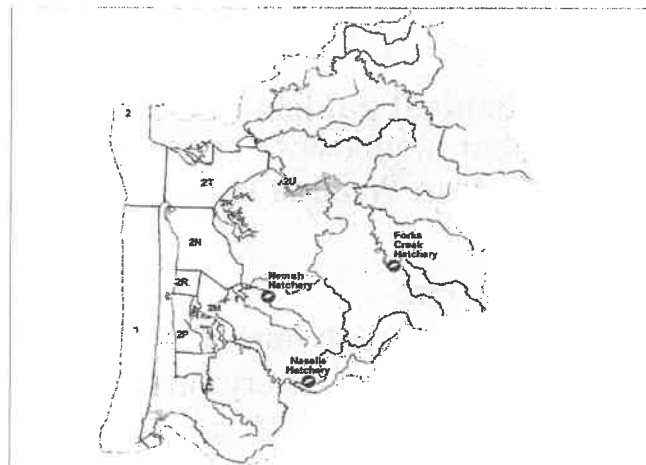


## Willapa Bay Salmon Management Policy C-3622



Chad Herring – South Coast Fishery Policy Lead  
Washington Fish and Wildlife Commission Meeting  
November 2, 2018

1

## Presentation Outline

- Willapa Bay Salmon Management Policy Background
  - Intent and Policy Development
  - Objectives and Guiding Principles
  - Species Specific Guidance
- Proposed Policy Review Process

## **Willapa Bay Salmon Management Policy Background**

---

- Intent
  - Provides 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

## **Willapa Bay Salmon Management Policy Background**

---

- Policy development (continued)
  - 4 public workshops/meetings
  - 4 advisory group meetings
  - 1 workshop for Pacific County Commissioners
  - 6 presentations to Fish & Wildlife Commission (FWC)
- Policy adopted June 2015
- Policy expires in 2023

## Willapa Bay Salmon Management Policy Background

---

- 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

WA Dept. of Fish and Wildlife, Information subject to  
changes and amendments over time

Commission Presentation  
November 2, 2018

5

## Willapa Bay Salmon Management Policy Background

---

- Guiding Principles
  - #3 - Improve broodstock management, HSRG standards
  - #4 - Alternative selective gear in commercial fisheries
  - #7 - Adequately account for species impacts
  - #8 – Implement in season management
  - #9 – Transparent salmon management
  - #10 - Improve fishery management tools

WA Dept. of Fish and Wildlife, Information subject to  
changes and amendments over time

Commission Presentation  
November 2, 2018

6

## **Willapa Bay Salmon Management Policy Background**

---

- **Chinook Guidance**
  - Two-phase rebuilding program
  - Achieve broodstock management standards by 2020
  - Achieve spawner goals in years 16 – 21
  - Full recreational fishing season with increased participation and catch
  - Population designations
    - Willapa-primary, Naselle-contributing
  - Maintain rebuilding trajectory

## **Willapa Bay Salmon Management Policy Background**

---

- **Phase One 2015 - 2018**
  - 20% impact rate cap for Willapa and Naselle
  - Alternative gear set aside for commercial fishery
  - No commercial fisheries until after Labor Day in south
  - No commercial fisheries prior to 9/16 in north

### **Phase Two - 2019 forward**

- 14% impact rate cap

## **Willapa Bay Salmon Management Policy Background**

---

- Coho Guidance
  - Achieve aggregate spawner goal for natural origin Coho
  - Prioritize commercial fishing opportunities
    - September 16 through October 14
  - Provide recreational fishing opportunities

## **Willapa Bay Salmon Management Policy Background**

---

- Chum Guidance
  - Achieve aggregate spawner goal for naturally spawning chum
  - Provide commercial fishing opportunities
  - Provide recreational fishing opportunities
  - 10% terminal impact rate cap

## Proposed Policy Review Process

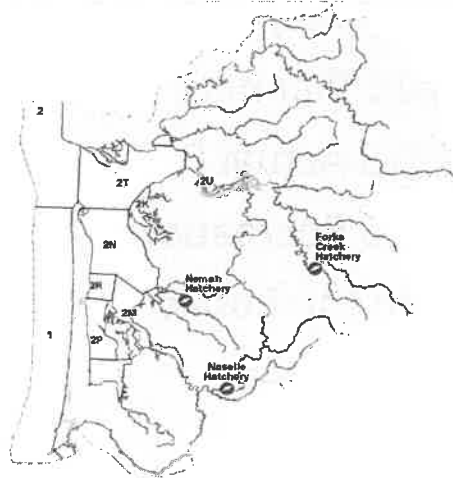
- Development of review questions
  - FWC/WDFW
  - Willapa Bay Salmon Advisory Group (WBSAG)
- Workshops to go over data relevant to review questions
- Analysis of data and results presentation to FWC

## Proposed Policy Review Process

- Timeline and public involvement

Type	Purpose	Date	Status
Public workshop	Public feedback on policy	Jan 23, 2018	Completed
WBSAG	Proposed process, review public feedback	Sept 14, 2018	Completed
WBSAG - rec	Review questions development	Oct 23, 2018	Completed
WBSAG - comm	Review questions development	Oct 24, 2018	Completed
FWC	Proposed process, commissioner feedback	Nov 2, 2018	Scheduled
WBSAG	Review of relevant data	Nov/Dec 2018	Proposed
FWC	Briefing on progress to date	Dec 2018	Proposed
WBSAG	Development of detailed responses	Jan 2019	Proposed
FWC	Briefing on progress to date	Jan 2019	Proposed
FWC	Presentation and seek approval of final report	Feb 2019	Proposed

## Willapa Bay Salmon Management Policy 2015 Season Review



Chad Herring – Fish Program  
Washington Fish and Wildlife Commission Meeting  
February 27, 2016

1

## Purpose

- Brief Commission on implementation of the Willapa Bay Salmon Management Policy
- Report on public feedback

2

## **Presentation Outline**

---

- Review of Key Policy Elements
- Review of 2015 Planning
- Report on 2015 Actual Performance
- Report on 2015 Recreational Monitoring
- Feedback from the Public
- 2016 Implementation

## **Key Policy Elements**

---

- Enhance Conservation Focus
- Reduce Gear Conflict



## Enhance Conservation Focus

---

- **Implement Phase I: Chinook Rebuilding**
  - 20% harvest rate limit on Naselle and Willapa River stocks
- **Pursue Alternative Commercial Gears**
  - Additional mark selective fishery opportunities
  - 1% of commercial impacts
- **Hatchery Production**
  - 350K at Forks Creek Hatchery for 2015 brood year

## Reduce Gear Conflict

---

### Chinook Fishery Management

- No commercial fisheries in areas 2T and 2U prior to September 16.
- No commercial fisheries in areas 2M, 2N, 2P and 2R until after Labor Day.

## Review of 2015 Planning

---

- Constraining stocks
  - Chinook and Chum
- Crafted fisheries to comply with key policy elements
- Crafting alternative gear use on Naselle River Chinook was difficult

## 2015 Actual Performance

---

- **Recreational Fishery**
  - CRC estimates for 2015 season not available
  - Extremely productive very early in the season
  - Difficult to assess impacts
  - Need for additional monitoring
- **Commercial Fishery**
  - Chinook catch rate higher than expected
  - Could be due to forecasting, build-up issues and drought
- **Total Collapse of Coho Fishery**
  - Commercial fishery – Scheduled 27 days in Sept. & Oct. plus 20 days in Nov. but only fished 10 days in Sept.- Oct. and no time in Nov.
  - Recreational fishery limited to areas below hatcheries and mark selective

## 2015 Actual Performance

- **Chum**
  - Arrived earlier than normal
  - Couldn't find a way to access without impacting Coho in order to provide commercial opportunity
- **Chinook Pre-Spawn Mortality**
  - Drought related
  - Highest on Naselle River, also observed in Nemah and Willapa Rivers

## 2015 Actual Performance

### Willapa Bay Fall Chinook - Naturals

Metric	Objective	Pre-Season	Actual*
Runsize		3,835	4,160
Spawners	4,353	3,100	2,043
Harvest Rate for Willapa/Naselle	20%/20%	20%/18.8%	15.7%/19.3%
Alternative Gear Willapa/Naselle	1%/1%	6.5%/1.1%	2.5%/0.4%

\* Preliminary data subject to change

## 2015 Actual Performance

### Willapa Bay Fall Chinook - Hatchery

Metric	Pre-Season	Actual*
Runsize	30,983	40,672
Escapement	18,394	28,845
Total Harvest Rate	40.6%	29.1%

\* Preliminary data subject to change

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 27, 2016

11

## 2015 Actual Performance

### Willapa Bay Coho - Naturals

Metric	Objective	Pre-Season	Actual*
Runsize		38,505	18,112
Spawners	13,090	26,795	13,689

### Willapa Bay Coho - Hatchery

Metric	Pre-Season	Actual*
Runsize	41,116	22,722
Escapement	24,262	17,813

\* Preliminary data subject to change

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 27, 2016

12

## 2015 Actual Performance

### Willapa Bay Fall Chum

Metric	Objective	Pre-Season	Actual*
Runsize		39,994	48,756
Spawners	35,400	35,986	45,044
Harvest Rate	10%	10%	6.8%

\* Preliminary data subject to change

## 2015 Actual Performance

### Commercial Catch

Species	Pre-Season	Actual*
Chinook	5,143	4,858
Coho	23,314	1,929
Chum	3,243	2,833

\* Preliminary data subject to change

## 2015 Actual Performance

### Natural Origin Spawner Escapements

Species	Basin	Goal	Actual <sup>2</sup>	% of Goal
Chinook	North	991	173	17%
	Willapa	1,181	1,064	90%
	Palix	104	77	74%
	Nemah	224	35	16%
	Naselle	1,547	483 <sup>1</sup>	31%
	Bear	306	211	69%
Coho*	--	13,090	13,689	105%
Chum	--	35,400	45,044	127%

\* Escapement estimated using in-season update model

<sup>1</sup> Does not include 532 pre-spawn mortalities and 522 mortalities at the Naselle Hatchery

<sup>2</sup> Preliminary data subject to change

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 27, 2016

15

## 2015 Actual Performance

### Chinook Pre-Spawn Mortality - Females

	Natural	Hatchery
Naselle	532	1,865
Nemah	4	345
Willapa	18	96

\* Preliminary data subject to change

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 27, 2016

16

## 2015 Actual Performance

### Willapa Bay Hatchery Surpluses - Hatchery

Species	Forks Creek	Nemah	Naselle	Total
Chinook	12,012	72	3,494	15,578
Coho	2,454	0	6,284	8,738
Chum	4	0	0	4

Preliminary data subject to change

## 2015 Recreational Monitoring

- **Creel Sampling – Marine Area 2.1 Tokeland**
  - From Aug. 8 – Sept. 20
  - 16 days sampled
  - 285 boats
    - 708 anglers
- **Voluntary Trip Reports**
  - From July 23 – Sept. 18
  - 275 VTR forms handed out
  - 72 VTR forms returned
    - 136 anglers

## 2015 Recreational Monitoring

		Creel	VTR
Chinook	Kept - Ad Clipped	306	87
	Kept - Unmarked	0	2
	Released - Ad Clipped	4	1
	Released - Unmarked	116	33
Coho	Kept - Ad Clipped	74	80
	Kept - Unmarked	61	43
	Released - Ad Clipped	3	0
	Released - Unmarked	2	1
Chum		0	0

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 27, 2016

19

## Public Feedback

- Commercial fishery
  - Was not a viable fishery
  - Throw out the “Willapa Plan”
  - Harvest rate on unmarked Chinook should be capped at 30%
  - Did not like depending on Coho fishery for harvest especially when the Coho fishery collapsed
  - Did not like less access to Chinook
  - Should have been allowed to access Chinook that died in the rivers
  - Increase Chinook production at all Willapa Bay hatcheries

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 27, 2016

20



## Public Feedback

---

- **Recreational Fishery**
  - Mostly positive for Chinook fishery except limits were too liberal
  - Emergency regulations for Coho were too restrictive
  - Department prioritized recreational fishery over conservation
  - Better monitoring of recreational fishery is necessary

## 2016 Policy Implementation

---

- **Constraining stocks**
  - Willapa River Fall Chinook – 20%
  - Naselle River Fall Chinook – 20%
  - Willapa Bay Chum – 10%
- **Implement change of the natural origin Coho escapement goal to 13,600 from 13,090**
- **Continue to explore alternative gear**
- **Review the Chum natural spawning escapement goal**
- **New tools for in-season updates seemed to work in 2015 for Coho and Chum**
  - Will continue to refine those
- **Address hatchery operations for natural origin Chinook**
- **Ocean Ranching Report**

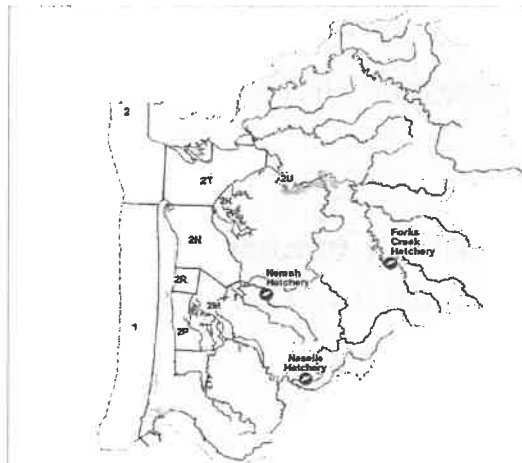
# Questions?

WA Dept. of Fish and Wildlife, information subject to  
changes and amendments over time

Commission Presentation  
February 27, 2016

23

## Willapa Bay Salmon Management Policy 2016 Season Review



Chad Herring – Fish Program  
Washington Fish and Wildlife Commission Meeting  
February 11, 2017

1

## Presentation Outline

- Review of Key Policy Elements
  - Enhance conservation focus
  - Reduce gear conflict
- Review of 2016 Planning
- Report on 2016 Preliminary Performance
- Report on 2016 Recreational Monitoring
- 2017 Implementation

## **Enhance Conservation Focus**

---

- **Implement Phase I: Chinook Rebuilding**
  - 20% harvest rate limit on Naselle and Willapa River stocks
- **Pursue Alternative Commercial Gears**
  - Additional mark selective fishery opportunities
  - 6% of commercial impacts

## **Reduce Gear Conflict**

---

### **Chinook Fishery Management**

- No commercial fisheries in areas 2T and 2U prior to September 16.
- No commercial fisheries in areas 2M, 2N, 2P and 2R until after Labor Day.

## Review of 2016 Planning

---

- **Constraining stocks**
  - Chinook
  - Chum
  
- **Crafted fisheries to comply with key policy elements**
  
- **Alternative gear proposals**

## 2016 Preliminary Performance

---

- **Recreational Fishery**
  - CRC estimates for 2016 season not available
  - Difficult to assess impacts
  - Need for additional monitoring
  - Local vs. non local
  - Landowner issues
  
- **Commercial Fishery**
  - Scheduled 50 openers
  - Actual 42 openers
  - Chum concern
  - Tangle net

## 2016 Preliminary Performance

---

- **Chinook**
  - Baseline genetic analysis
  - Challenging river flows
  - Lower than predicted natural origin return
- **Coho**
  - Hatchery runsize higher than predicted
  - Carcass recoveries
- **Chum**
  - Lots of Chum
  - In-season runsize update (ISU)

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 11, 2017

7

## 2016 Preliminary Performance

---

### Willapa Bay Fall Chinook - Naturals

Metric	Objective	Pre-Season	Actual*
Runsize		3,261	2,476
Spawners	4,353	2,610	1,581
Harvest Rate for Willapa / Naselle	20% / 20%	19.5% / 19.4%	25.1% / 25.0%
Alternative Gear Willapa / Naselle	2% / 2%	6.8% / 11.0%	2.7% / 2.7%

\* Preliminary data subject to change

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 11, 2017

8

## 2016 Preliminary Performance

### Willapa Bay Fall Chinook - Hatchery

Metric	Pre-Season	Actual*
Runsize	36,186	22,992
Escapement	19,977	12,766
Total Harvest Rate	44.8%	44.1%

\* Preliminary data subject to change

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 11, 2017

9

## 2016 Preliminary Performance

### Willapa Bay Coho - Naturals

Metric	Objective	Pre-Season	Preliminary*
Runsize		37,069	33,233
Spawners	13,600 <sup>1</sup>	26,012	24,946

<sup>1</sup> WDFW goal; PFMC goal 17,200 naturally spawning Coho

### Willapa Bay Coho - Hatchery

Metric	Pre-Season	Preliminary*
Runsize	23,810	42,920
Escapement	15,535	22,672

\* Preliminary data subject to change

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 11, 2017

10

## 2016 Preliminary Performance

### Willapa Bay Fall Chum

Metric	Objective	Pre-Season	Actual*
Runsize		47,555	86,475
Spawners	35,400	42,855	80,748
Harvest Rate	10%	9.9%	6.6%

\* Preliminary data subject to change

## 2016 Preliminary Performance

### Commercial Landed Catch

Species	Pre-Season	Actual*
Chinook	7,512	3,144
Coho	12,512	19,304
Chum	4,425	5,183

\* Does not include estimated impacts and drop off

\* Preliminary data subject to change



## 2016 Preliminary Performance

### Natural Origin Spawner Escapements

Species	Basin	Goal	Actual <sup>2</sup>	% of Goal
Chinook	North	991	194	20%
	Willapa	1,181	575	49%
	Palix	104	17	16%
	Nemah	224	154	69%
	Naselle	1,547	597	39%
	Bear	306	31	10%
Coho	--	13,600	24,946 <sup>1</sup>	183%
Chum	--	35,400	80,748	228%

<sup>1</sup> Escapement estimated using in-season update model

<sup>2</sup> Preliminary data subject to change

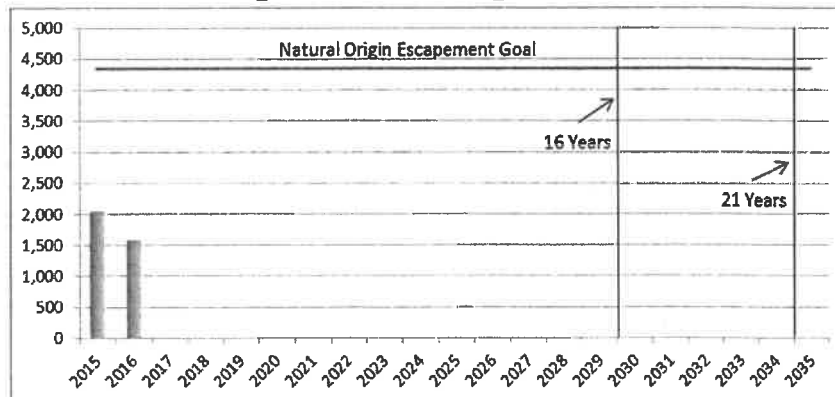
WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 11, 2017

13

## 2016 Preliminary Performance

### Willapa Bay Chinook Natural Origin Spawner Escapement



Preliminary data subject to change

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 11, 2017

14

## 2016 Preliminary Performance

### Chinook Pre-Spawn Mortality - Females

Basin	Natural		Hatchery	
	2015	2016	2015	2016
Naselle	532	24	1,865	5
Nemah	4	0	345	0
Willapa	18	0	96	0

Preliminary data subject to change

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 11, 2017

15

## 2016 Preliminary Performance

### Willapa Bay Hatchery Surpluses - Hatchery

Species	Forks Creek	Nemah	Naselle	Total
Chinook	2,598	901	1,019	4,518
Coho	4,755	19	8,549	13,323
Chum	20	0	0	20

Preliminary data subject to change

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 11, 2017

16

## 2016 Recreational Monitoring

- **Creel Sampling**
  - **Marine Area 2.1 Tokeland & South Bend**
  - From August 1 – September 18, 2016
  - 44 days sampled
  - 1,414 interviews
    - 3,348 anglers
- **Voluntary Trip Reports (VTR's)**
  - From August 2 – September 15, 2016
  - 360 VTR forms handed out
  - 73 VTR forms returned
    - 20.3% return
    - 168 anglers

## 2016 Recreational Monitoring

Species	Status	Creel	VTR
<b>Chinook</b>	<b>Kept - Ad Clipped</b>	<b>646</b>	<b>49</b>
	<b>Kept – Unmarked</b>	<b>3</b>	<b>5</b>
	<b>Released - Ad Clipped</b>	<b>20</b>	<b>5</b>
	<b>Released - Unmarked</b>	<b>232</b>	<b>22</b>
<b>Coho</b>	<b>Kept - Ad Clipped</b>	<b>151</b>	<b>12</b>
	<b>Kept - Unmarked</b>	<b>54</b>	<b>0</b>
	<b>Released - Ad Clipped</b>	<b>2</b>	<b>0</b>
	<b>Released - Unmarked</b>	<b>3</b>	<b>0</b>
<b>Chum</b>	<b>Released</b>	<b>1</b>	<b>0</b>

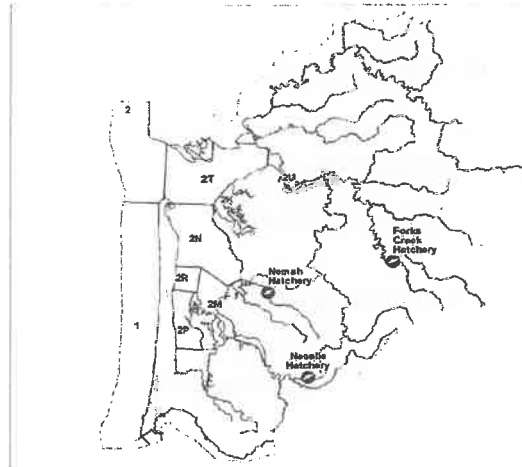
## 2017 Policy Implementation

---

- **Constraining stocks**
  - Willapa River Fall Chinook – 20%
  - Naselle River Fall Chinook – 20%
  - Willapa Bay Chum – 10%
- **Continue to explore alternative gear**
  - Floating pontoon fish trap
- **New tools for in-season updates seemed to work in 2016 for Coho and Chum**
  - Will continue to refine those
  - Chinook ISU
- **Wild Future Initiative**

# Questions?

## Willapa Bay Salmon Management Policy



Annette Hoffmann– Fish Program  
Washington Fish and Wildlife Commission Meeting  
March 18, 2017

1

## Presentation Outline

- Policy Overview
- Review 2016 Data
- What does it all mean?
- Rebuilding Trajectory

## Willapa Bay Policy Overview

- Key policy elements
  - Enhanced conservation focus
  - Gear conflict
- Chinook fishery management objectives
  - Achieve spawner goals for North, Naselle, and Willapa River stocks
  - Provide enhanced recreational season
    - Anticipated impact rate of 3.2% initially
  - Commercial opportunity with remaining impacts

## Willapa Bay Policy Overview

- Chinook fishery and species – specific guidance

### 7) Maintaining Rebuilding Trajectory

“If the postseason estimate of aggregated natural-origin Chinook salmon mortality exceeds the preseason projection, the Department staff shall make a recommendation to the Commission regarding an adjustment to the allowable impacts for the subsequent year. The recommendation shall be based upon the percentage by which the postseason estimate of impacts exceeded the preseason projection, but may consider other factors such as the predicted abundance or other relevant factors”

## Review 2016 Data

---

- Willapa Bay natural-origin Chinook
  - Terminal runsize

Forecast	Actual*	Proportion
3,258	2,447	75%

- Total fishery impacts

Predicted		Actual*	
#	Impact Rate	#	Impact Rate
651	20.0%	535	21.9%

\*Preliminary data subject to change

## Review 2016 Data

---

- Commercial fishery impacts

Predicted		Actual*	
#	Impact Rate	#	Impact Rate
493	15.1%	298	12.2%

\* Preliminary data subject to change

## Review 2016 Data

- Recreational fishery impacts

Marine Impacts				Freshwater Impacts				Total Rec Impacts			
Predicted		Actual*		Predicted		Actual*		Predicted		Actual*	
#	%	#	%	#	%	#	%	#	%	#	%
92	2.8%	124	5.1%	66	2.0%	113	4.6%	158	4.8%	237	9.7%

\*Preliminary data subject to change

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
March 18, 2017

7

## What Does It All Mean

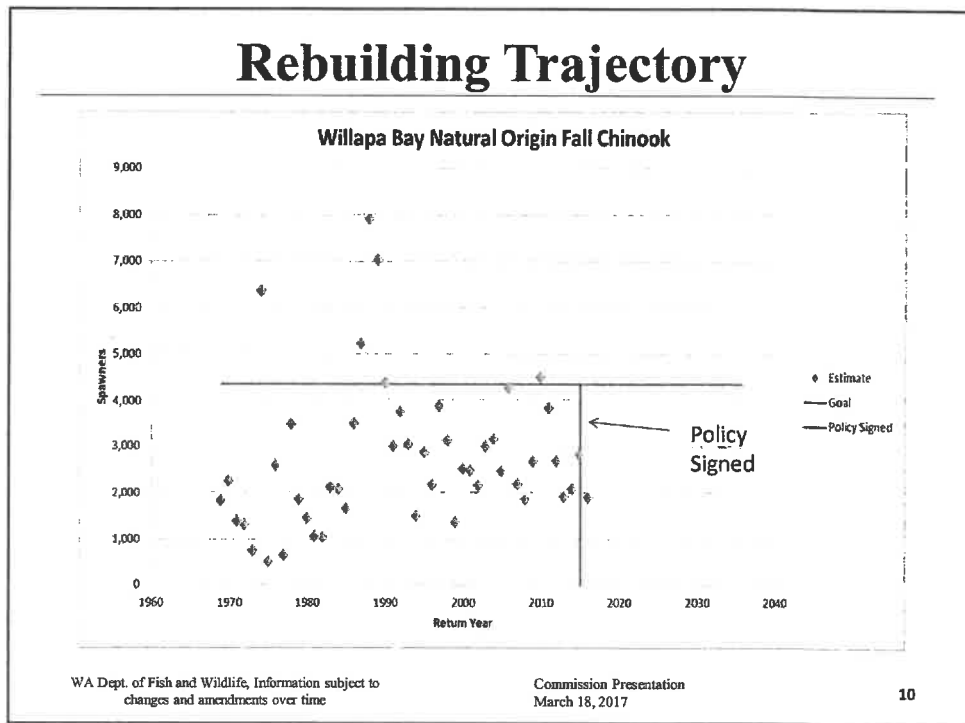
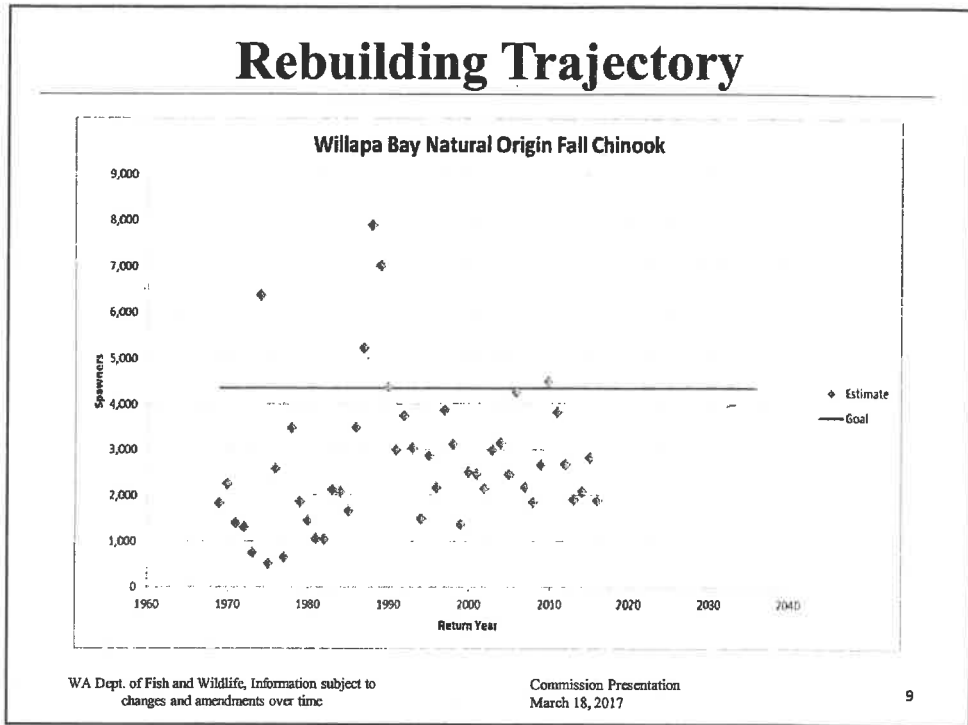
- Recreational impacts estimated using historical average harvest/impact rates
- Aggregate in-season estimate less than preseason prediction
- Phase I - Rebuilding
- Commercial impacts lower than predicted
- Recreational impacts higher than predicted
  - Chasing the curve
  - Model improvements to increase predictability of recreational harvest/impacts
  - Funding requests

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
March 18, 2017

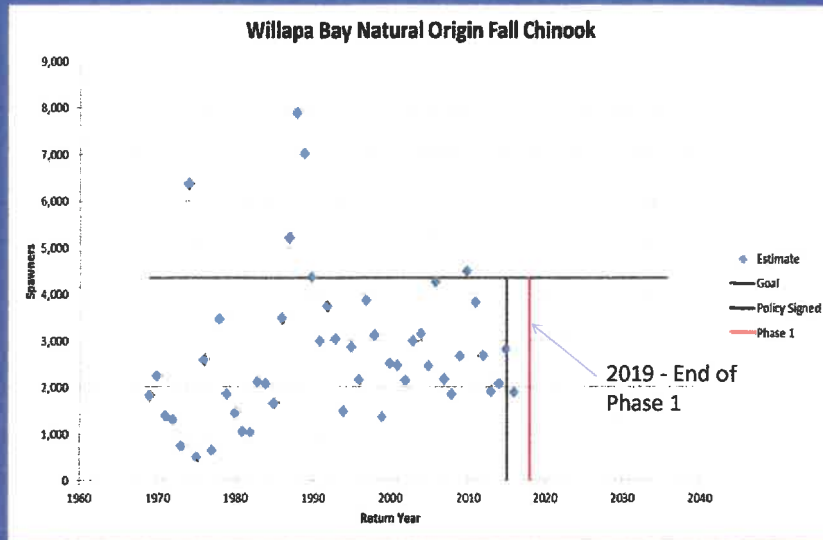
8







## Rebuilding Trajectory

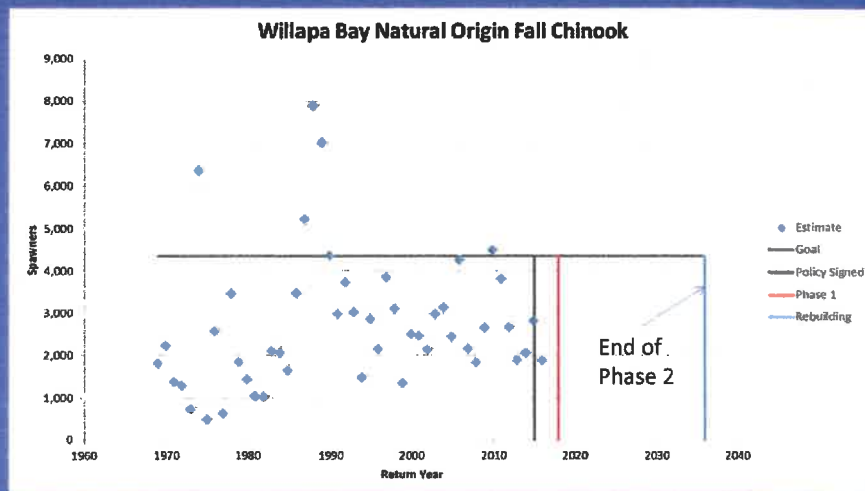


WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
March 18, 2017

11

## Rebuilding Trajectory



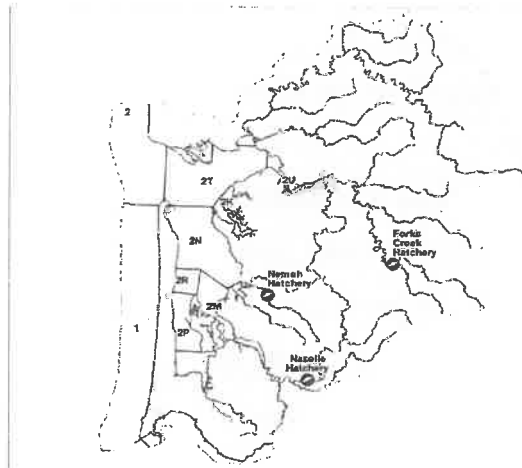
WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
March 18, 2017

12



## Willapa Bay Salmon Management Policy 2017 Season Review



Annette Hoffmann & Chad Herring– Region 6 Fish Program  
Washington Fish and Wildlife Commission Meeting  
December 9, 2017

1

## Presentation Outline

- Review of Key Policy Elements
  - Enhance conservation focus
  - Reduce gear conflict
- Review of 2017 Planning
- Fishery Review
  - Recreational
  - Commercial
- Stock Assessment
- 2018 Implementation

## **Review of Key Policy Elements**

---

- **Implement Phase I: Chinook Rebuilding**
  - 20% harvest rate limit on Naselle and Willapa River stocks
- **Pursue Alternative Commercial Gears**
  - Additional mark selective fishery opportunities
  - 6% of commercial impacts
- **Prioritize Species Utilization by Sector**
  - Chinook recreational priority
  - Coho and Chum commercial priority

## **Review of Key Policy Elements**

---

### **Chinook Fishery Management**

- No commercial fisheries in areas 2T and 2U prior to September 16.
- No commercial fisheries in areas 2M, 2N, 2P and 2R until after Labor Day.

## Review of 2017 Planning

- **Constraining stocks**
  - Chinook
    - Rebuilding
    - 20% harvest rate on Naselle and Willapa stocks
  - Chum
    - 10% harvest rate
    - No commercial fisheries between October 15-31
- **Alternative gear proposals**
  - Floating pontoon fish trap

WA Dept. of Fish and Wildlife, Information subject to  
changes and amendments over time

Commission Presentation  
December 9, 2017

5

## Recreational Fishery Review

- **Marine Area 2-1**
  - Marine Area 2 rules
  - August 1<sup>st</sup> – January 31st
  - 3 adult daily limit, release wild Chinook
  - 2-pole endorsement
- **Freshwater**
  - August 1<sup>st</sup> – January 31st
  - 4 adult daily limit, release wild Chinook
  - 2-pole endorsement
  - November 1<sup>st</sup> only 2 wild Coho

WA Dept. of Fish and Wildlife, Information subject to  
changes and amendments over time

Commission Presentation  
December 9, 2017

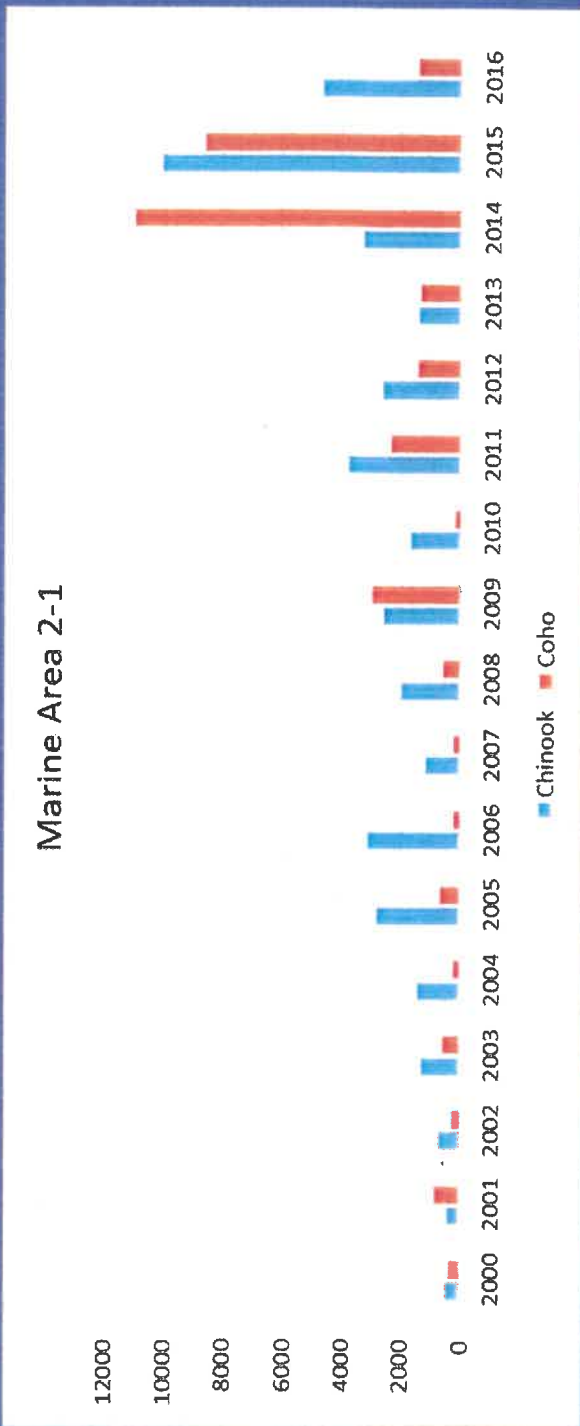
6





# Recreational Marine Fishery Review

Years	Total Catch	
	Chinook	Coho
2011-2014 avg.	2,760	4,039
2015	10,047	8,611
2016	4,626	1,428



WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
December 9, 2017



# Recreational Marine Fishery Review

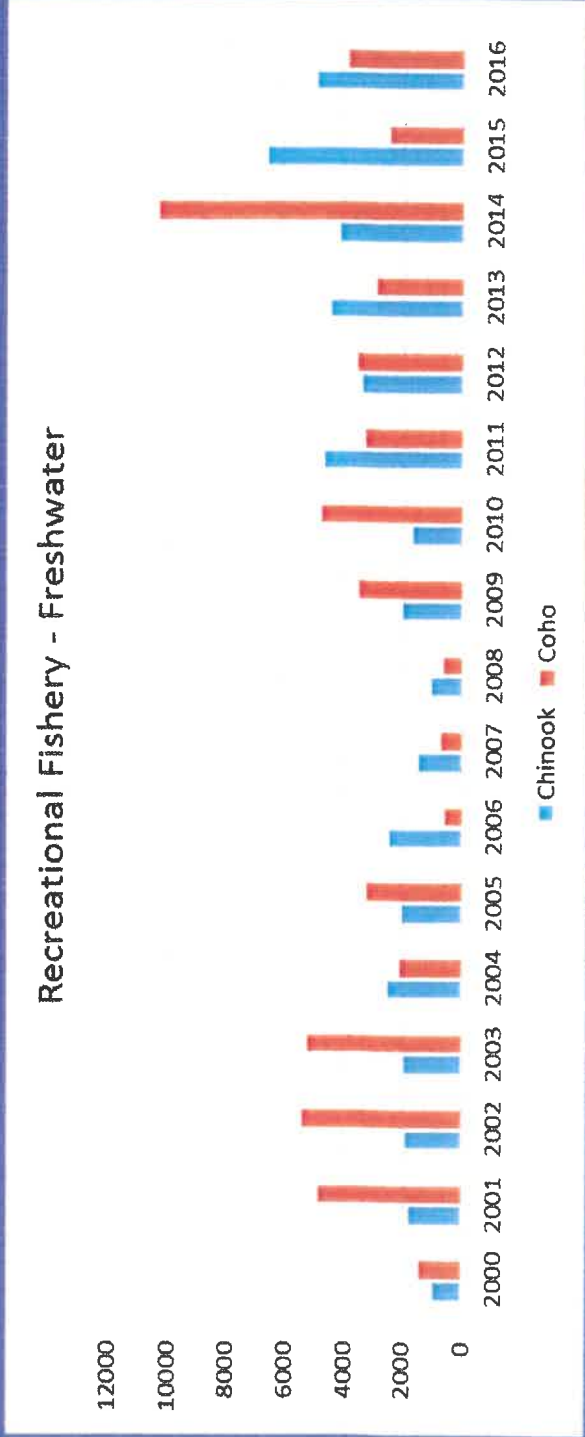
## Recreational Monitoring

Year	Total Number of Interviews	Total Anglers	Chinook				Coho	
			Hatchery Retained	Natural Retained	Natural Released	Natural Encounter Ratio	Hatchery Retained	Natural Retained
2015	351	848	385	1	151	0.3922	149	92
2016	1487	3516	695	8	254	0.3655	163	54
2017	919	2127	499	4	166	0.3327	60	37
<b>Total</b>	<b>2757</b>	<b>6491</b>	<b>1579</b>	<b>13</b>	<b>571</b>	<b>0.3616</b>	<b>372</b>	<b>183</b>



# Recreational Freshwater Fishery Review

Years	Total Catch	
	Chinook	Coho
2011-2014 avg.	4,116	5,017
2015	6,544	2,494
2016	4,887	3,845





# Recreational Fishery Review

## Recreational Harvest Rates – Wild Chinook

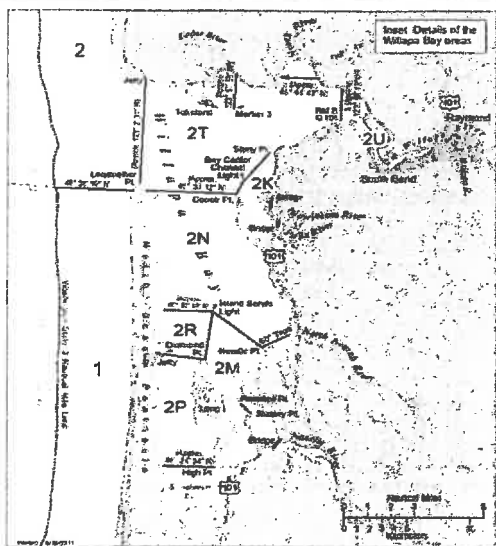
Year	Predicted Pre-Season Harvest Rates						Actual Post-Season Harvest Rates					
	Marine Area 2-1			Freshwater			Marine Area 2-1			Freshwater		
	Willapa Bay	Willapa River	Naselle River	Willapa Bay	Willapa River	Naselle River	Willapa Bay	Willapa River	Naselle River	Willapa Bay	Willapa River	Naselle River
2015	0.021	0.04	0.011	0.019	0.015	0.012	0.059	0.100	0.044	0.043	0.048	0.022
2016	0.028	0.056	0.007	0.02	0.021	0.013	0.075	0.141	0.036	0.016	0.009	0.021
2017	0.041	0.076	0.011	0.038	0.045	0.023						
<b>Average</b>	<b>0.030</b>	<b>0.057</b>	<b>0.010</b>	<b>0.026</b>	<b>0.027</b>	<b>0.016</b>	<b>0.067</b>	<b>0.120</b>	<b>0.040</b>	<b>0.029</b>	<b>0.029</b>	<b>0.021</b>

- **Average total actual harvest rate by sub-basin**
  - **Willapa Bay 9.6%, Willapa River 14.9%, Naselle River 6.1%**





## Commercial Fishery Review



WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
December 9, 2017

11

## Commercial Fishery Review

- South Bay – Areas 2N, 2R, and 2M
  - September 5<sup>th</sup> – October 13<sup>th</sup>
    - 22 12-hr openers
    - 7 tangle net openers
  - November
    - 22 24-hr openers
- North Bay – Areas 2T and 2U
  - September 18<sup>th</sup> – October 13<sup>th</sup>
    - 2U – 19 12-hr openers, all tangle net
    - 2T – 10 12-hr openers, 3 tangle net
  - November
    - 22 24-hr openers

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
December 9, 2017

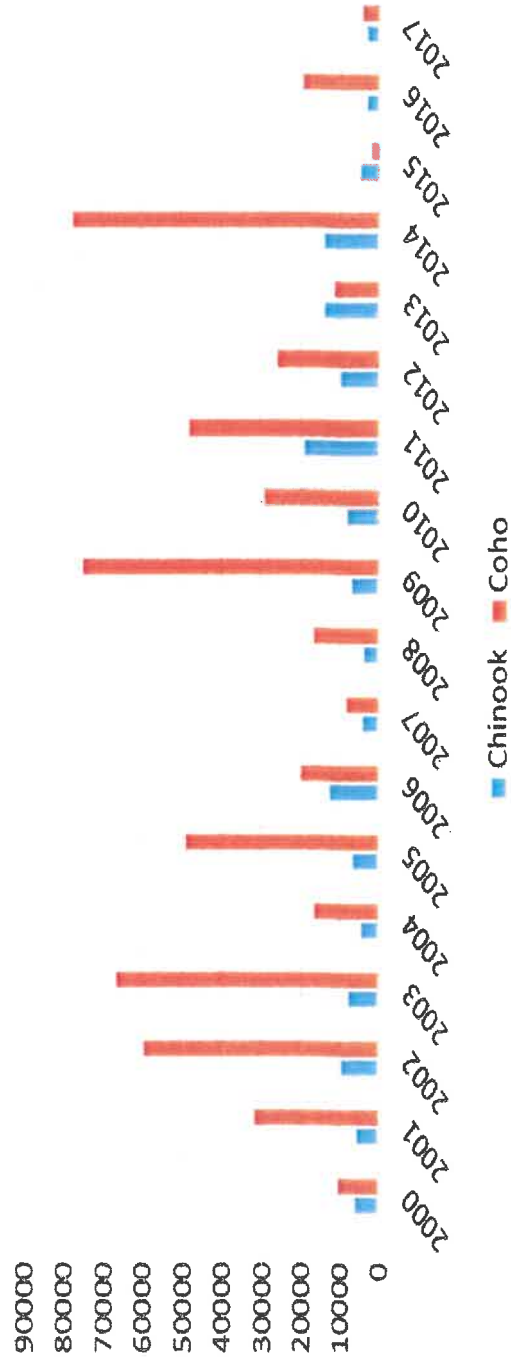
12



# Commercial Fishery Review

Years	Landed Catch			Ex-Vessel Value*
	Chinook	Coho		
2011-2014 avg.	13,990	40,698		\$978,437
2015	4,737	1,922		\$155,579
2016	3,144	19,304		\$480,513
2017	2,946	4,575		\$146,964

Commercial Fishery



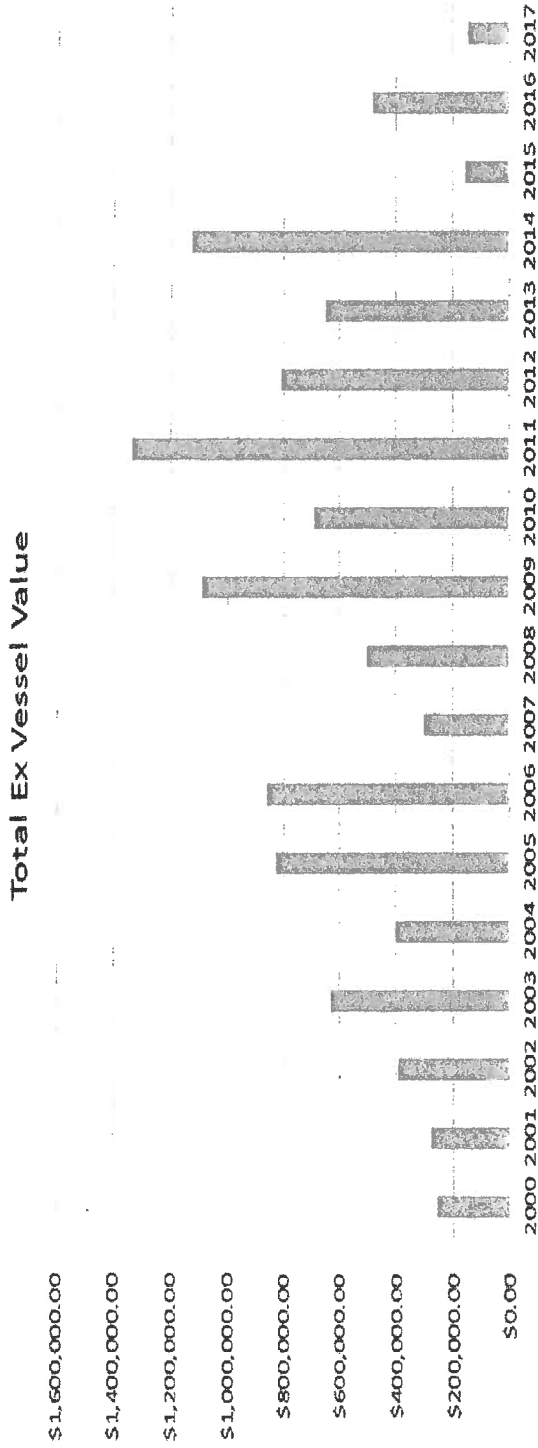
\* GDP adjusted to 3rd Quarter 2017

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

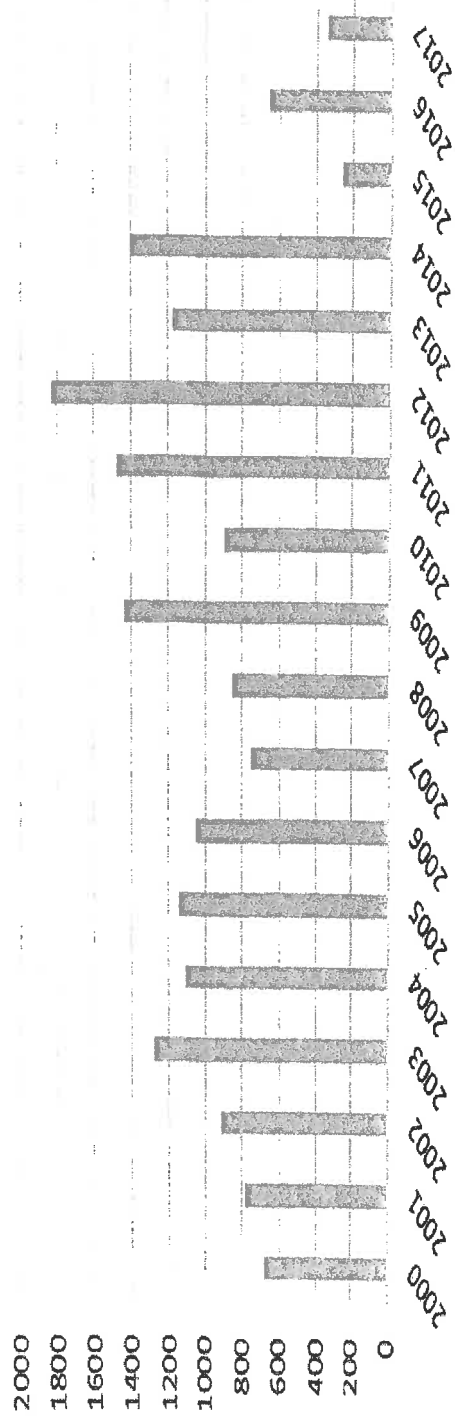
Commission Presentation  
December 9, 2017



# Commercial Fishery Review



## Annual Commercial Fishery Landings



# Commercial Fishery Review

## Commercial Fishery Monitoring – Wild Chinook

Total Impacts						
Year	Predicted			Actual		
	Willapa Bay	Willapa River	Naselle River	Willapa Bay	Willapa River	Naselle River
2015	581	208	303	515	122	314
2016	493	169	281	298	97	173
2017	468	155	242	290	169	105

Harvest Rate						
Year	Predicted			Actual		
	Willapa Bay	Willapa River	Naselle River	Willapa Bay	Willapa River	Naselle River
2015	15.2	14.5	16.5	11.9	7.6	15.6
2016	15.1	11.8	17.3	12.3	9.2	18.8
2017	11.3	7.8	14.4			

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
December 9, 2017

15

# Commercial Fishery Review

## Alternative Gear

Year	Policy Objective		Pre-Season		Actual	
	Willapa River	Naselle River	Willapa River	Naselle River	Willapa River	Naselle River
2015	1.0%	1.0%	6.5%	1.1%	2.5%	0.4%
2016	2.0%	2.0%	6.8%	11.0%	2.7%	2.7%
2017	6.0%	6.0%	6.0%	11.9%		

- Tangle net use
- Terminal areas
- Condition upon release

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
December 9, 2017

16

## Commercial Fishery Review

- **Alternative Gear Proposals**
  - **Floating pontoon fish trap**
    - Emerging Commercial Fishery
      - CR-101 filed April 19,2017
    - 3 stakeholder meetings
    - Public comment
      - Unlimited entry, time and place, ability to participate given timeframe, and faulty process
    - Withdrawn on June 14, 2017
    - Experimental Commercial Fishery
      - CR-101 filed June 14, 2017
    - 3 stakeholder meetings
    - Public comment similar to previous meetings

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
December 9, 2017

17

## Stock Assessment - Chinook

Basin	North River/Smith Creek		Willapa River		Naselle River		Willapa Bay Basin	
Pop. Des.	Primary		Primary		Contributing		BASIN TOTAL	
Goal	991		1181		1547		4353	
Year	NOS	pHOS	NOS	pHOS	NOS	pHOS	NOS	pHOS
2010	315	0%	1873	69%	1971	82%	4418	76%
2011	298	0%	1473	70%	1415	87%	3331	81%
2012	168	0%	1191	66%	581	92%	2057	81%
2013	113	0%	481	77%	767	82%	1669	80%
2014	99	47%	784	74%	975	81%	1936	81%
2015	173	0%	1064	70%	483	68%	2043	73%
2016	194	0%	575	81%	597	75%	1581	74%
2017	190	0%	1668	66%	1191	24%	3392	61%
<b>2010-2016 Avg.</b>	<b>194</b>	<b>7%</b>	<b>1063</b>	<b>72%</b>	<b>970</b>	<b>81%</b>	<b>2434</b>	<b>78%</b>

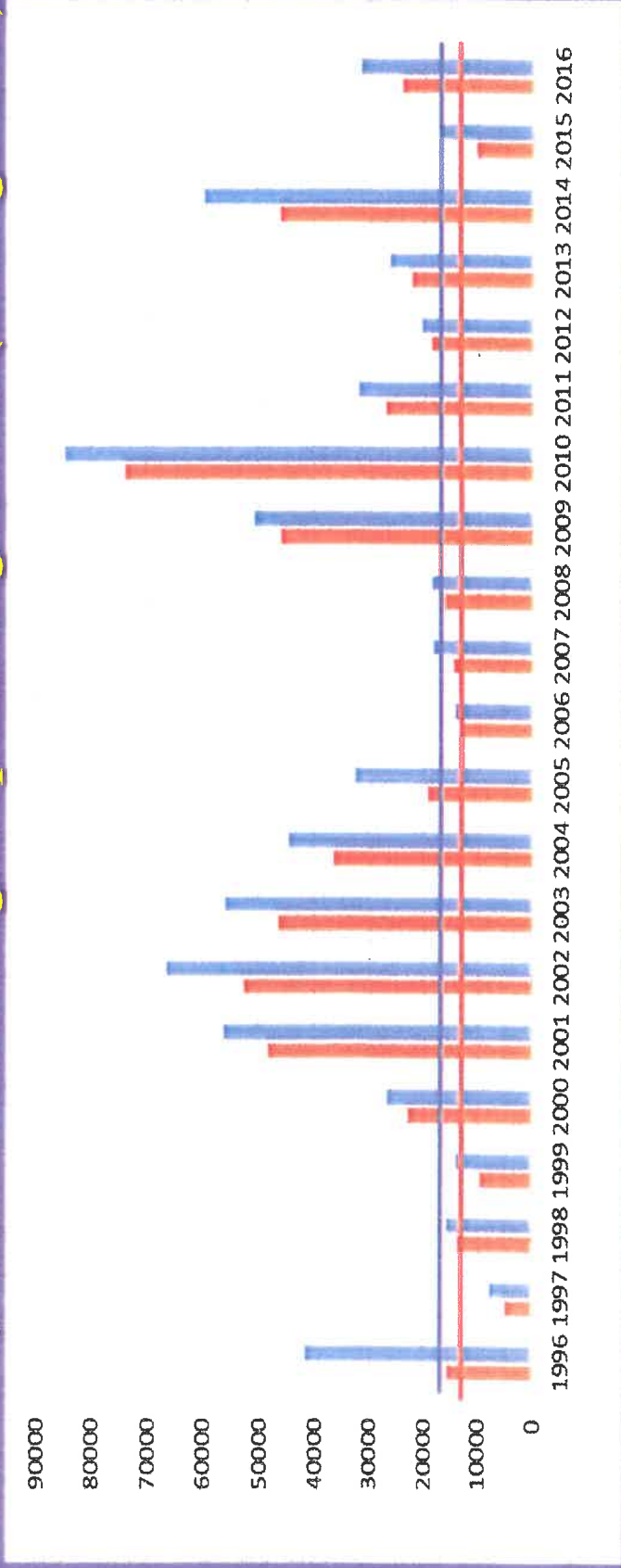
WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
December 9, 2017

18

# Stock assessment - Coho

- PFMC Objective
  - 17,200 naturally spawning Coho (Blue line)
- WDFW Objective
  - 13,400 natural origin spawning Coho (Orange line)





# Stock assessment - Chum

---

- Spawner Escapement Objective

– 35,400





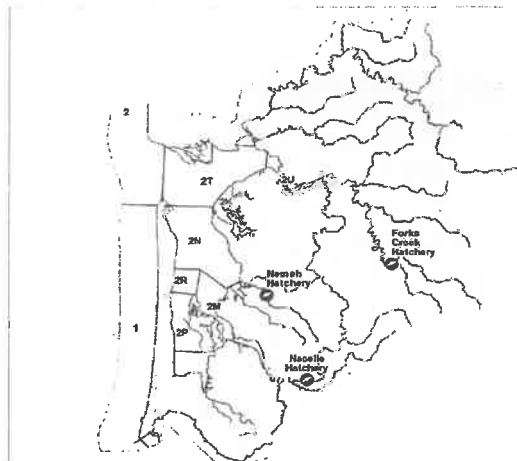
## 2018 Policy Implementation

- **Constraining stocks**
  - Willapa River Fall Chinook – 20%
  - Naselle River Fall Chinook – 20%
  - Willapa Bay Chum – 10%
- **Continue to explore alternative gear**
  - Floating pontoon fish trap
- **Allocation of available impacts**

# Questions?



## Willapa Bay Salmon Management Policy



Annette Hoffmann & Chad Herring– Region 6 Fish Program  
Washington Fish and Wildlife Commission Meeting  
February 10, 2018

1

## Presentation Outline

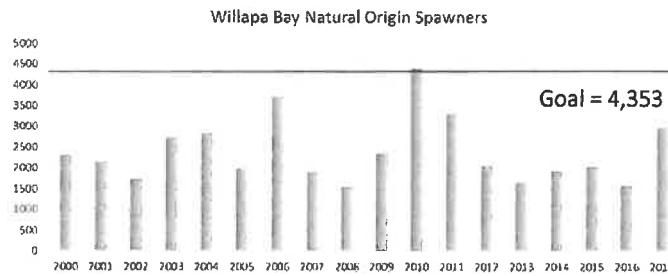
- Clarify Annual Review
- Policy base assumptions and performance
- Clarification of policy intent
- Proposed public process

2

## Supplement to Annual Review

### CHINOOK

	GOAL	2015	2016
Willapa River	20%	22.4%	24.1%
Naselle River	20%	22.1%	24.6%



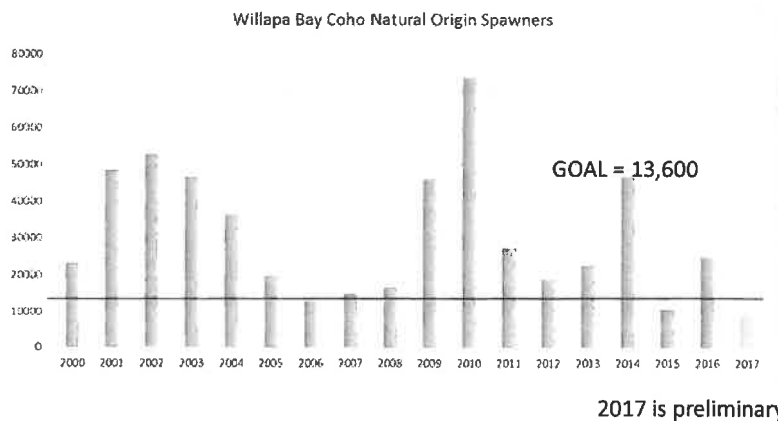
WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 10, 2018

3

## Supplement to Annual Review

### COHO



WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

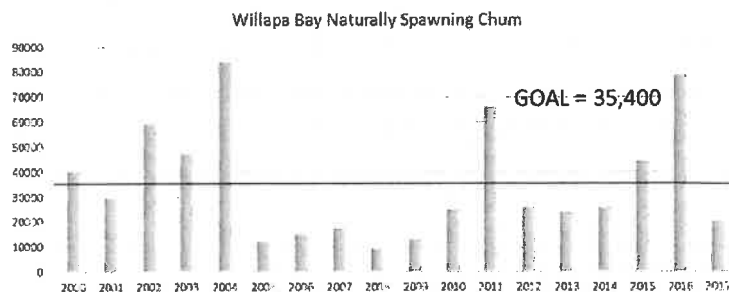
Commission Presentation  
February 10, 2018

4

## Supplement to Annual Review

### CHUM

	GOAL	2015	2016
Willapa Bay	10%	6.8%	6.7%



WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 10, 2018

5

## Policy Base Assumptions

- Proper hatchery operations
- Develop alternative selective gear
- Conduct adequate monitoring
- Adequate communication
- Chinook allocation
- Economic well being of fisheries

WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 10, 2018

6

## Policy Base Assumptions

–Proper hatchery operations for Chinook by 2020

Year	North/Smith Primary	Willapa R Primary		Naselle R Contributing	
	pHOS	pHOS	PNI	pHOS	PNI
	< 30%	< 30%	> 67%	< 30%	> 50%
2015	No Data	70%	51%	69%	18%
2016	No Data	81%	52%	75%	14%
2017*	No Data	75%	30%	26%	35%

\* preliminary

## Policy Base Assumptions

–Proper hatchery operations for Coho by 2015

	North/Smith Primary	Willapa R Primary		Nemah Contributing
Goals	pHOS < 30%	pHOS < 30%	PNI > 67%	pHOS < 30%
2015	14%	46%	52%	No Data
2016	0%	27%	78%	No Data
2017*	0%	68%	30%	No Data

\* preliminary



## Policy Base Assumptions

–Proper hatchery operations for Chinook by 2020

- Weir efficiency
- Program adjustments

Hatchery	Release 2015	Release 2016	See Transition
Forks	3.2M	350K	2019-20
Naselle	800K	2.5M	2019-20

## Policy Base Assumptions

–Develop alternative selective gear

- Recreational - Mark selective regulations
- Commercial
  - Tangle Net

Year	Alt Gear Goal	Willapa R	Naselle R
2015	1%	2.5%	0.4%
2016	2%	2.6%	2.7%
2017	6%	8.4%	4.7%

\* preliminary

–Fish Trap – suspended in 2017

## Policy Base Assumptions

---

- Conduct adequate monitoring (commercial)
  - 20% sample rate
  - 15% observer rate
  - Allows for in-season fishery adjustments based on actual harvest
  - Provides CPUE data for in-season updates on coho
  - Allows for future model improvements

## Policy Base Assumptions

---

- Conduct adequate monitoring (recreational)
  - Have not had adequate information for in season fishery adjustments based on actual harvest
    - Policy assumed 3.2% impact rate on NORs.
    - The average impact rate on Willapa River NOR's is 14.9%
  - Allows for future model improvements

## Policy Base Assumptions

### –Conduct adequate monitoring (spawner surveys)

- Provides for in-season updates on runsizes for coho and chum for fishery management
- Provides for post season spawner escapement
- Provides for spawner age and origin composition (pHOS)

## Policy Base Assumptions

### –Adequate Communication

#### – Pre season

- Multiple stakeholder meetings for North of Falcon (forecast, management objectives, modeling of fisheries and fishing package development)
- Rule Making public hearing

#### – In-season

- Weekly summaries (Aug-Sep) are provided stakeholders on commercial harvest, hatchery escapement, recreational monitoring information.
- Communication on in-season management actions

#### – Post season

- Annual review with Fish and Wildlife Commission

## Policy Base Assumptions

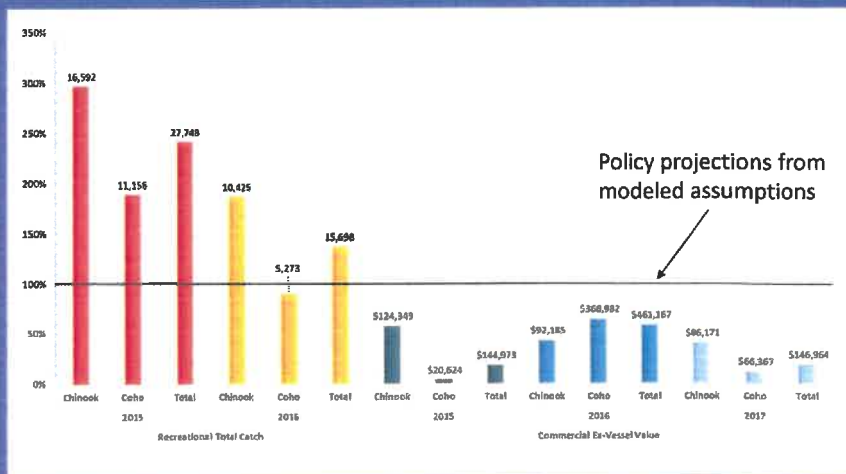
---

### - Chinook Allocation in Priority Order

- Chinook impacts allocated to recreational fisheries
- Alternative gear policy set asides
- Commercial gillnet gear

## Policy Base Assumptions

–Economic well-being of fisheries



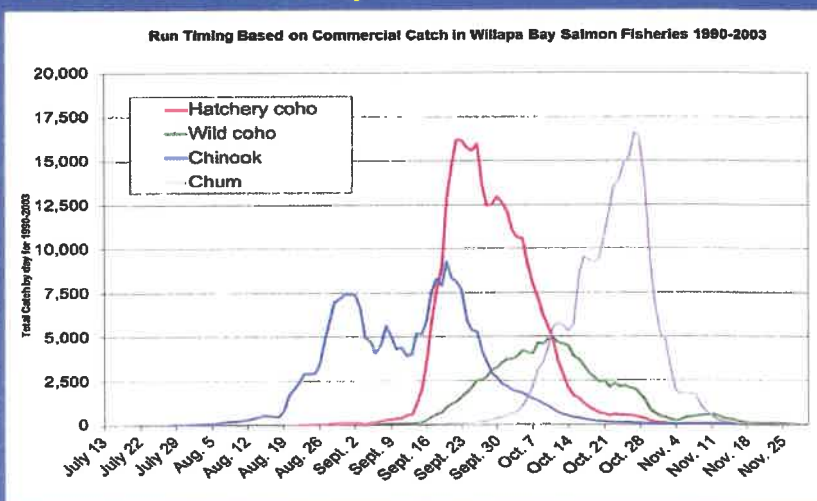
WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 10, 2018

16

## Clarification of Policy Intent

- Mixed stock fishery



WA Dept. of Fish and Wildlife, Information subject to changes and amendments over time

Commission Presentation  
February 10, 2018

17



## Clarification of Policy Intent

---

- Does the application of the policy language represent the Commission's intent?

## Public Comments

---

- From Raymond Public Workshop Jan 23
  - Examples of Comments on Priority
    - No priorities
    - Don't change priorities if you can't hit the goal
    - There is no conflict for priorities.
    - Priority is opportunity for all within conservation limits

[wdfw.wa.gov/fishing/commercial/salmon/season\\_setting](http://wdfw.wa.gov/fishing/commercial/salmon/season_setting)

## Proposed Process

---

- Public engagement
- Identify issues
  - Expand on base assumptions
  - Key conflicts
  - Policy review
- Brief the Fish and Wildlife Commission on developments this fall

## Questions?