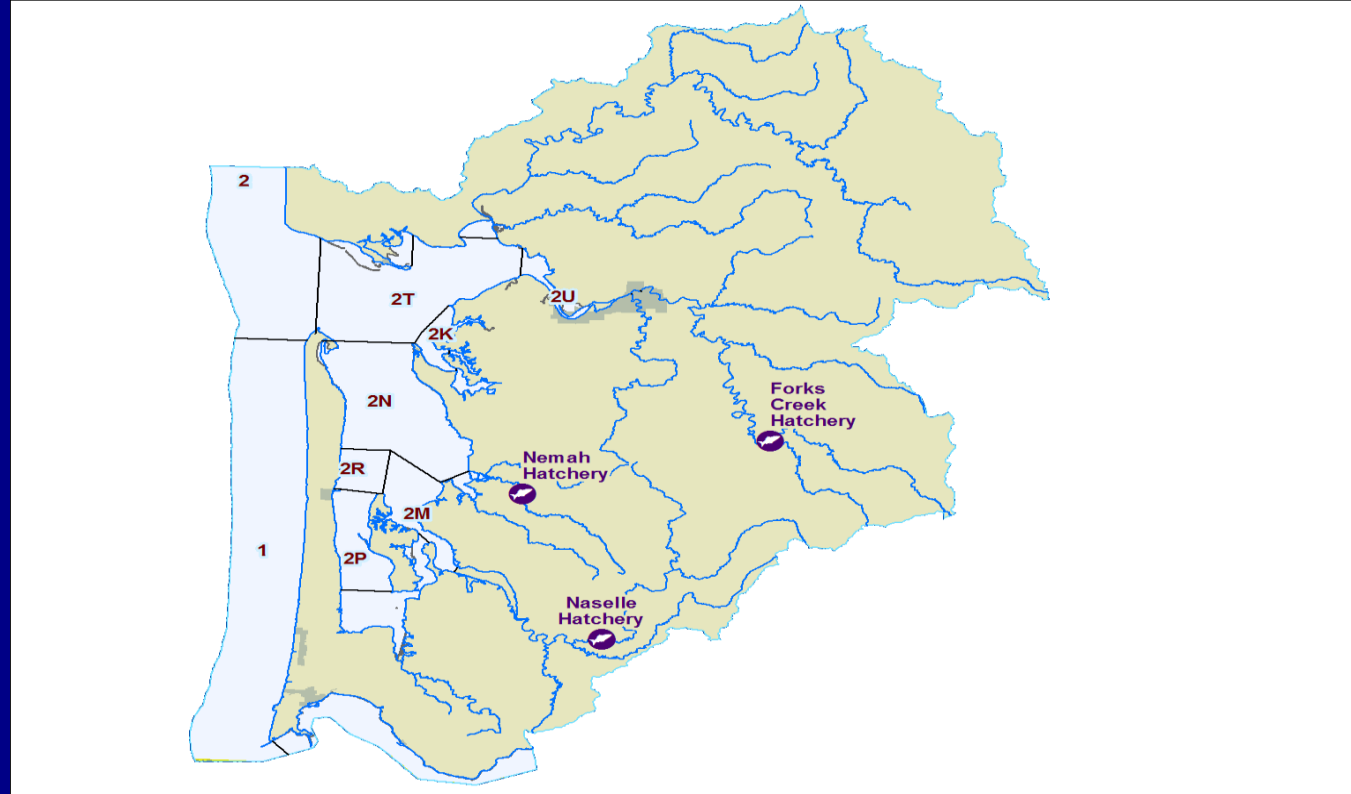


# Willapa Bay Salmon Management Policy C-3622



Chad Herring – South Coast Fishery Policy Lead  
Kirt Hughes – Statewide Salmon and Steelhead Manager  
Washington Fish and Wildlife Commission Meeting  
February 9, 2019

# Presentation Outline

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- Why was a policy needed?
- Basis for 14% impact rate cap for wild Chinook?
- Where are we now?
- Proposed timeline for comprehensive review

# Willapa Bay Salmon Management

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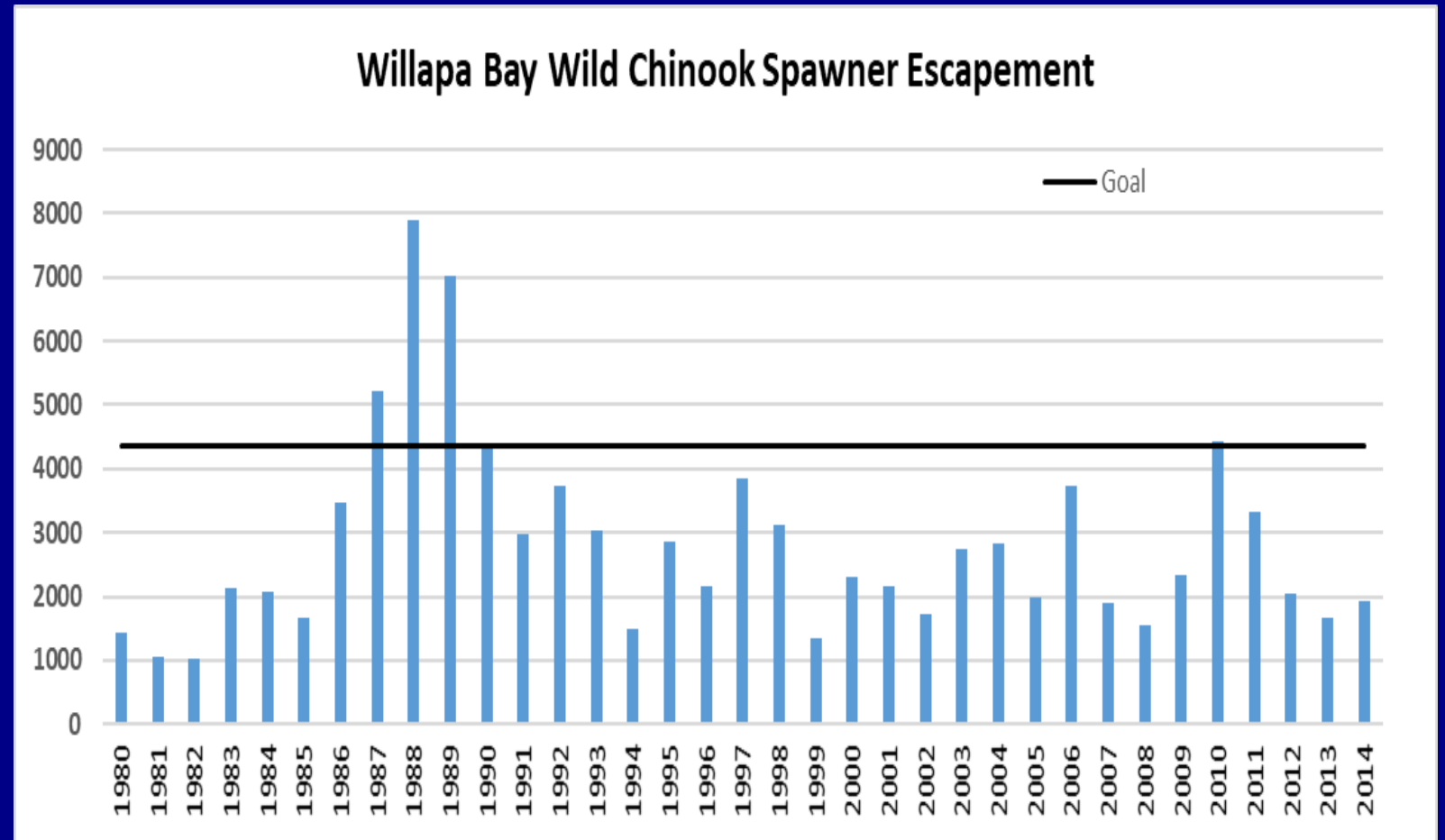
Why was a Willapa Bay Salmon Management Policy needed?

- Key stocks not meeting escapement objectives
  - Enhance conservation focus
- Frustration in harvest allocation
  - Provide guidance on reducing gear conflict and sharing of impacts
- Lack of trust
  - Restore and maintain public trust

# Willapa Bay Salmon Management

## Enhance Conservation Focus

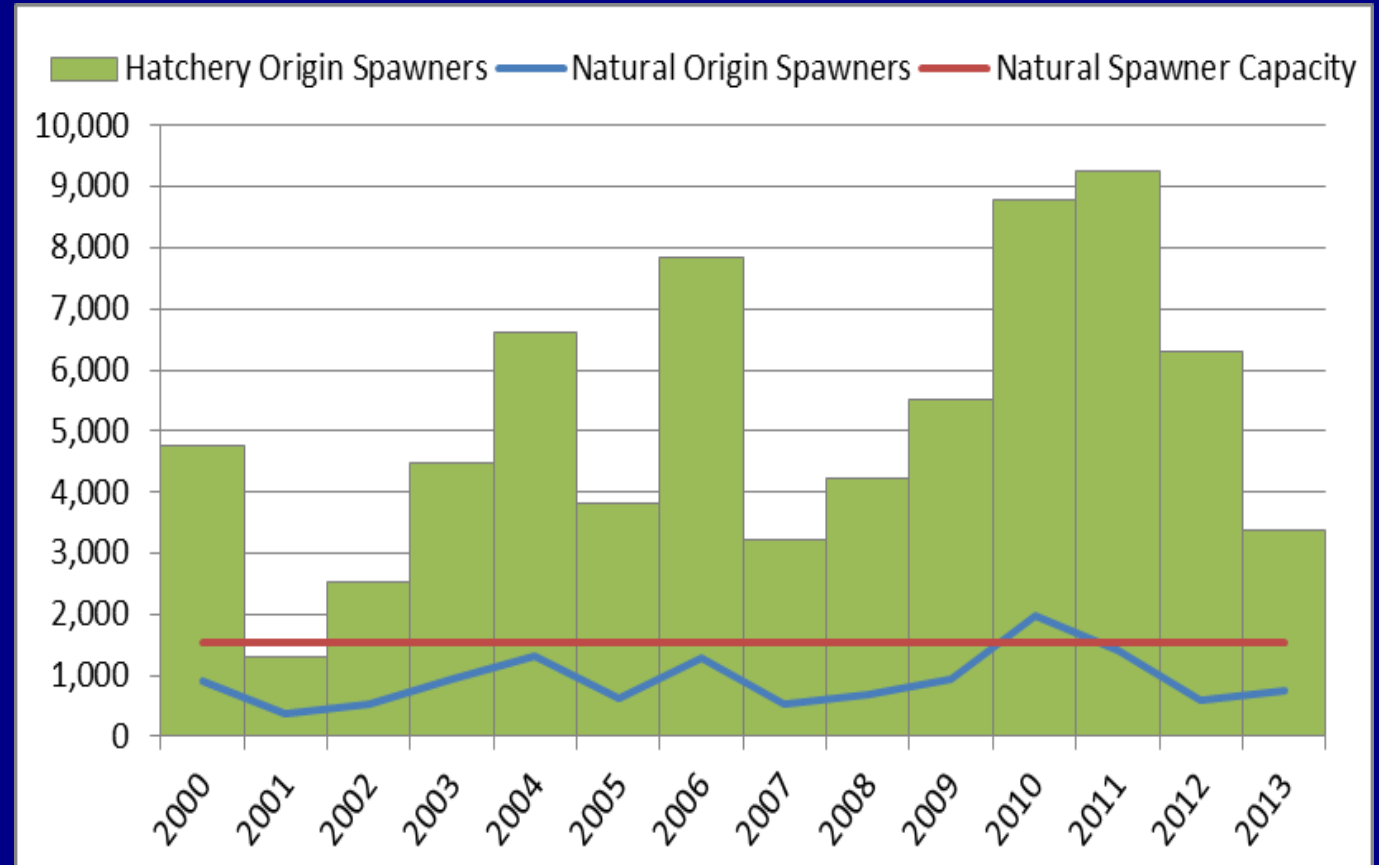
- Percent of time goal has been achieved
  - 1980 – 2014
    - Chinook – 14%
    - Chum – 34%
    - Coho – 88%



# Willapa Bay Salmon Management

## Enhance Conservation Focus

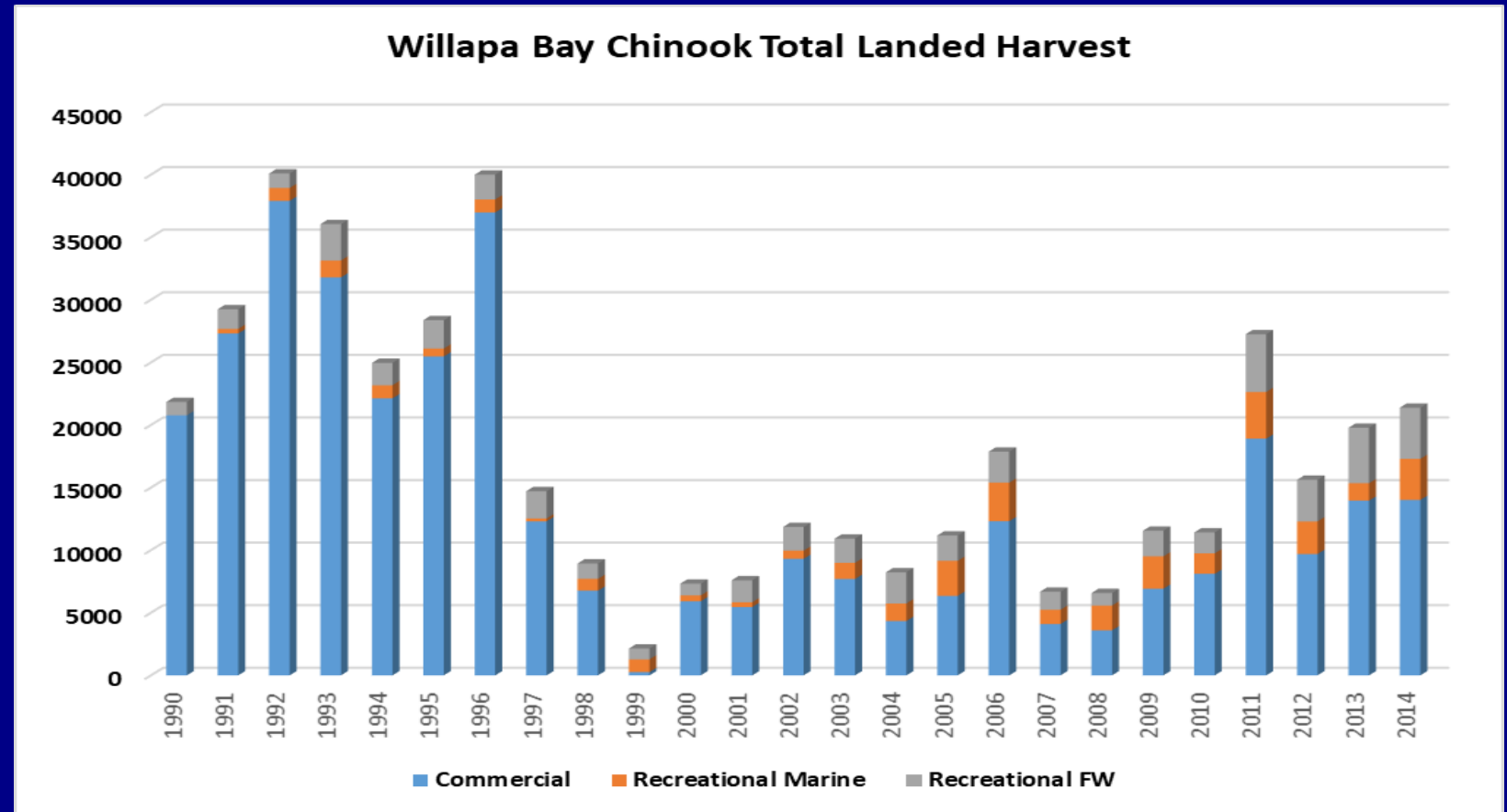
- Naselle River Chinook
  - Primary stock designation
  - Too many hatchery origin strays
  - Lack of infrastructure



# Willapa Bay Salmon Management

## Clarify Sharing of Impacts and Reduce Gear Conflict

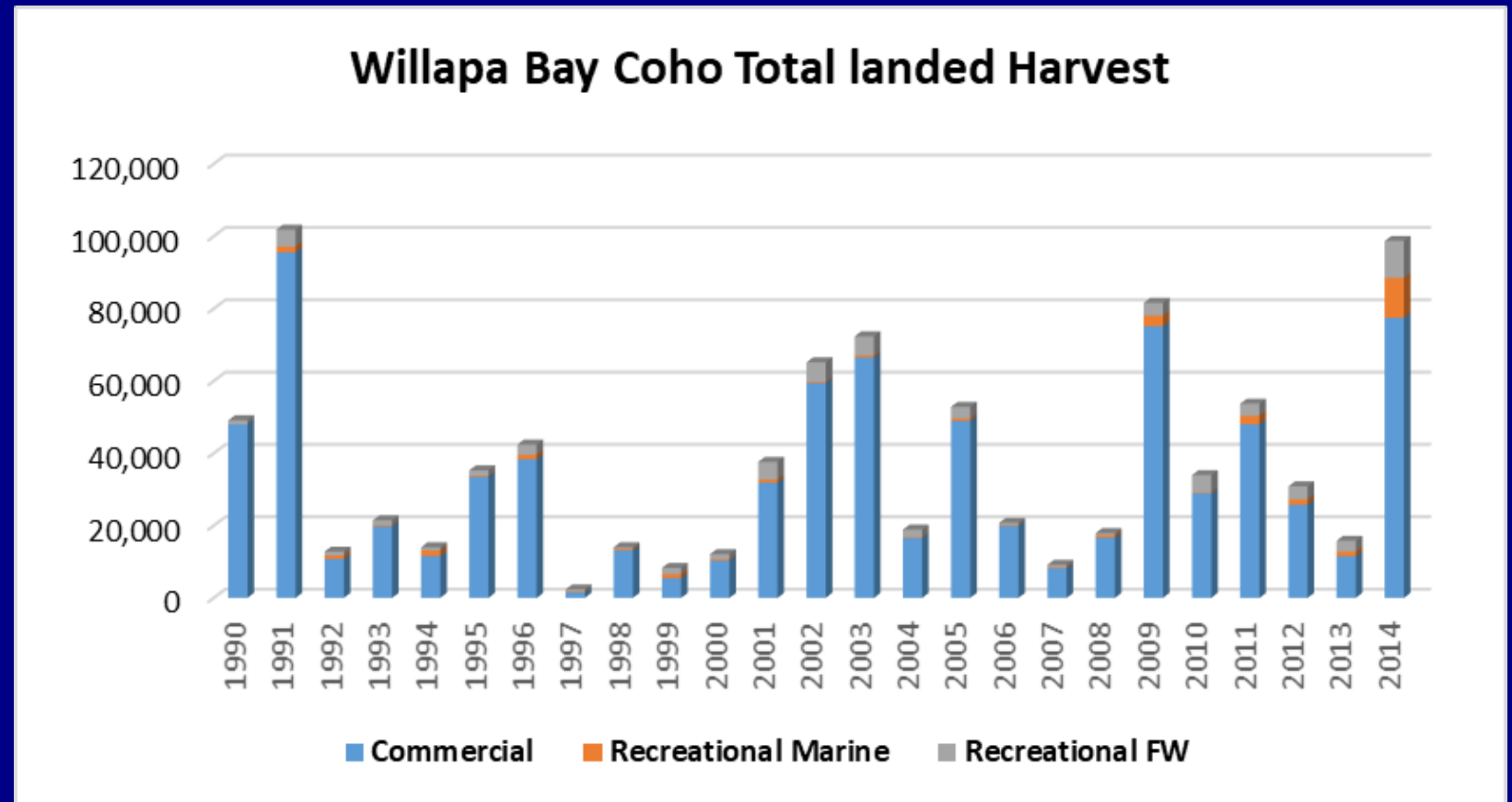
- Catch allocation
  - 2000 – 2014
  - Chinook
    - 69% commercial



# Willapa Bay Salmon Management

## Clarify Sharing of Impacts and Reduce Gear Conflict

- Catch allocation
  - 2000 – 2014
  - Coho
    - 88% commercial



# Willapa Bay Salmon Management

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What was the basis for the 14% impact rate cap to Chinook?

- Public workshop
- Straw dog questionnaire
  - Chinook, coho and chum
  - 2 questions
    - Which rivers should be managed for natural production?
    - How rapidly should we meet objectives?
- Chinook
  - 18/27 respondents identified  $\leq 20$  years



# Willapa Bay Salmon Management

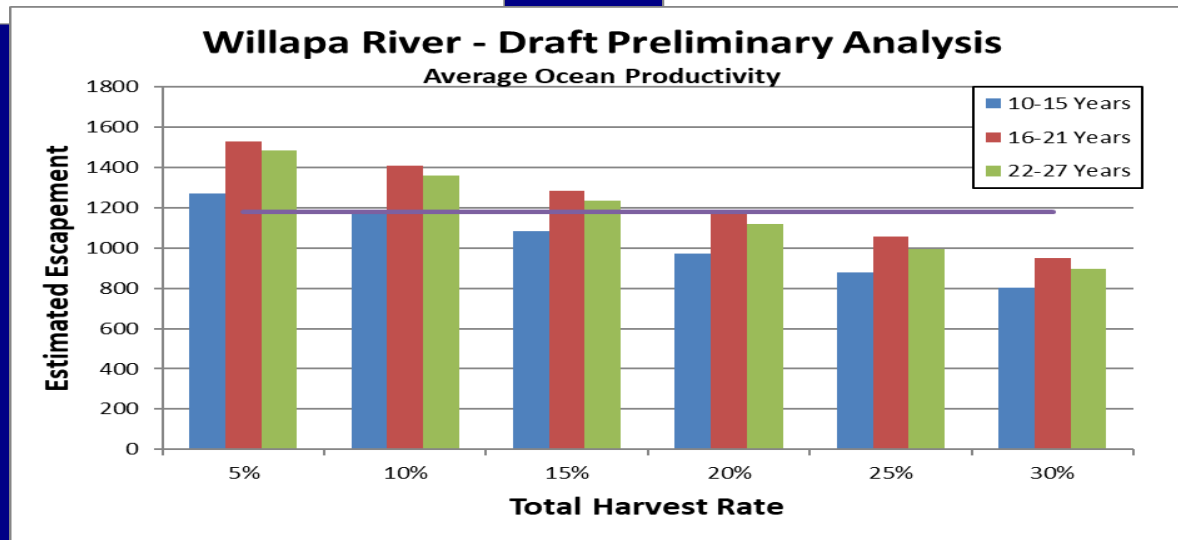
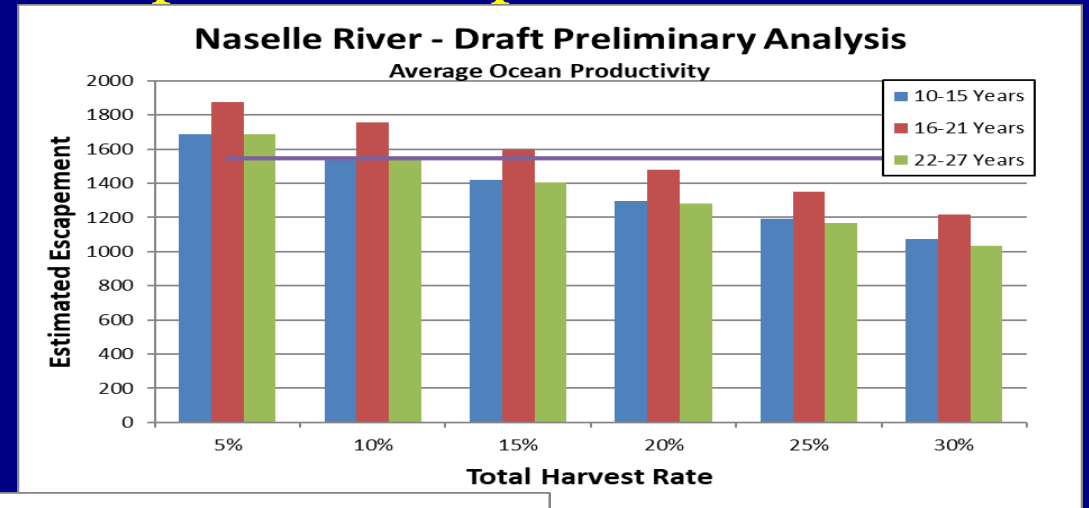
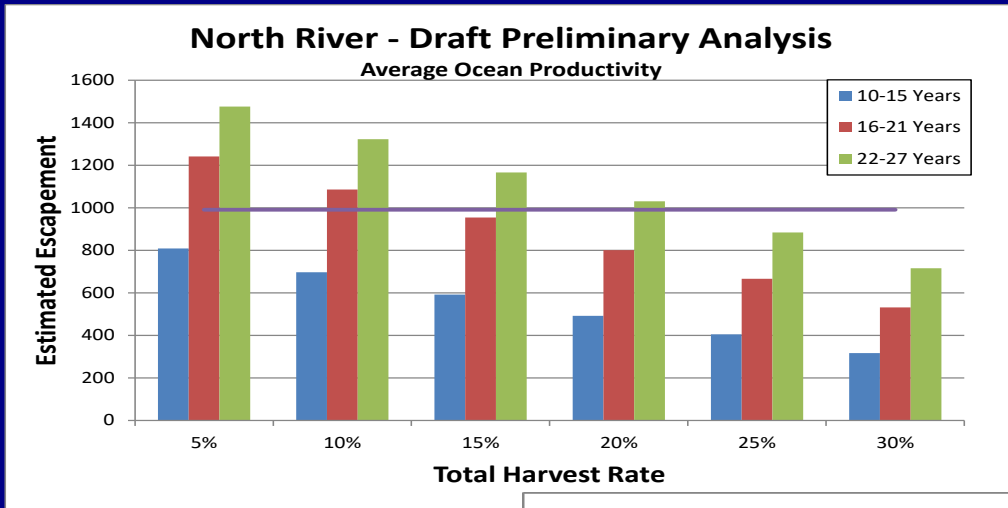
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What was the basis for the 14% impact rate cap to Chinook?

- All-H analyzer
  - Developed by HSRG
  - Integrated analysis of hatcheries, harvest, and habitat
  - Incorporates variability in ocean survival and management uncertainty
  - Cannot predict future environmental conditions – actual results will be different
  - Adaptive management necessary

# Willapa Bay Salmon Management

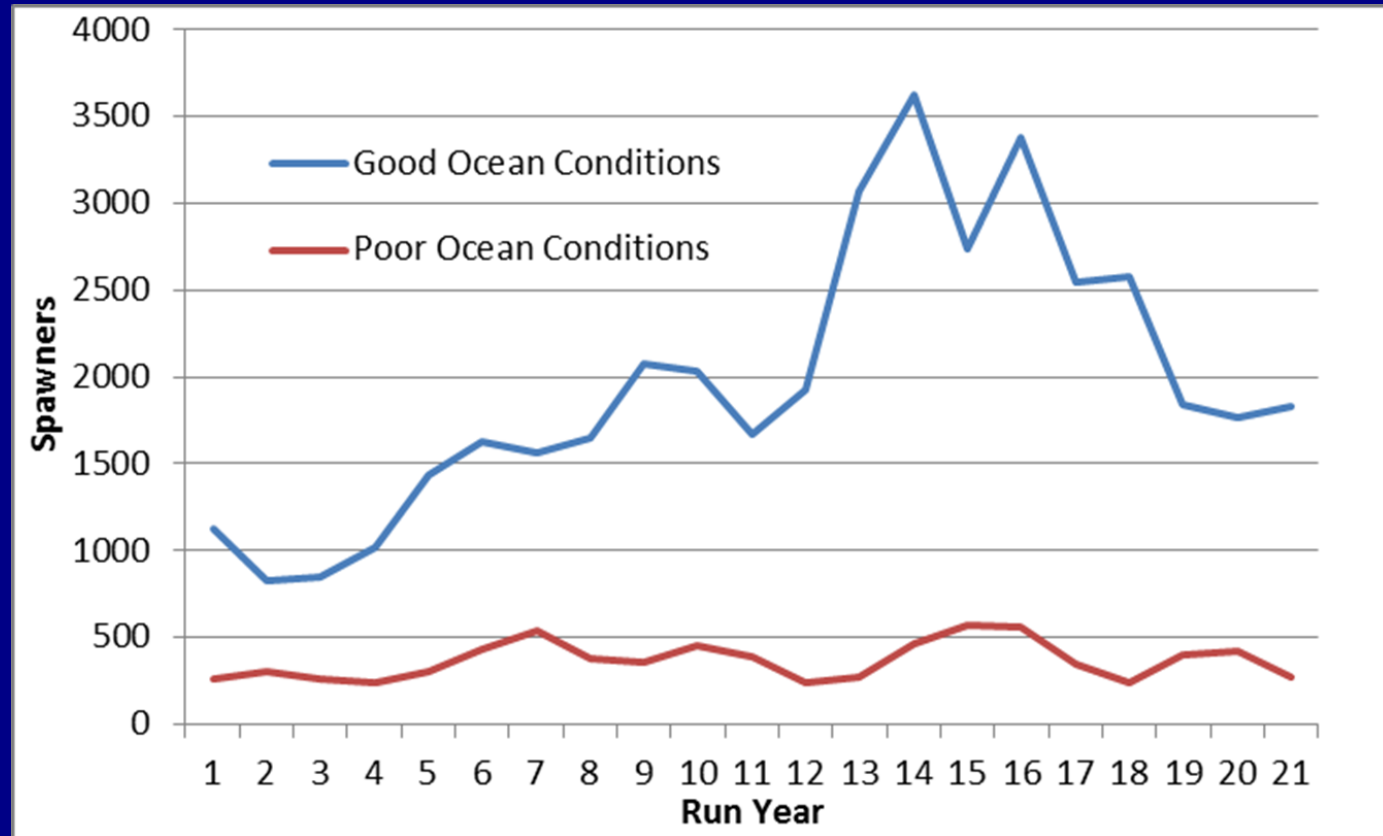
What was the basis for the 14% impact rate cap to Chinook?



# Willapa Bay Salmon Management

What was the basis for the 14% impact rate cap to Chinook?

- Uncertainty in predictions



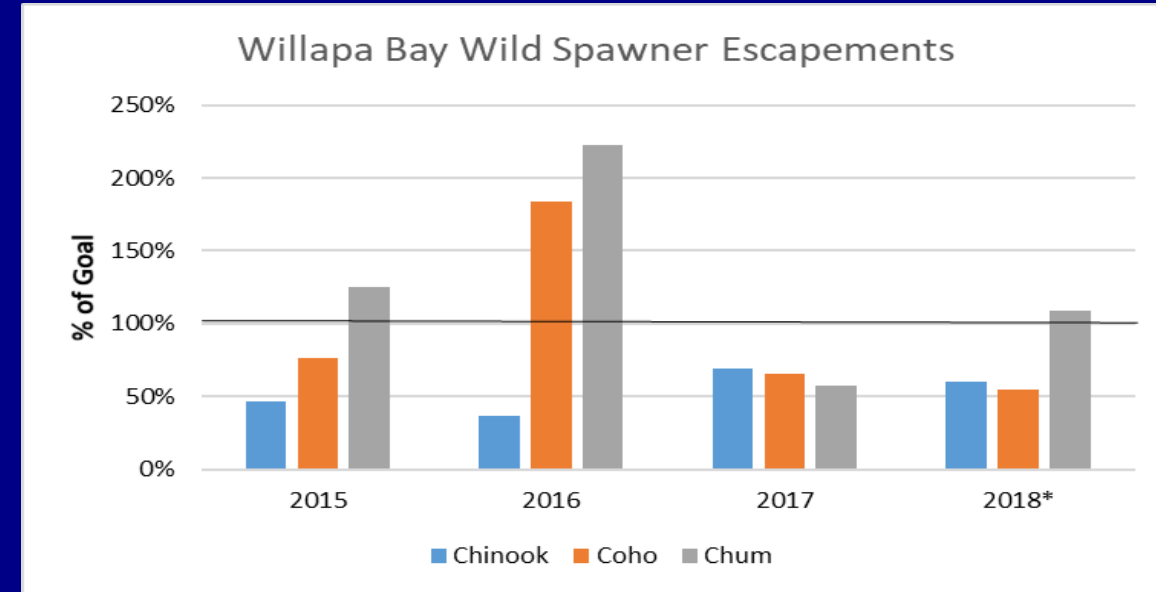
# Willapa Bay Salmon Management

Where are we now?

# Willapa Bay Salmon Management

## Stock Assessment

- Increased survey coverage
  - Chinook – added 6 reaches
  - Coho – added 16 reaches
  - Chum – full suite of historical indexes
- Comprehensive review
  - Chinook – stock recruit analysis
    - limited by # of complete brood years
  - Coho – goal review completed in 2016
  - Chum – evaluating estimate methodology/stock recruit analysis



\*Preliminary

Species	Average % of goal – 2000 to 2014	Average % of goal – 2015 to 2018
Chinook	56%	53%
Coho	248%	95%
Chum	90%	128%

# Willapa Bay Salmon Management

## Fisheries Management

### Commercial fisheries

- Increased on-board sample rate
  - Estimate impacts for MSF
  - Genetic based stock composition (551 samples 2015-2018)
- 
- Catch Allocation 2015-2017
    - Chinook – 27%
    - Coho – 51%

Year	On-board Sample Rate
Pre 2015	<2%
2015	29.8%
2016	20.2%
2017	20.4%
2018*	26.7%

Year	Active Fishers	Chinook	Coho
2000 – 2014 Avg.	78	8,716	36,349
2015	60	4,840	1,926
2016	54	3,142	19,324
2017	44	2,942	4,615
2018*	41	1,534	7,253

# Willapa Bay Salmon Management

## Fisheries Management

### Recreational fisheries

- Marine Area 2-1
  - 2015 – 2017 active in-season monitoring during; collecting encounter information and CWT's
  - 2018, In-season catch estimate using modified Murthy method
- Freshwater fisheries
  - Catch record card

Year	Chinook		Coho	
	2-1	FW	2-1	FW
2000 – 2014 Avg.	1,736	2,141	1,548	3,518
2015	5,785	6,400	8,612	2,544
2016	3,097	4,897	1,427	3,843
2017	4,441	5,638	5,020	3,190
2018*	1,221	NA	NA	NA

\*Preliminary

# Willapa Bay Salmon Management

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## Where are we now?

- Incorporating new data sources into management tools
- Finalizing 2017 run reconstructions
- Developing preliminary 2018 run reconstructions
  - Genetic analysis, CWT's, catch record card
- Stock recruit analysis for Chinook
- Escapement estimate methodology review for Chum



# Willapa Bay Salmon Management

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	Completed
WBSAG	Review of relevant data	Nov/Dec 2018	Completed
FWC- Fish Committee	Briefing on progress to date	Dec 2018	Completed
WBSAG	Review of relevant data	Jan 2019	Completed
FWC-Fish Committee	Briefing on progress to date	Jan 2019	Completed
<b>FWC</b>	<b>Briefing on progress to date</b>	<b>Feb 2019</b>	<b>Scheduled</b>
WBSAG	Review draft report	Aug 2019	Proposed
FWC-Fish Committee	Briefing on progress to date	Aug 2019	Proposed
WBSAG	Review final report	Nov 2019	Proposed
FWC	Presentation and seek approval of final report	Nov 2019	Proposed

# Questions?

