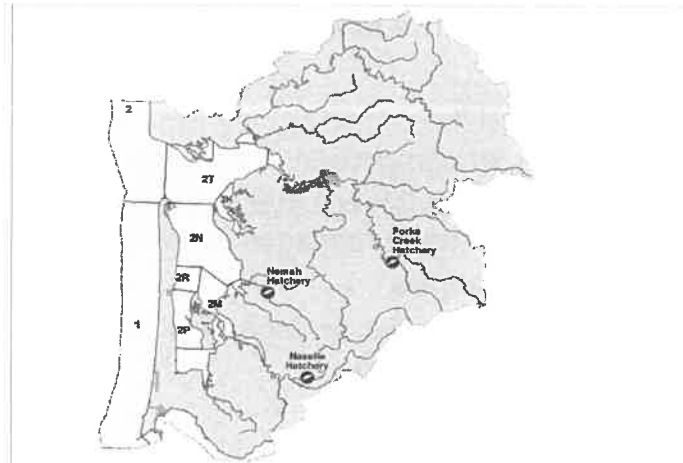


## Willapa Bay Salmon Management



Chad Herring – South Coast Fishery Policy Lead  
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## Meeting Purpose

- Collect public input on changes to hatchery production in Willapa Bay
- Presentation outline
  - Background
  - Current status of Chinook egg take
  - Future production increases

## Willapa Bay Salmon Management

### Willapa Bay Salmon Management Policy C-3622

- Adopted in 2015
- Currently under comprehensive review
- Provides general guidance and management objectives for salmon management in Willapa Bay
- 11 guiding principles
- Species specific guidance, including hatchery production for Chinook

## Willapa Bay Salmon Management

### 2015 Willapa Bay Hatchery Production Goals

Species	Forks Creek Hatchery	Nemah Hatchery	Naselle Hatchery	Total
Chinook	350,000	3,300,000	800,000	4,450,000
Coho	300,000	-	1,400,000	1,700,000
Chum	300,000	300,000	300,000	900,000

## Willapa Bay Salmon Management

### 2016 Legislative Action

- Increased funding for hatchery production and monitoring/evaluation activities
  - Naselle Hatchery Chinook
    - 2.5 million release
  - All Willapa Bay Hatcheries
    - Chum releases of 500,000

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## Willapa Bay Salmon Management

### Willapa Bay Chinook Smolt to Adult Return Rates (SAR)

- Coded wire tag (CWT) analysis
- Recoveries from all areas
  - Fisheries – pre terminal and terminal
  - Hatcheries
  - Spawning grounds

Facility	Forks Creek	Nemah	Naselle
<b>Brood Years</b>	2003-2011	2003-2006	2003-2006, 2009-2011
<b>SAR Rate</b>	0.43%	0.28%	0.43%

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## Willapa Bay Salmon Management

### 2016-2019 Willapa Bay Hatchery Production Goals

Species	Forks Creek Hatchery	Nemah Hatchery	Naselle Hatchery	Total
<b>Chinook</b>	350,000	3,300,000	2,500,000	6,150,000
Coho	300,000	-	1,400,000	1,700,000
<b>Chum</b>	500,000	500,000	500,000	1,500,000

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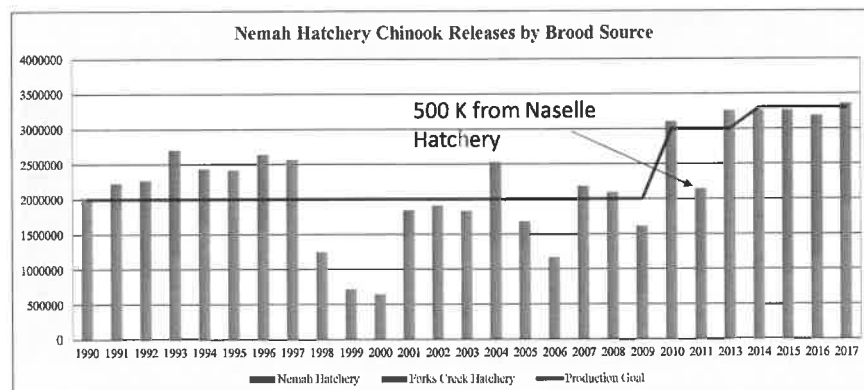
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## Willapa Bay Salmon Management

### Nemah Hatchery Chinook Smolt Releases

- Typically requires egg transfer to achieve release goal
- Forks Creek Hatchery

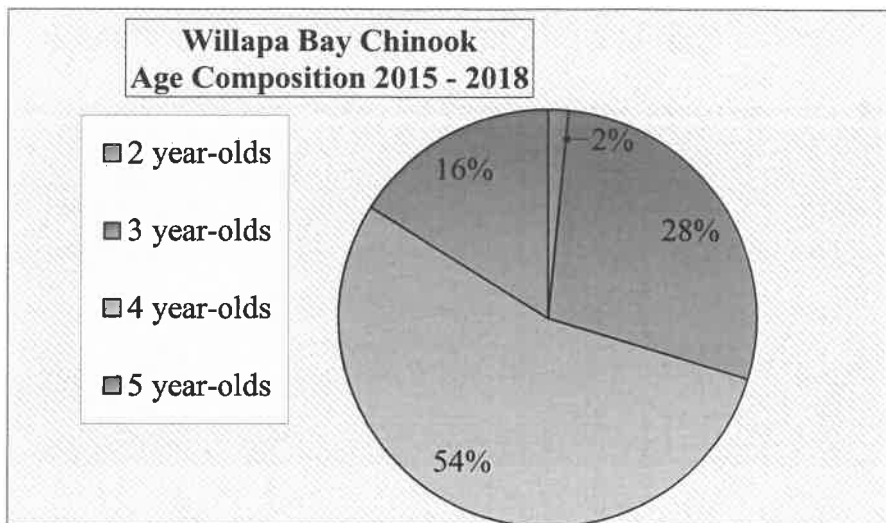


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## Willapa Bay Salmon Management



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## Willapa Bay Salmon Management

Facility and Brood Year	Smolts Released	Return Year						
		2016	2017	2018	2019	2020	2021	2022
<b>Forks Creek</b>								
2014	3,221,073	2 yo	3 yo	4 yo	5 yo			
2015	379,192		2 yo	3 yo	4 yo	5yo		
2016	368,537			2 yo	3 yo	4 yo	5 yo	
2017	365,864				2 yo	3 yo	4 yo	5 yo
<b>Naselle</b>								
2014	749,265	2 yo	3 yo	4 yo	5 yo			
2015	788,229		2 yo	3 yo	4 yo	5yo		
2016	2,499,279			2 yo	3 yo	4 yo	5 yo	
2017	2,531,859				2 yo	3 yo	4 yo	5 yo
<b>Nemah</b>								
2014	3,264,062	2 yo	3 yo	4 yo	5 yo			
2015	3,259,623		2 yo	3 yo	4 yo	5yo		
2016	3,185,438			2 yo	3 yo	4 yo	5 yo	
2017	3,358,383				2 yo	3 yo	4 yo	5 yo

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## Willapa Bay Salmon Management

### Current Status of Chinook Hatchery Broodstock

Facility	Total Adults	Females Spawned	Female Mortalities	Egg take
Forks Creek	2,599	767	21	2,301,000
Nemah	4,281	396	612	1,188,000
Naselle	2,692	702	160	2,106,000
<b>Total</b>	<b>9,572</b>	<b>1,865</b>	<b>793</b>	<b>5,595,000</b>

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## Willapa Bay Salmon Management

### Pre-season Willapa Bay Hatchery Production Goals for 2019 North of Falcon Process

Species	Forks Creek Hatchery	Nemah Hatchery	Naselle Hatchery	Total
<b>Chinook</b>	350,000	3,300,000	2,500,000	6,150,000
Coho	300,000	-	1,400,000	1,700,000
<b>Chum</b>	500,000	500,000	500,000	1,500,000

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## Willapa Bay Salmon Management

2019 and beyond including SRKW/Enhance Fisheries

Species	Forks Creek Hatchery	Nemah Hatchery	Naselle Hatchery	Total
Chinook	350,000 +50,000 <hr style="width: 50%; margin: 0 auto;"/> 400,000	3,300,000	2,500,000 +2,500,000 <hr style="width: 50%; margin: 0 auto;"/> 5,000,000	6,150,000  <b>8,700,000</b>
Coho	300,000 +300,000 <hr style="width: 50%; margin: 0 auto;"/> 600,000	-	1,400,000	1,700,000  <b>2,000,000</b>
Chum	500,000	500,000 +1,000,000 <hr style="width: 50%; margin: 0 auto;"/> 1,500,000	500,000	1,500,000  <b>2,500,000</b>

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## Questions

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