### **Fisheries**

### **Andrew Ollenburg**

Cushman Fish Facilities Manager



## **Production Goals**

Species	Life stage at release	Subtotal	Total	Potential Adult Returns
Sockeye	Fed Fry (May)	200,000	2,000,000	22,200
	Fed Fry (June)	1,000,000		
	Fed Fry (Sept)	800,000		
Spring Chinook	Fingerling	300,000	375,000	1,388
	Yearling	75,000		
Winter Steelhead	Smolts	15,000	15,225	675
	Adults	225		
Coho	Smolts		10,000 - 35,000	500 - 1,750



## Starting Reintroduction...

- Outside egg sources must be used for Chinook and sockeye:
  - WDFW Marblemount Hatchery
  - Puget Sound Energy Baker Lake Hatchery
- All eggs tested and are pathogen/disease-free
- Seed stock from which our programs will grow



#### Timelines...

#### **Happening Now**

- Reintroduction program releases
- Agreements reached with partners
- Continued partnerships to work toward success
- Spring Chinook spawning in the North Fork!!!



#### 2-5 Years From Now

- Little-to-no reliance on WDFW for Chinook eggs
- Less and less reliance on PSE for sockeye eggs

#### 5-25+ Years From Now

- No reliance on WDFW or PSE for eyed eggs
- Naturally spawning fish will significantly augment hatchery production
- Utilization of returning adults may start to occur



### Fish Releases from Cushman

Spring Chinook		<u>Coho</u>		Steelhead	Sockey	Sockeye	
BY14	131,028	BY13	402	BY16 8,543	BY16 24	1,943	
BY15	339,632	BY14	5,723	BY17 6,351	BY17 48	4,035	
BY16	375,728	BY15	9,744	BY18 9,602	BY18 39	7,584	
BY17	398,434	BY16	9,972				
BY18	436,161	BY17	11,888				
TOTALS	1,680,983		37,729	24,496	1,12	3,562	

BY = Brood Year

# **Adult Spring Chinook**

o returning adults 2014-2017

O eggs from NF fish 400,000 eggs from WDFW

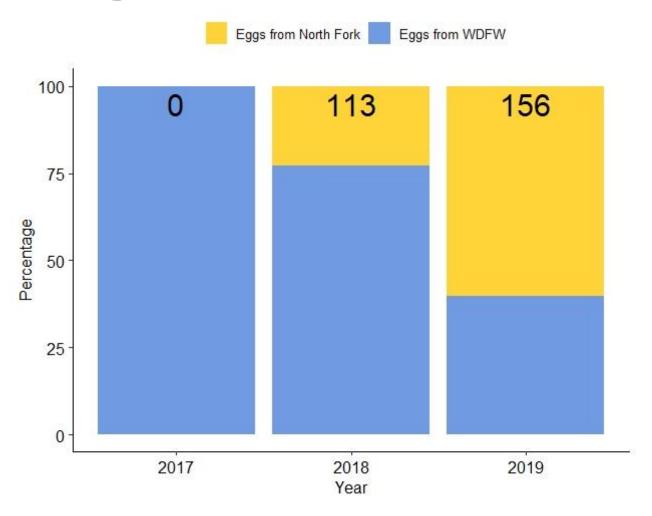
113 returning adults captured in 2018

112,000 eggs from NF fish 380,000 eggs from WDFW

156 returning adults captured in 2019 302,000 eggs from NF fish 200,000 eggs from WDFW

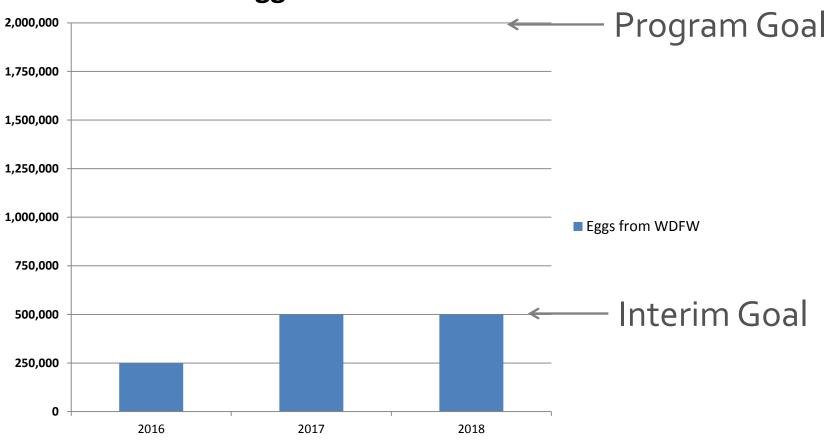


# **Spring Chinook Production**



# **Sockeye Production**





## Teamwork is the key!!!

#### We cannot be successful without help and cooperation

- WDFW supplies eyed eggs for Chinook, fisheries co-manager
- PSE supplies eyed eggs for sockeye
- Skokomish Tribe coordinates and is a fisheries co-manager
- Upper Skagit Tribe coordinates and is a fisheries co-manager
- Sport fishing clubs and organizations support reintroduction efforts
- Work through new challenges that arise and adapt when needed



## **Questions?**

**Thank You!** 

