

# Stream Studies of Hatchery-Wild Pink and Chum Salmon Interactions in PWS and SE, Alaska, 2015

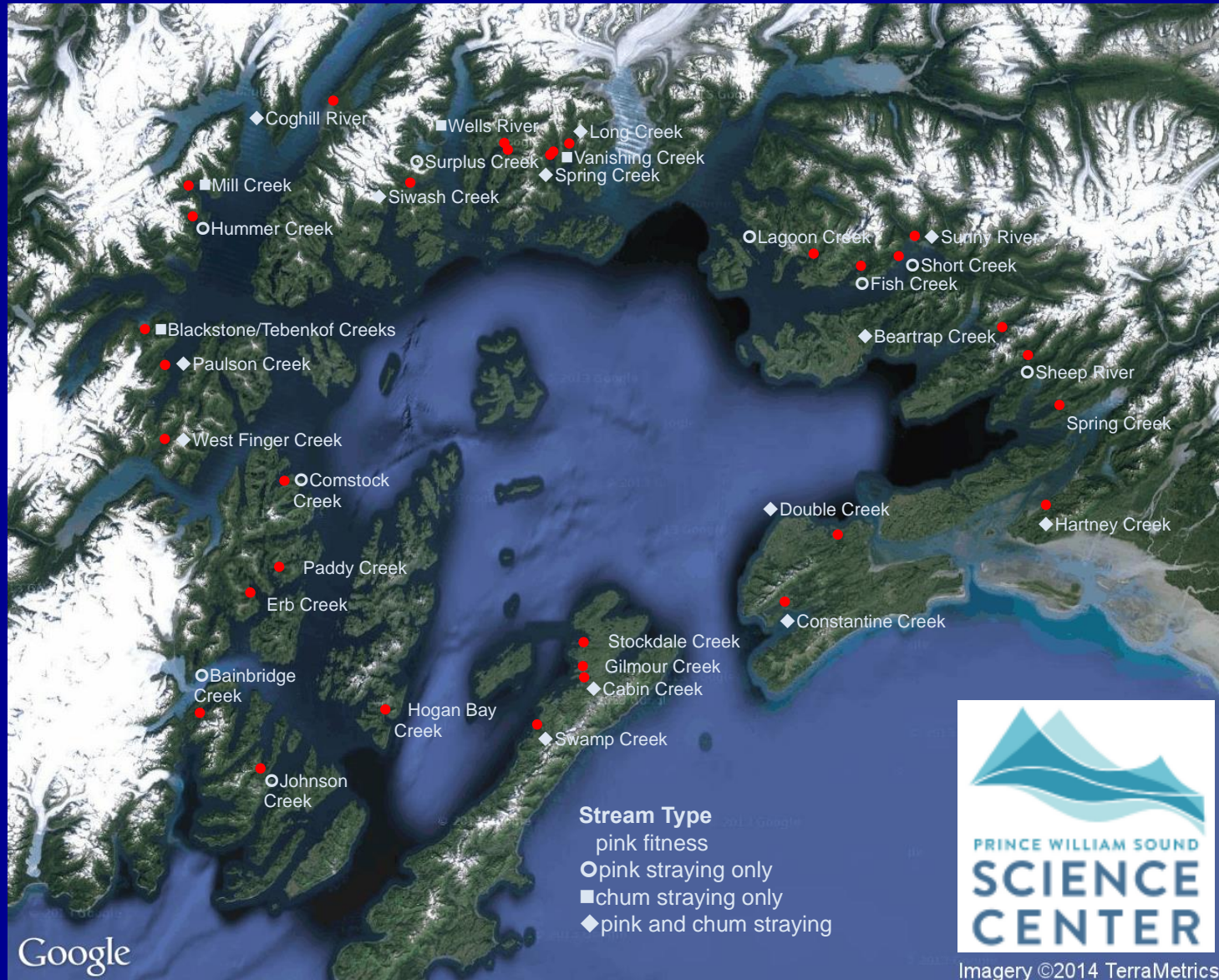


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Prince William & Sitka Sound Science Centers



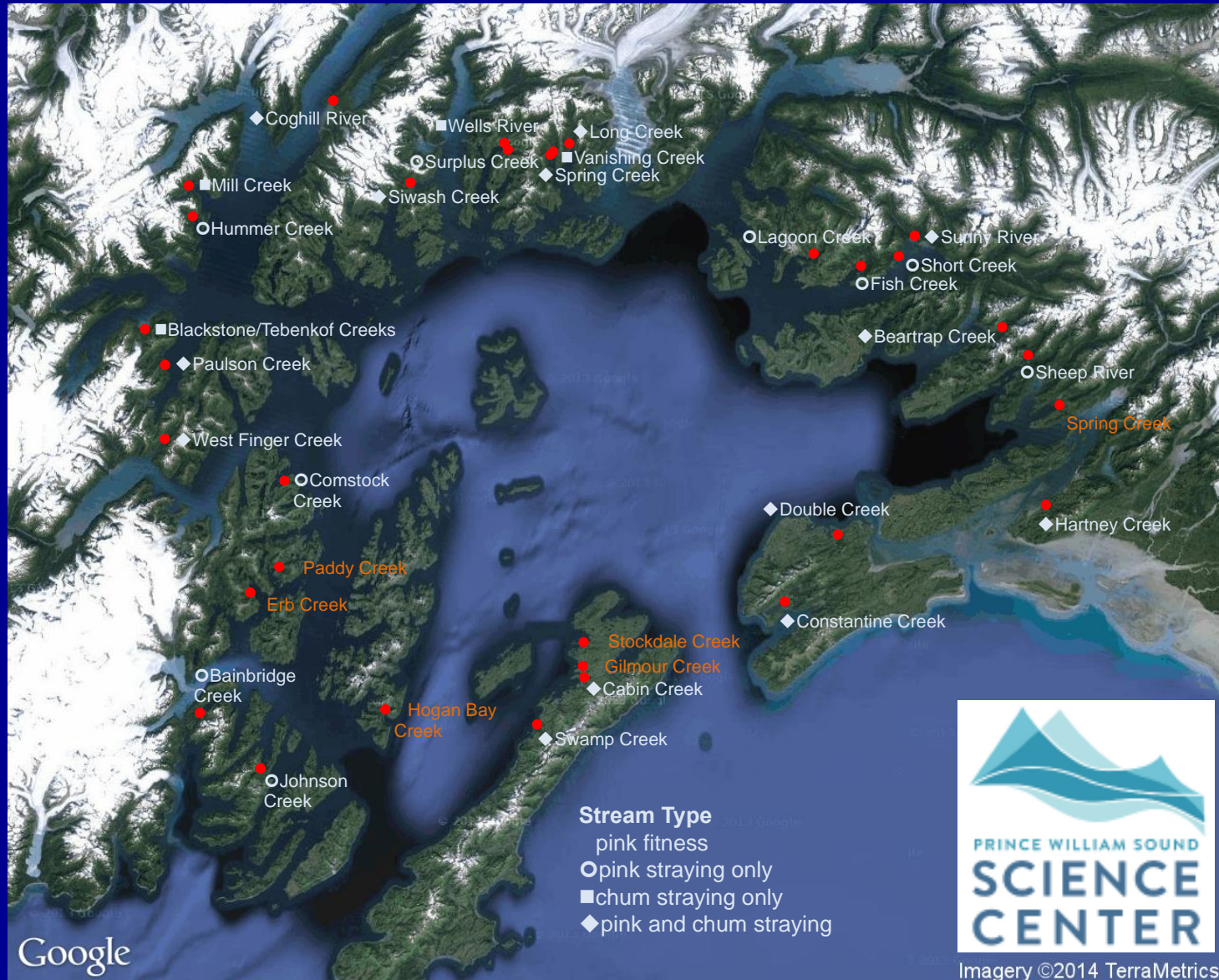
# 2015 Field Campaign PWS

- 32 study streams throughout PWS.



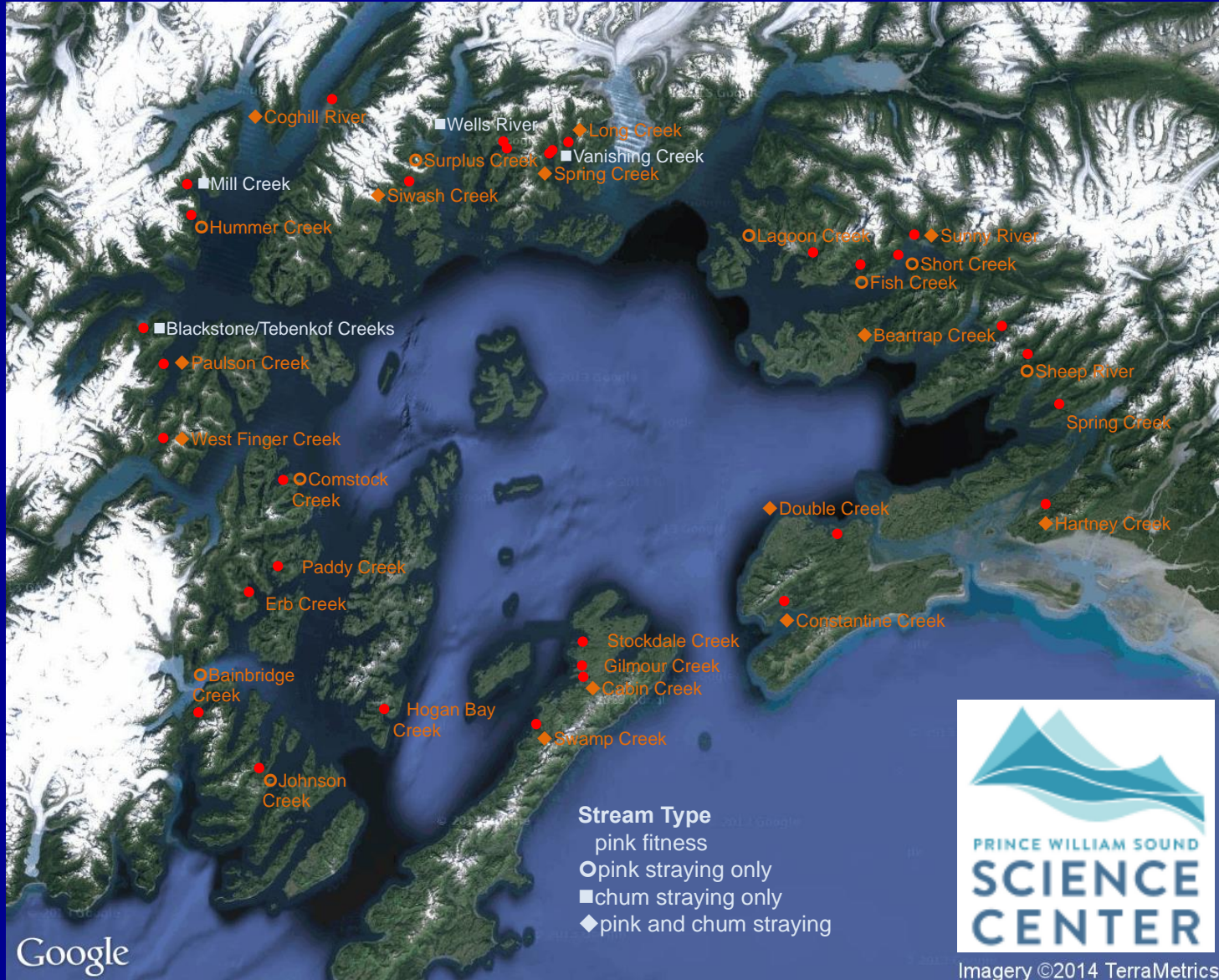
# 2015 Field Campaign PWS

- 6 pedigree fitness streams for pinks.
  - Sampled every 1-3 days.



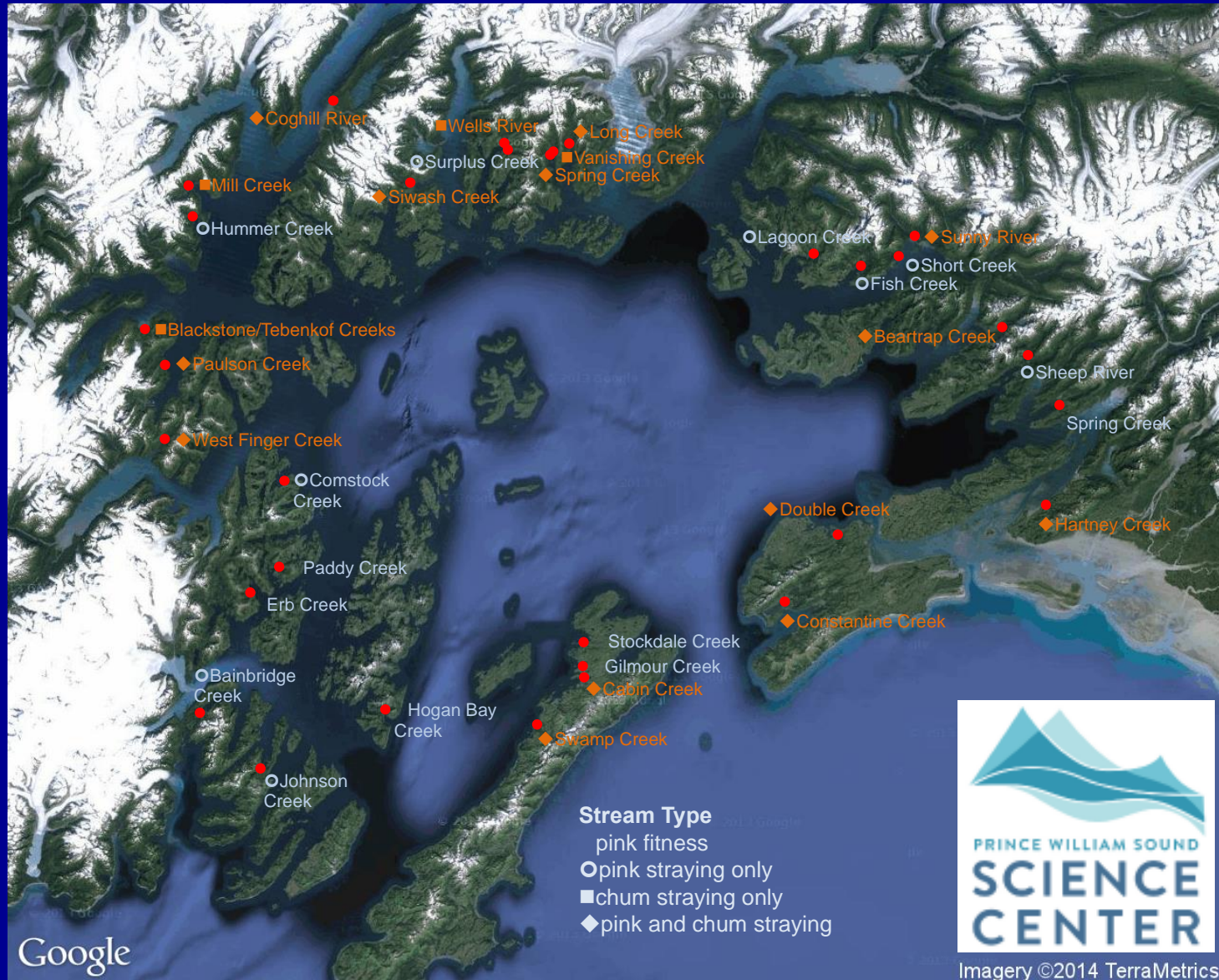
# 2015 Field Campaign PWS

- 28 pink straying streams.
- Includes 12 streams for stock structure study.



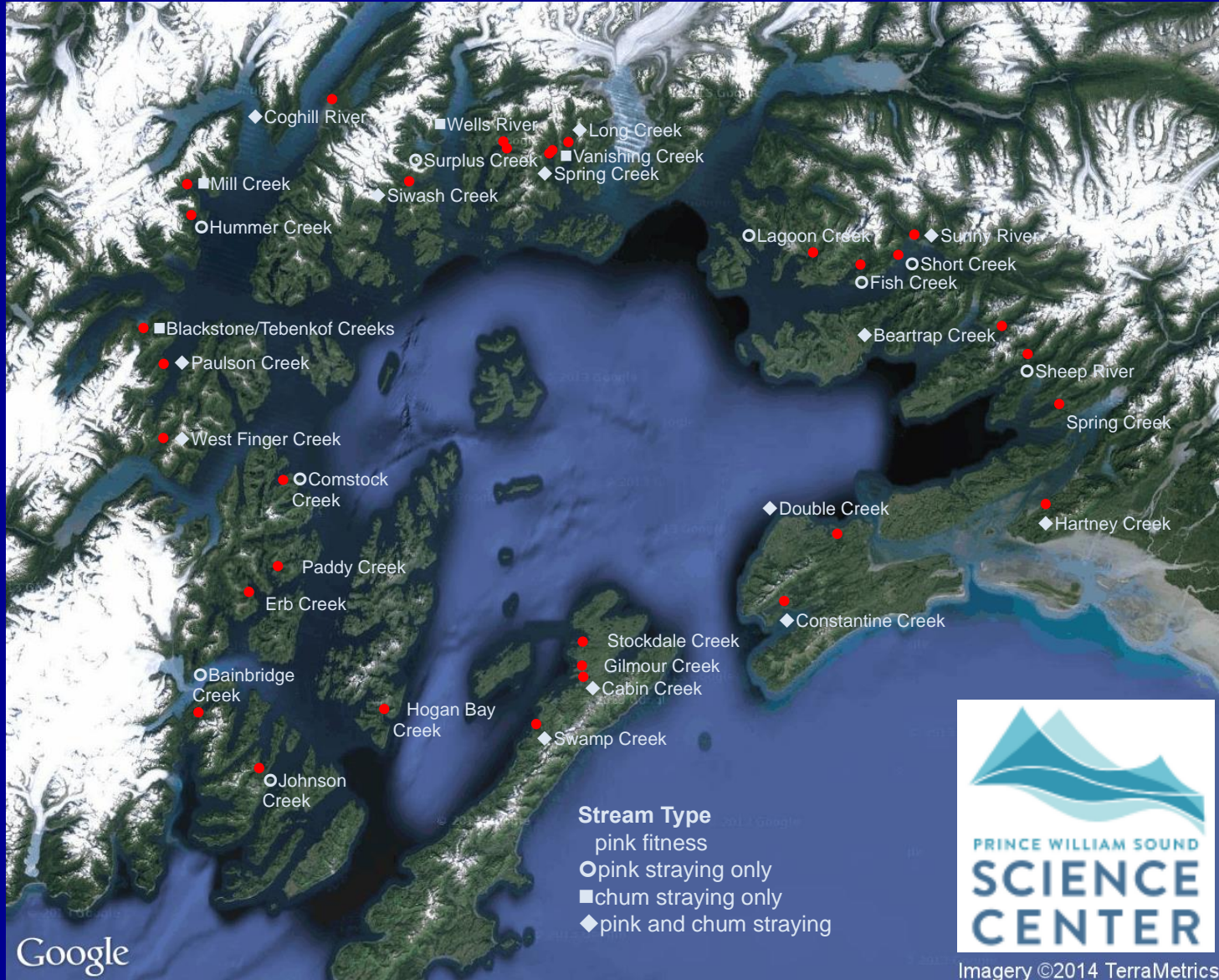
# 2015 Field Campaign PWS

- 18 Chum straying streams, 17 in fraction analysis.



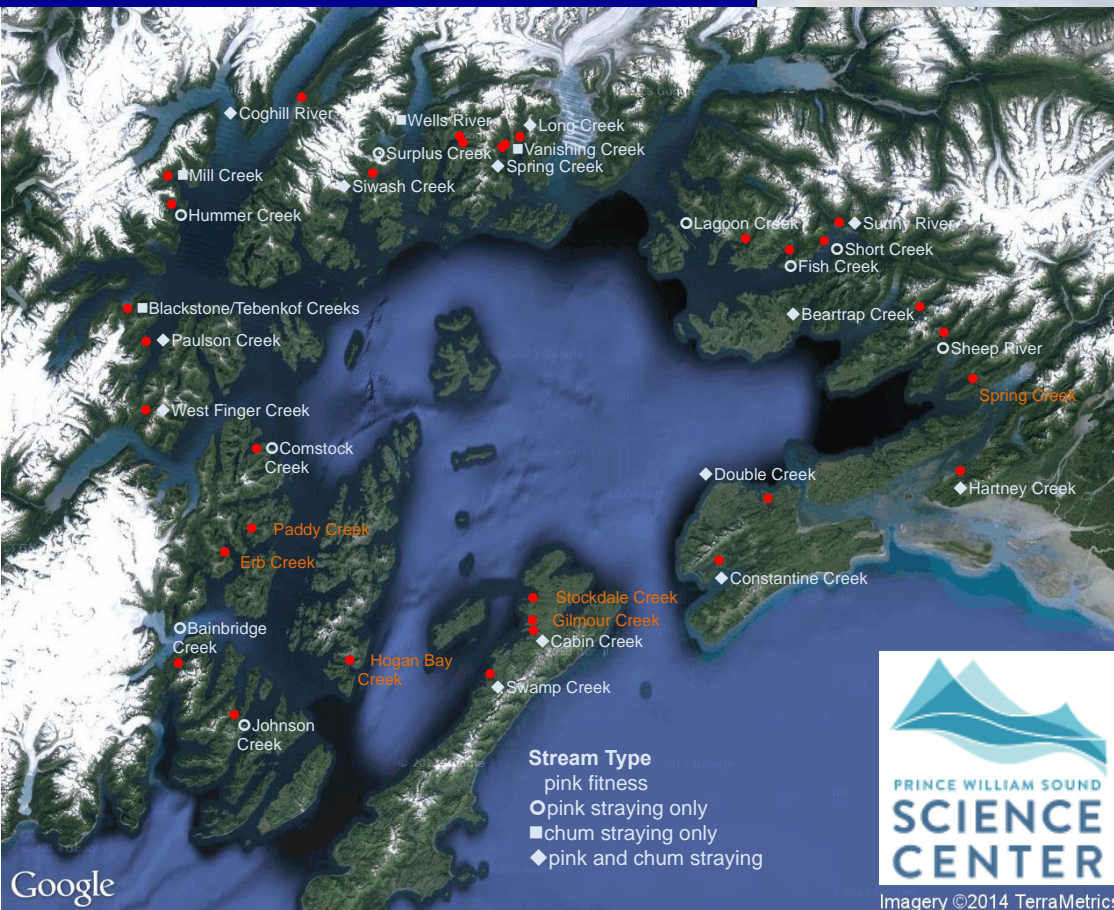
# 2015 Field Campaign PWS

- 6 field crews operating in PWS.



# PWS Vessel-Based Crews 2015: Cathy G

- July 18 –  
September 26, 2015
- 3 port calls
- Focus: stray streams



# PWS Vessel-Based Crews 2015: Auklet

- August 1 – September 19, 2015
- 1 port call
- Focus: pedigree streams
  - Early/Late: Every 3 days
  - Mid: Every 2 day sampling

Photo Credit: A. Chastan

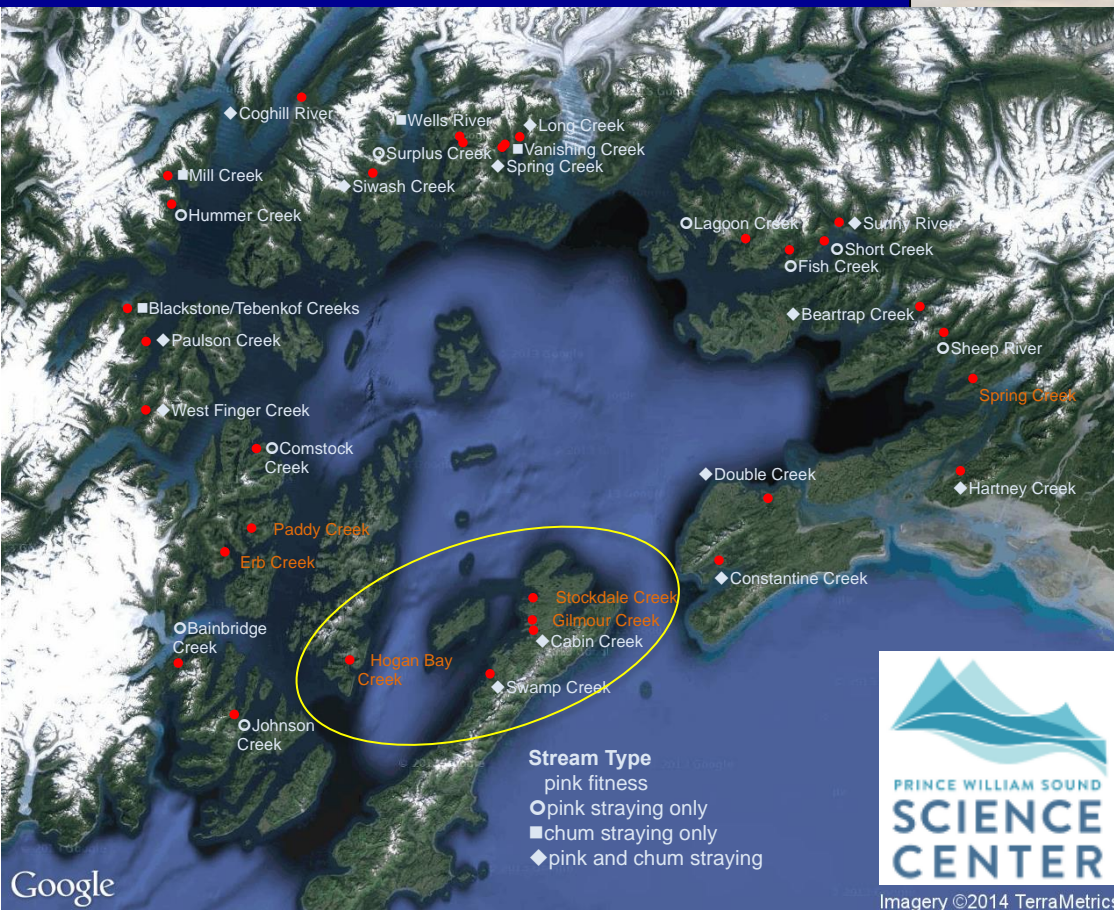


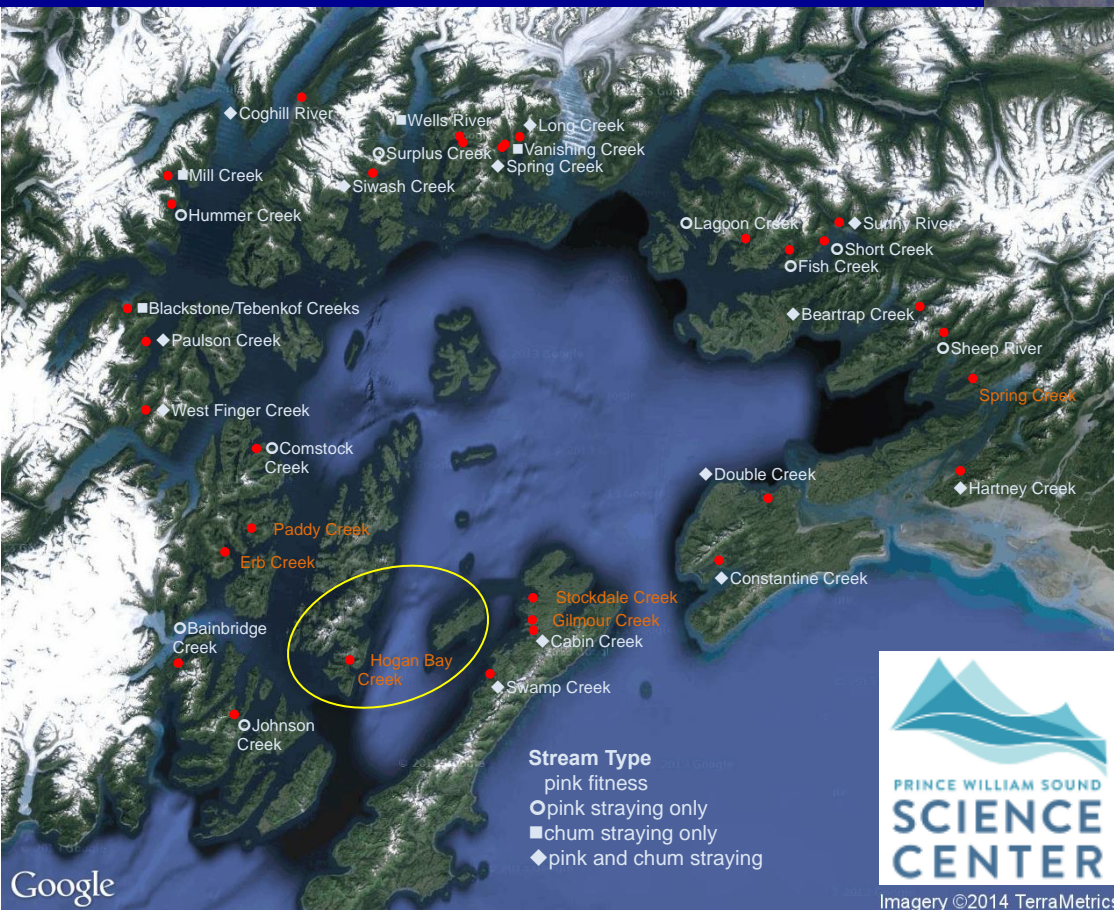
Photo Credit: D. Janka <sup>8</sup>



# PWS Vessel-Based Crews 2015: Auklet

Photo Credit: T. D'Aoust

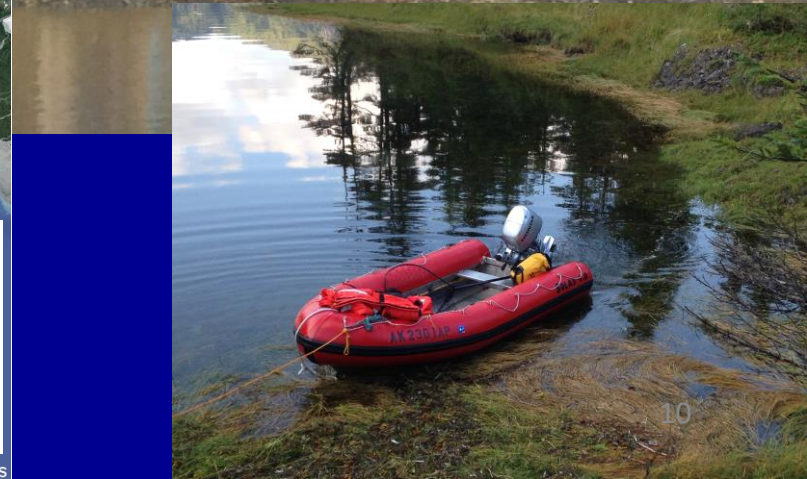
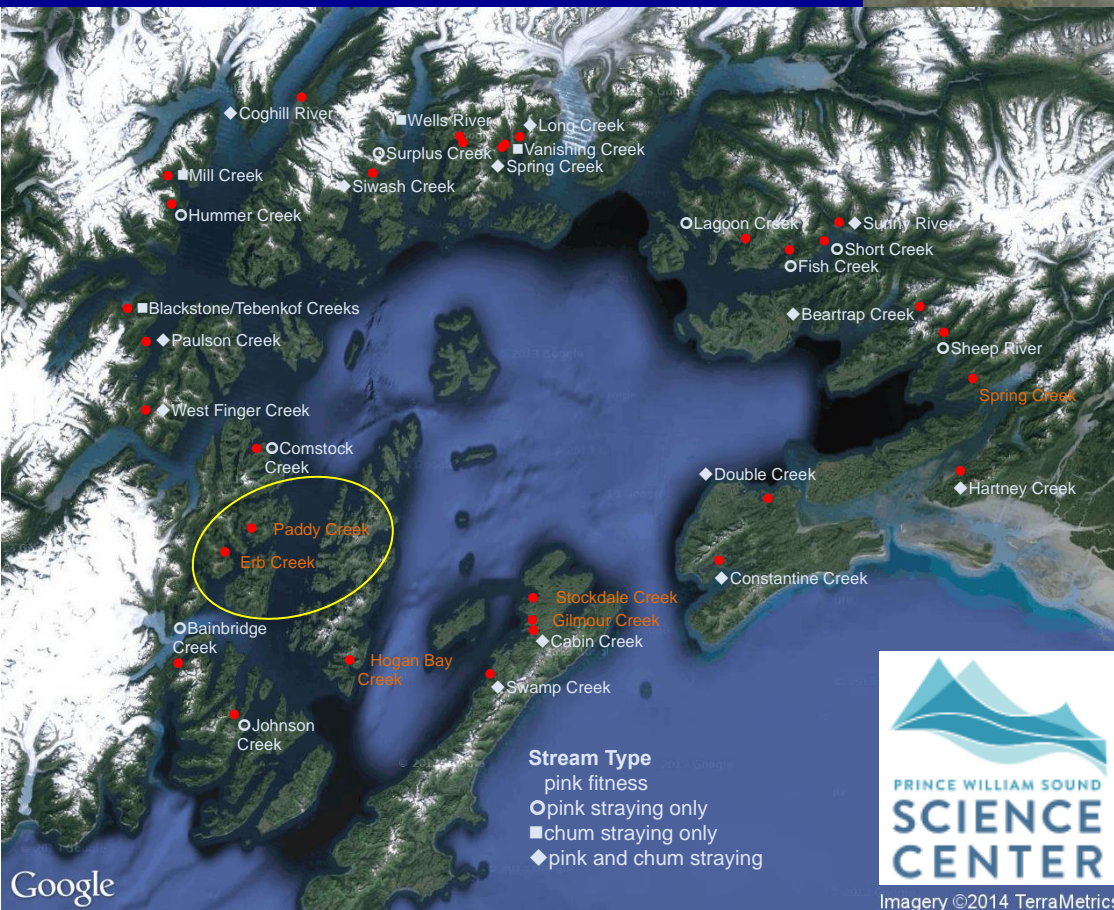
- August 21 – 30, 2015
- Focus: pedigree stream
- Every day sampling



# PWS Camping Crew 2015: Paddy Bay

Photo Credit: J. McMahon

- August 1 – September 26, 2015
- Resupply via Cathy G
- Focus: pedigree streams



# Additional Field Crews 2015: Texas A&M, Cordova-based

## TAMU Crew

- Alice Cove base camp
- July 10 – August 21, 2015
- Focus:  
Spring Creek (pedigree) only
- Daily sampling

## CDV Crew

- Mid-July – September 20, 2014
- Focus: Hartney Creek, Double Creek, Sheep River, Humpback and Windy Creeks (Wei), Spring Creek (pedigree) late season, 2 trips to Coghill River



# Field Collections: Otoliths and Genetic Samples



Photo Credit: D. Janka

# Field Collections: Otoliths and Genetic Samples



# 2015 PWS Sample Summary

	Total	Pink	Chum	Pink-Wei (Windy, Humpback, & Snug)
Otoliths	78,098	70,815	6,492	791
DNA- Pedigree	58,809	58,809	-	-
Stream Visits	311	-	-	-
Sampling Goal		28/28 streams >384	12/17 streams >384	

-Chum sampling goals:

Blackstone Creek (13.3% of the sampling goal), Coghill River (60.9%), Paulsen (37.2%), Siwash (32.8%), Spring (44.3%), and Swamp (52.1%) Creeks.

-Excellent field crews and charter vessel operators!

-Great conditions for sampling in 2015, but low water in streams.







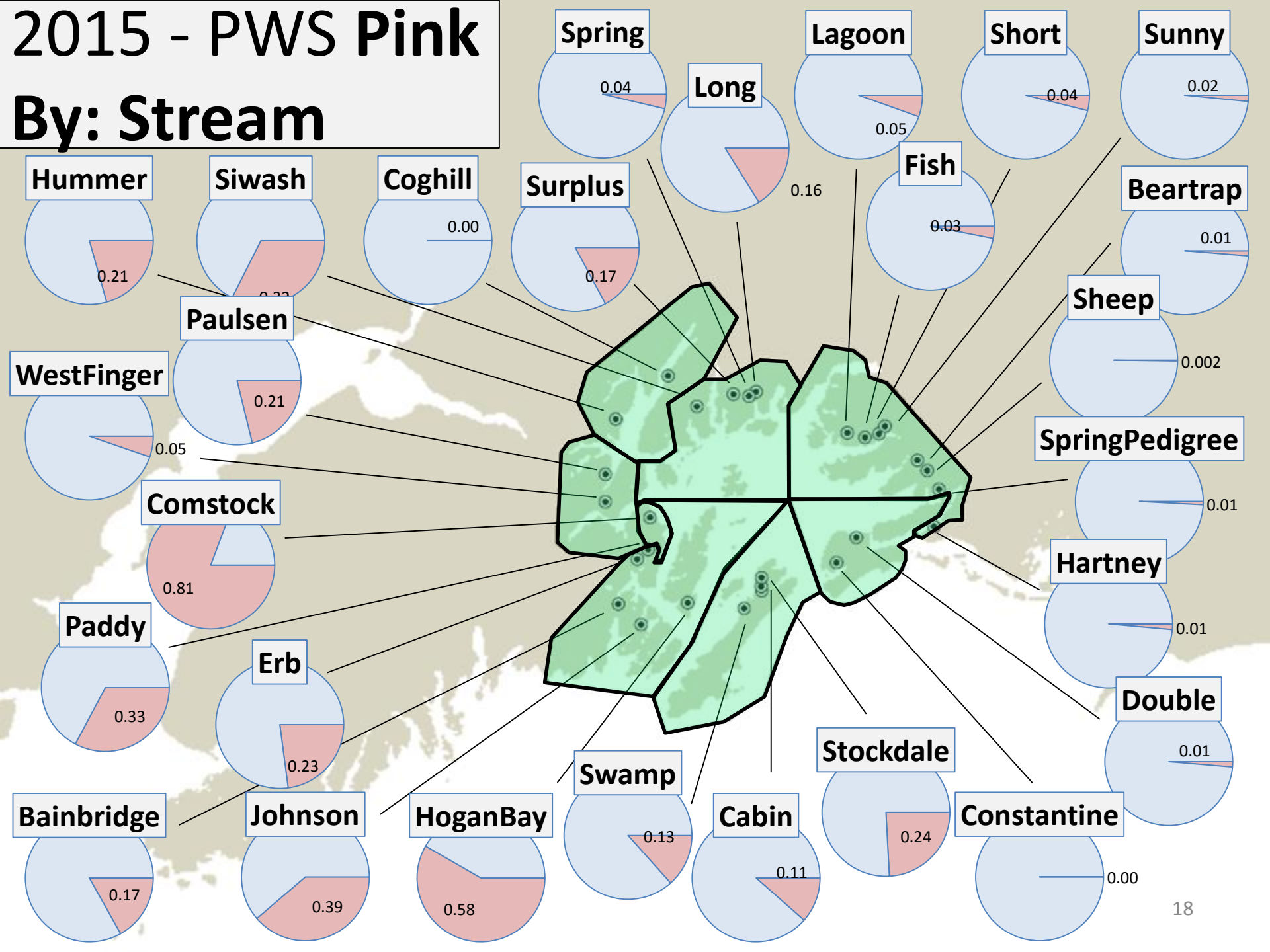
# PWS Hatchery Fraction Results 2015: Pink Salmon Streams, Districts, Region

Photo Credit: K. Ruck

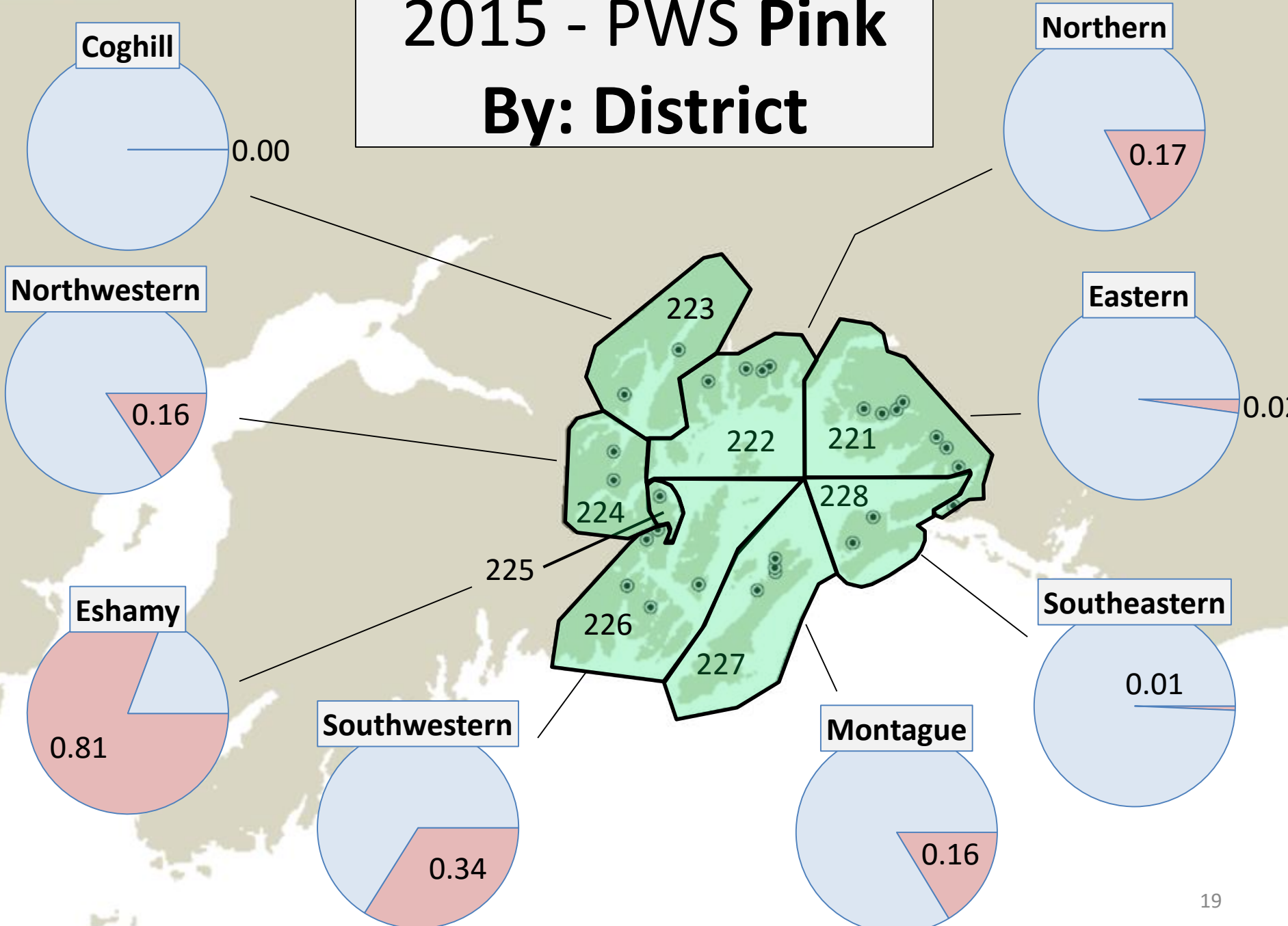


# 2015 - PWS Pink

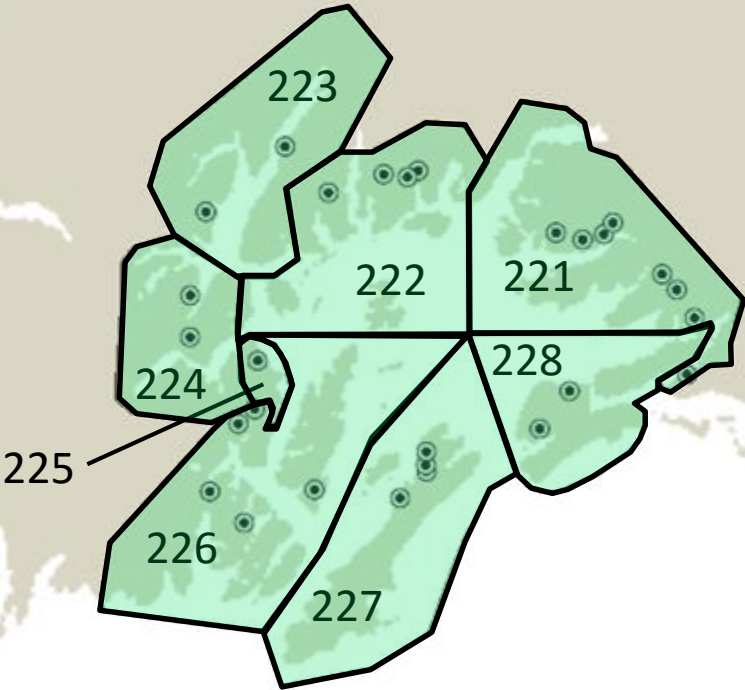
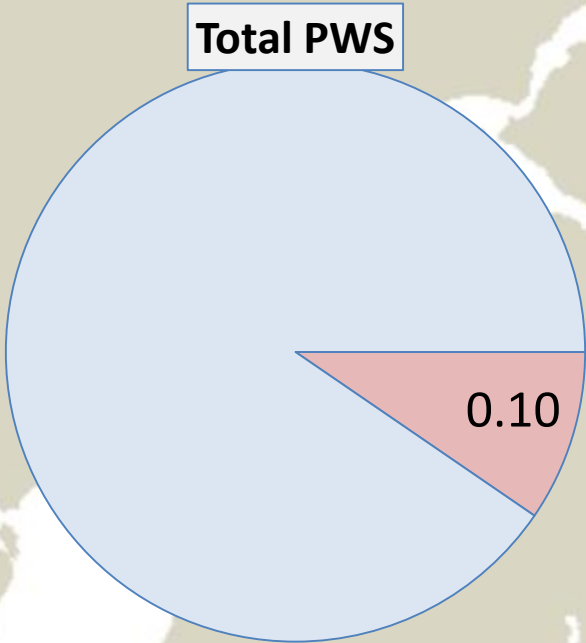
## By: Stream



# 2015 - PWS Pink By: District



# 2015 - PWS Pink Overall



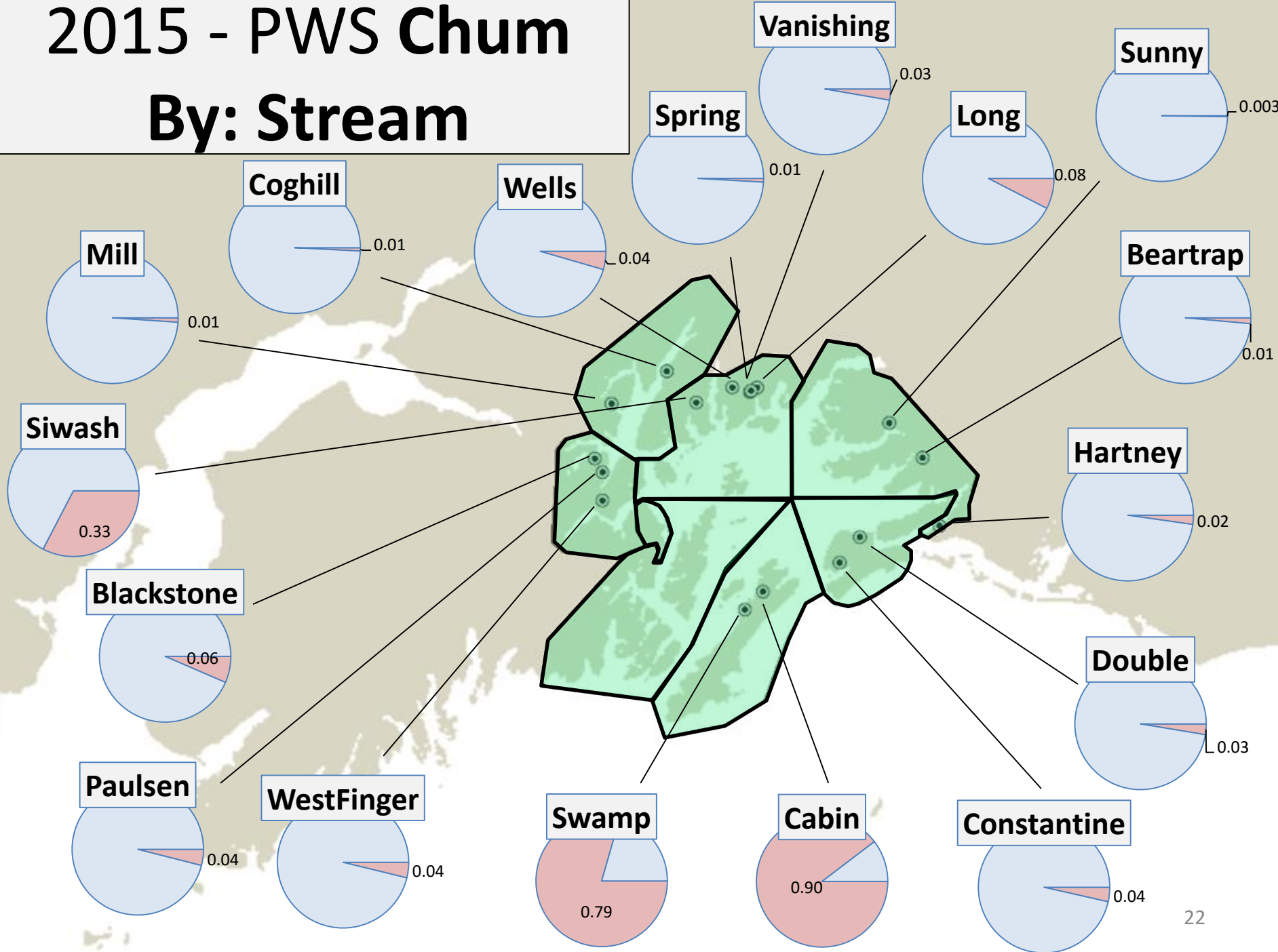
# PWS Hatchery Fraction Results 2015: Chum Salmon Streams, Districts, Region

Photo Credit: A. Patterson

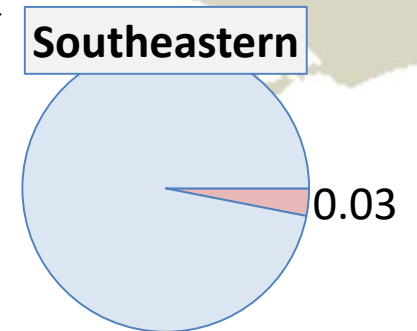
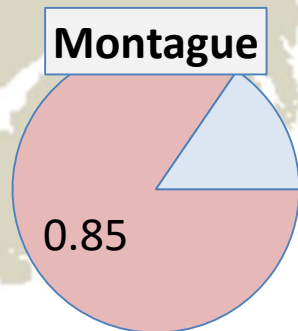
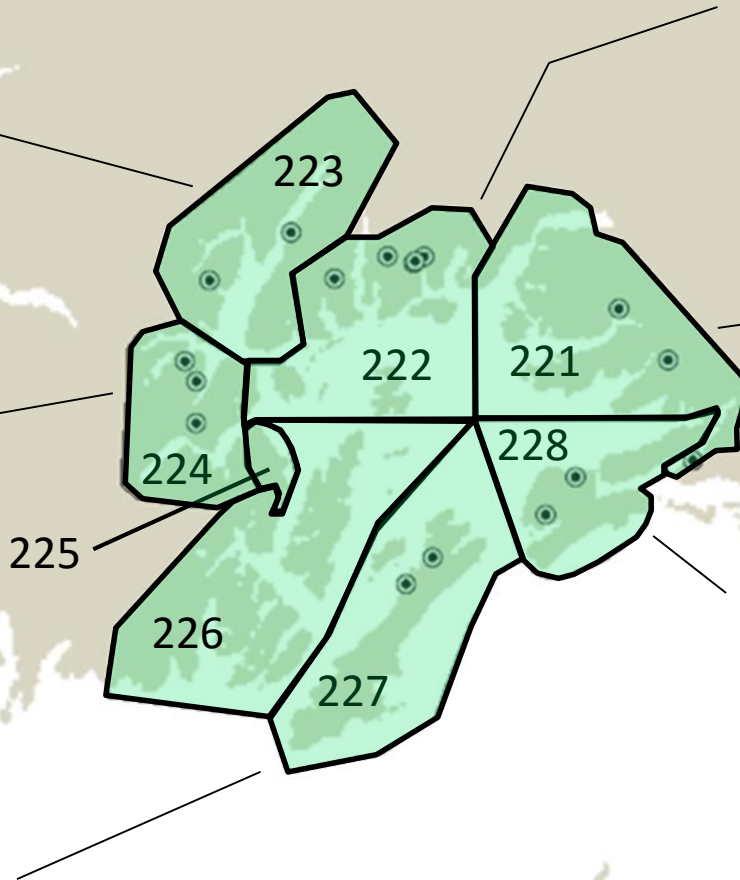
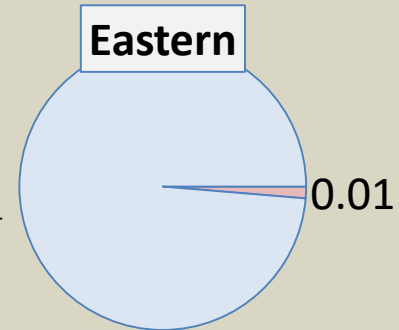
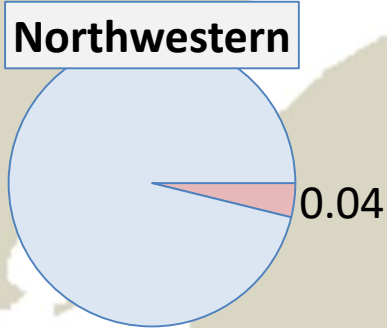
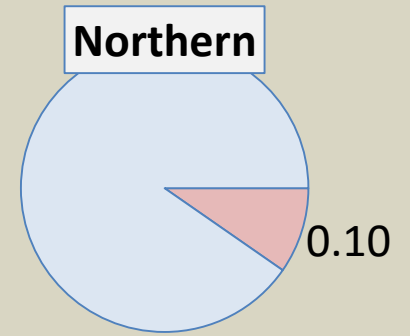
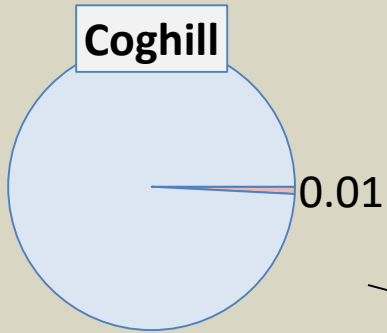


# 2015 - PWS Chum

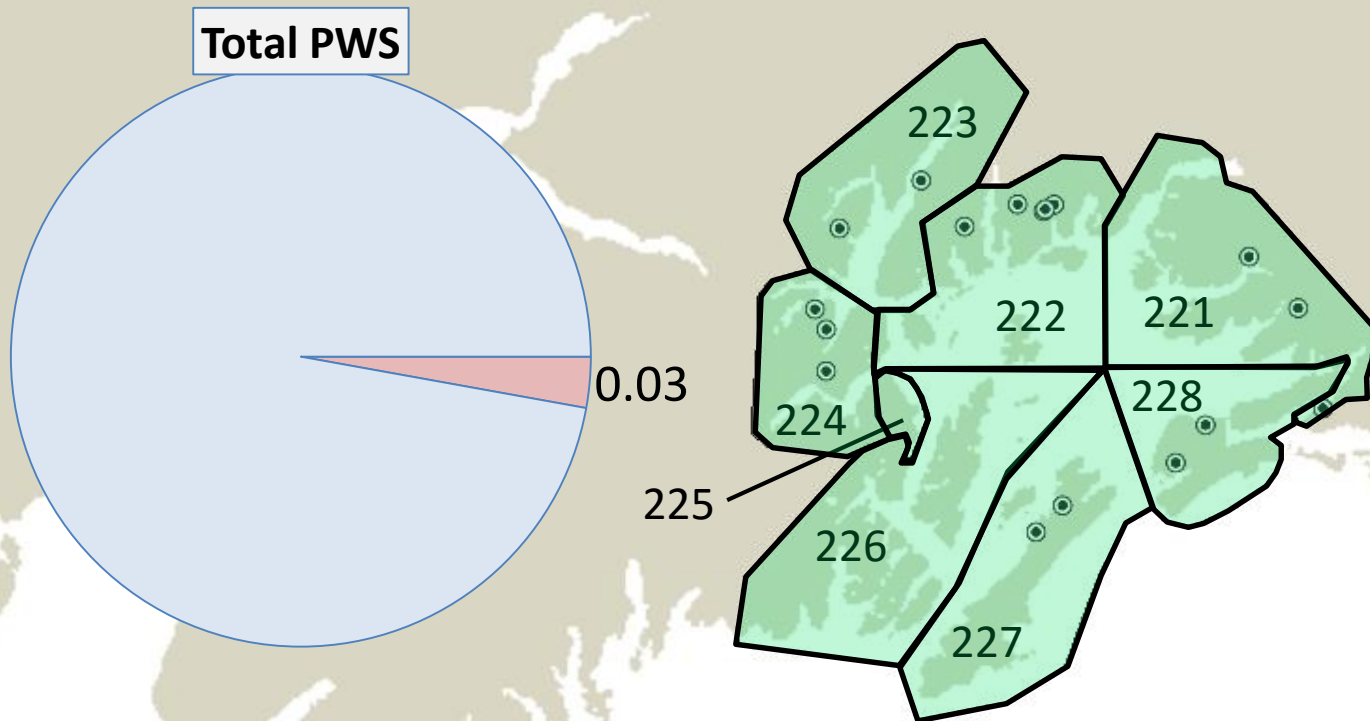
## By: Stream



# 2015 - PWS Chum By: District

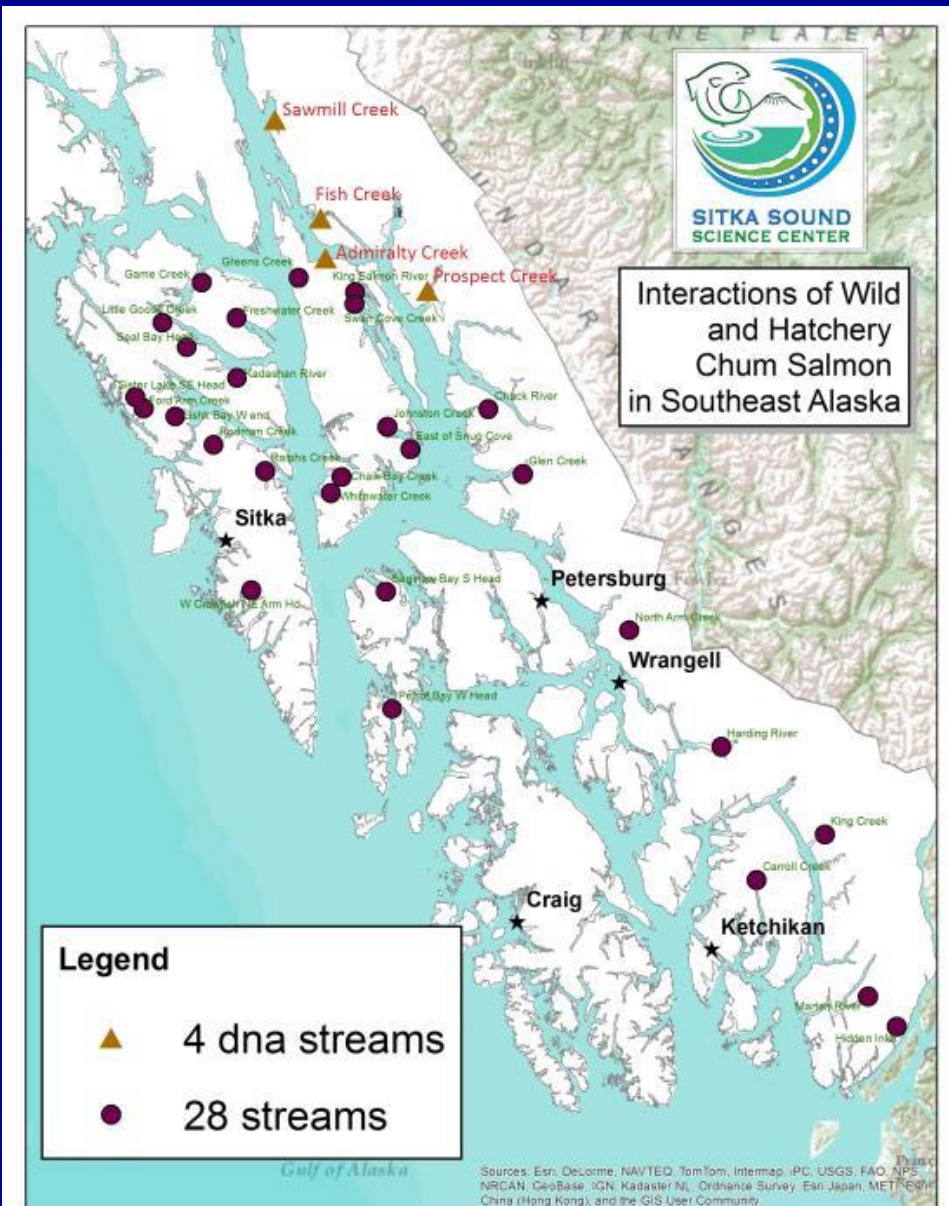


# 2015 - PWS Chum Overall





# 2015 Field Campaign SEAK



# 2015 Field Campaign SEAK

Photo Credit: D. Rhea-Fournier

- Sampled July 22 – Sept 2, 2015
- No pedigree sampling
- Otolith crews
  - 3 vessel crews
  - 2 land-based crews
- Streams sampled 2-4 times.



# 2015 SEAK Sample Summary

	Total Chum
Otoliths	10,651
DNA-Pedigree	NA
Stream Visits	116
Sampling Goal	16/32 streams >384

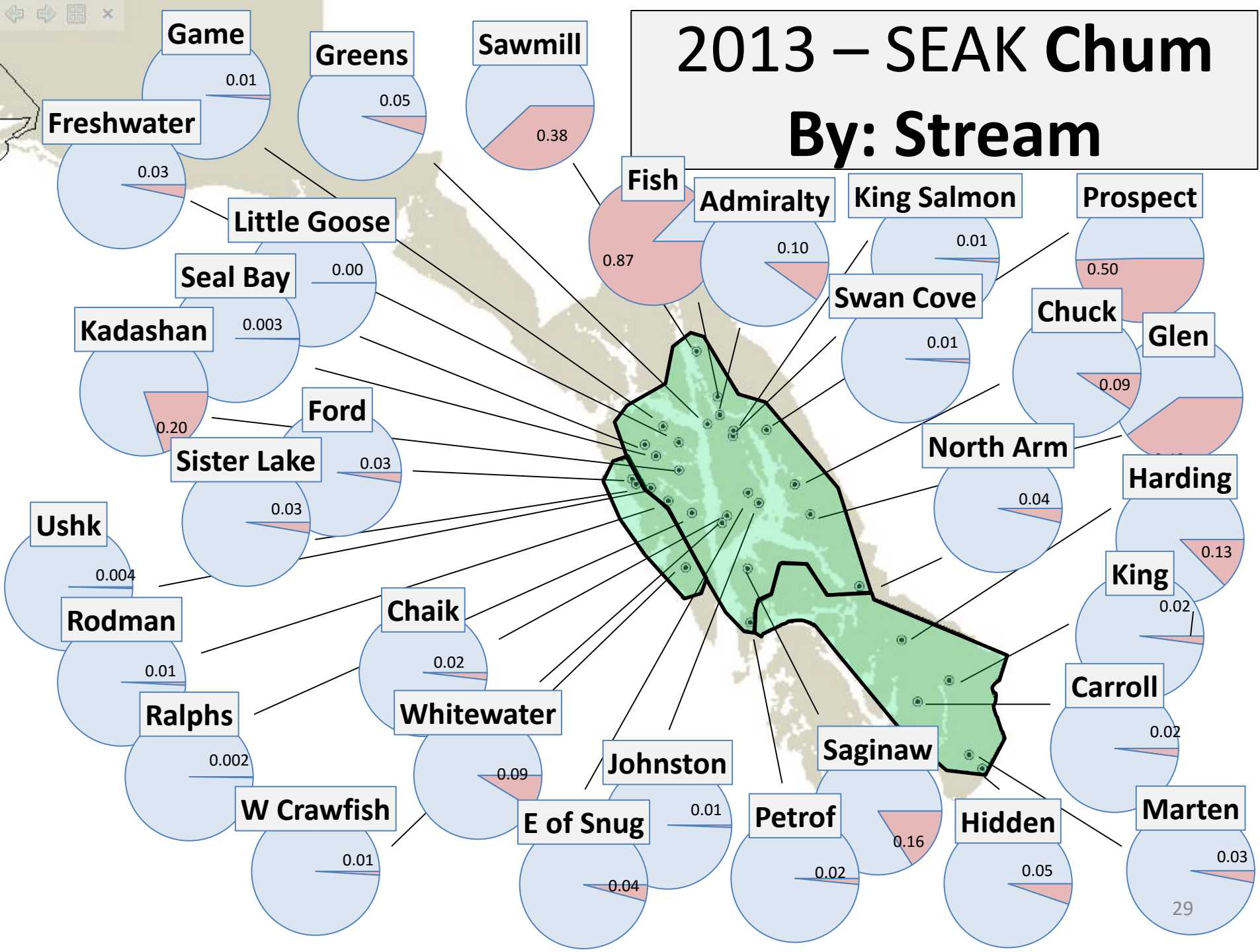
# SEAK Hatchery Fraction Results 2015: Chum Salmon Streams, Districts, Region

Photo Credit: B. Ferguson

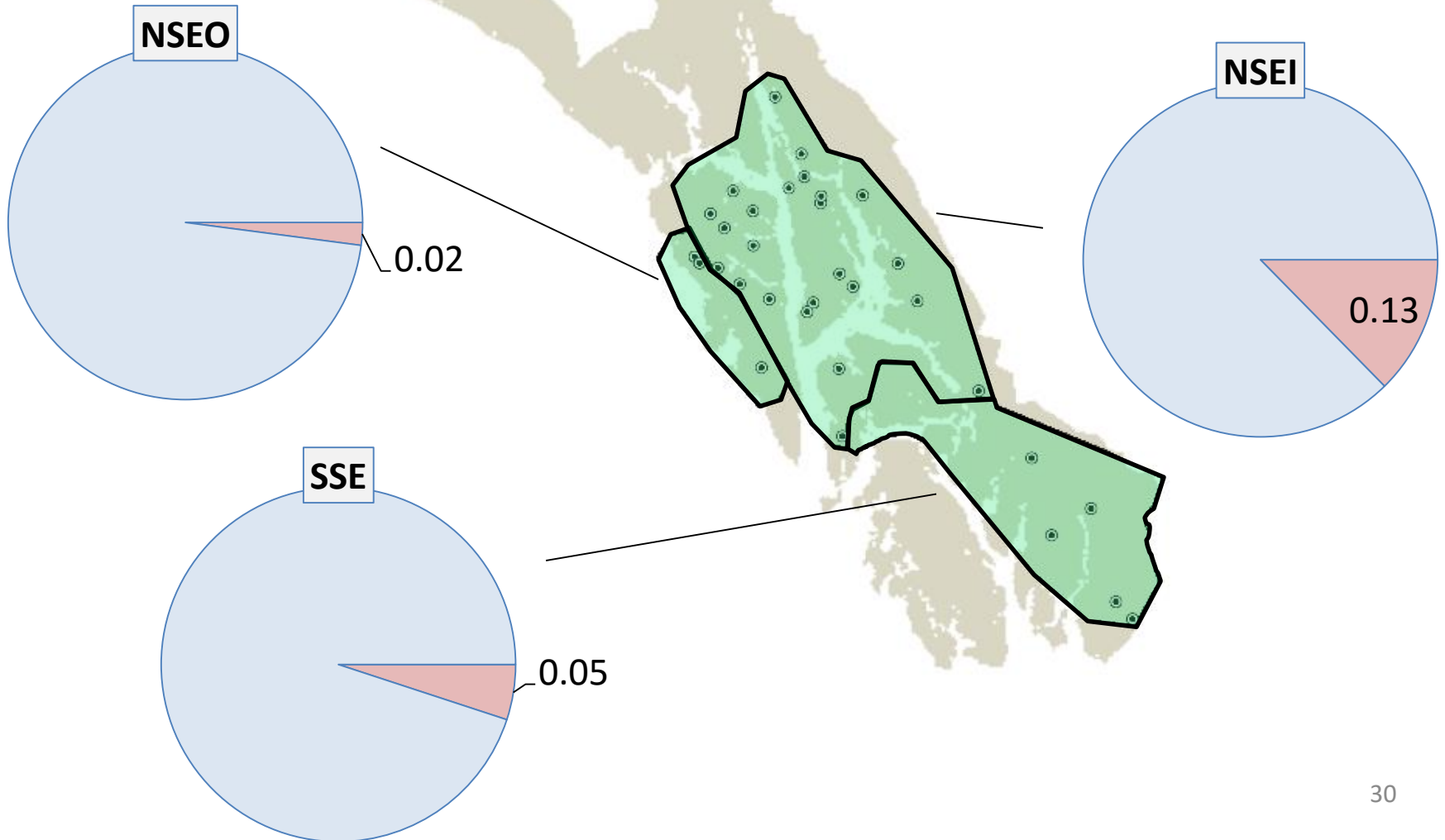


# 2013 – SEAK Chum

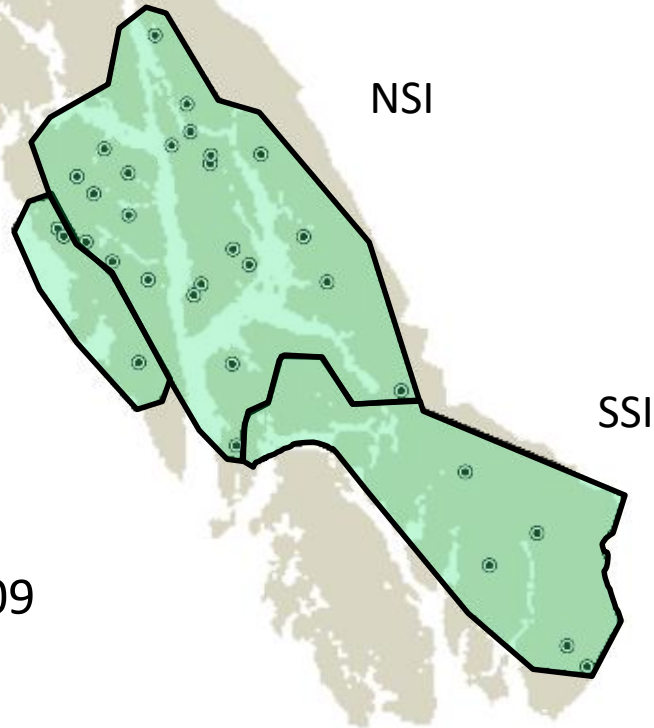
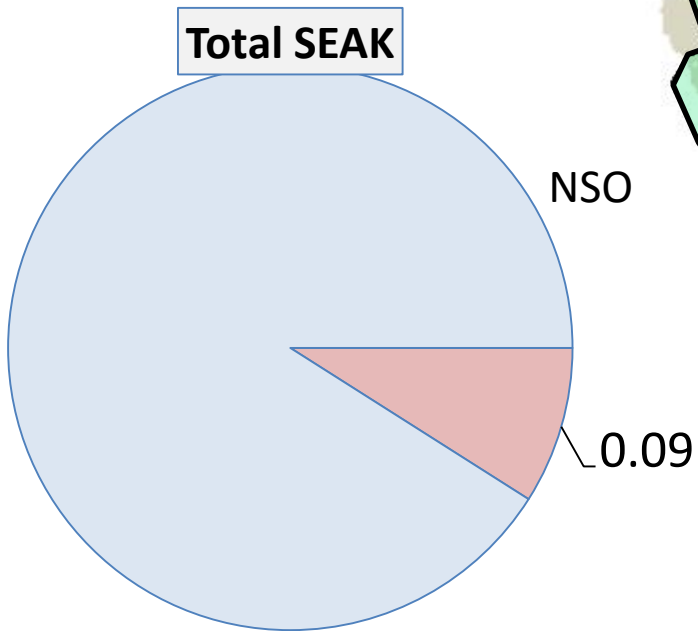
## By: Stream



# 2015 – SEAK Chum By: Subregion



# 2015 – SEAK Chum Overall



# Overall Stream Hatchery Fractions 2013-2015

