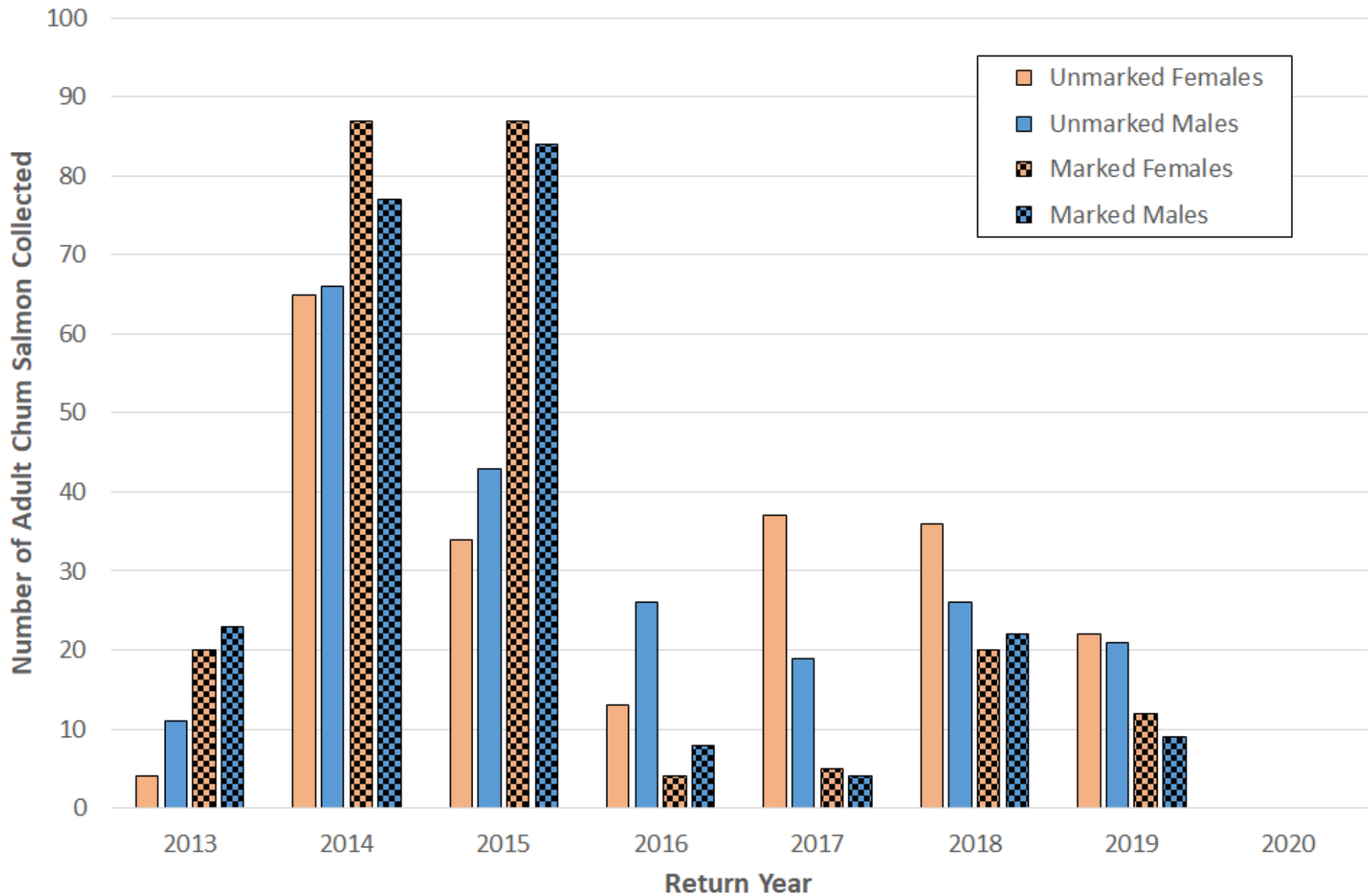


Chum Salmon Reintroduction Project (2020-21)

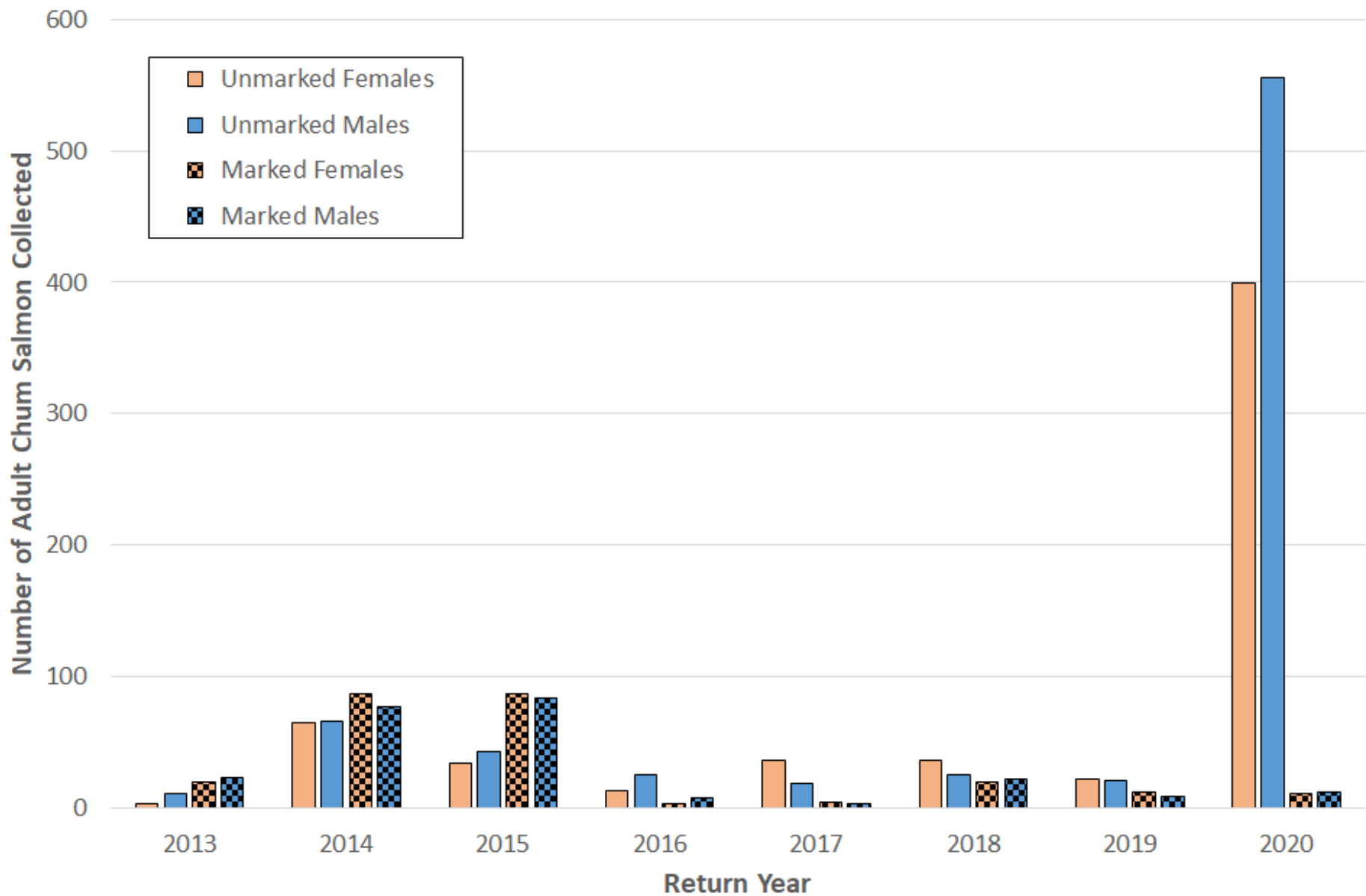
SALMON
SPAWNING
SURVEY

Derek Wiley
Assistant Project Leader
Oregon Department of Fish & Wildlife
93000 Ritter Road
Astoria, Oregon 97103

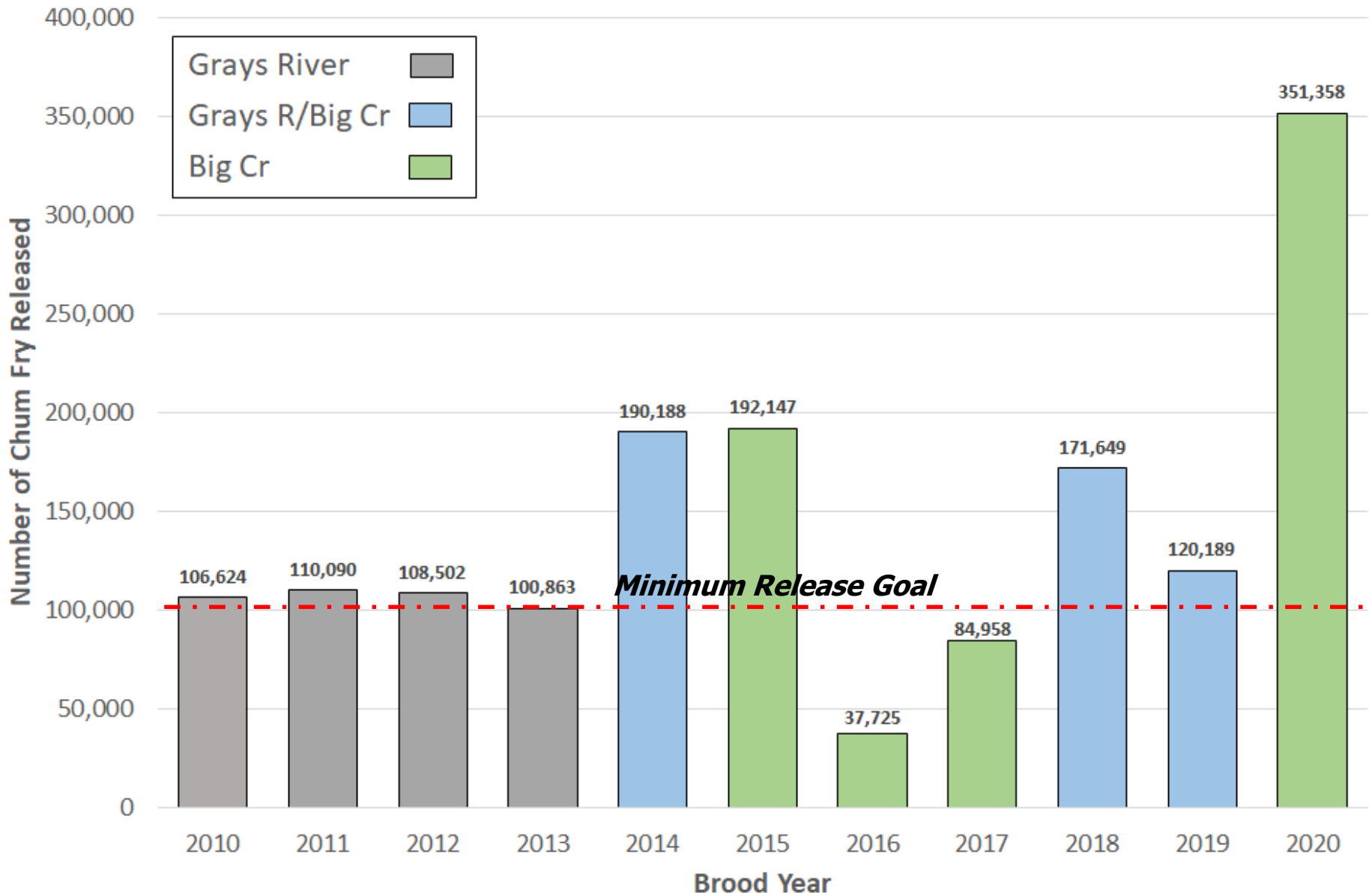
Broodstock Collection (Big Creek Hatchery)



Broodstock Collection (Big Creek Hatchery)



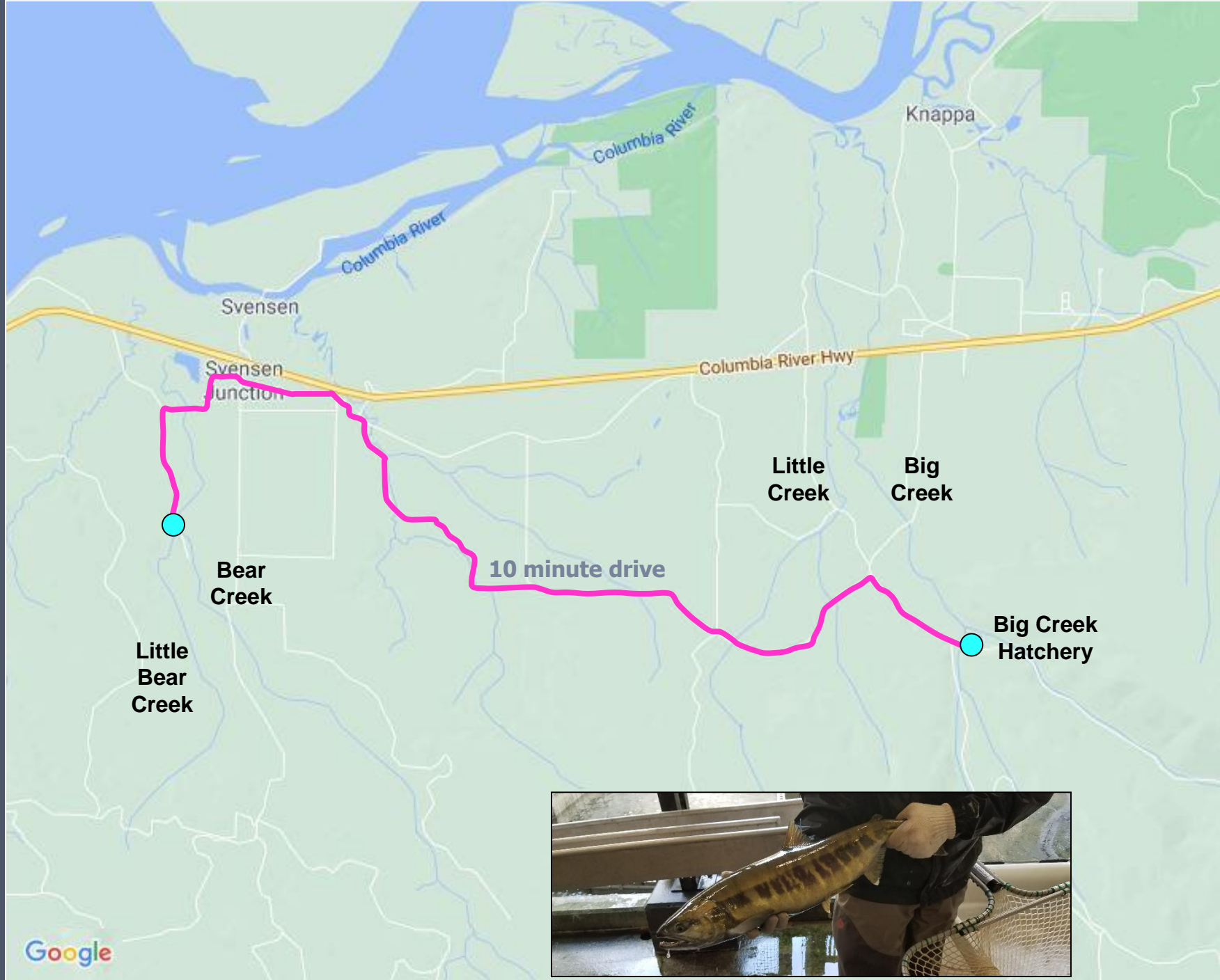
Big Creek Hatchery Chum Fry Releases



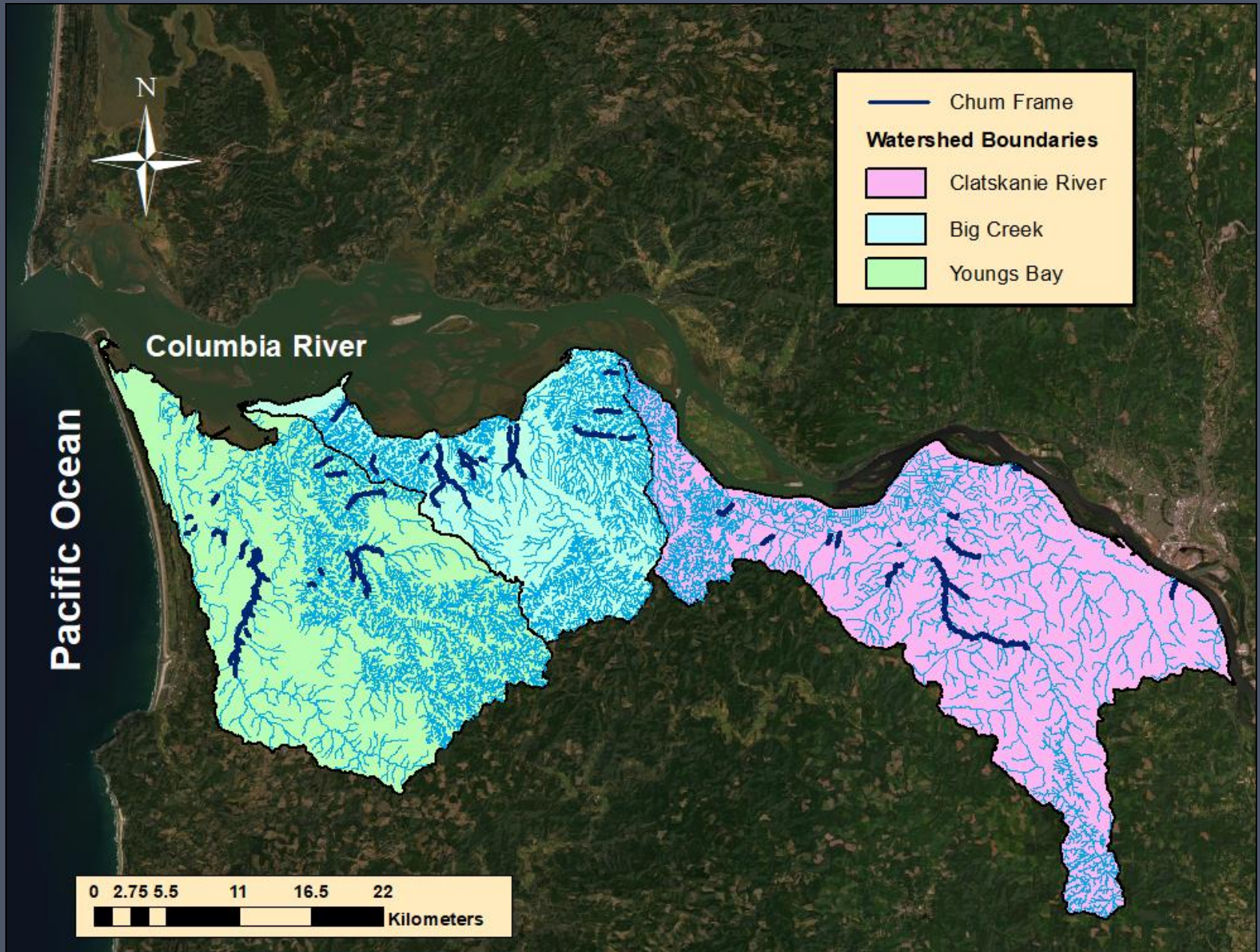
Outplanting

- 641 adults outplanted
 - Bear Creek (329 fish)
 - Little Bear Creek (312 adults)
- Outplanting occurred on 6 different days
 - November 17th, 18th, 24th
 - December 2nd, 8th, and 14th
- Sex ratio of outplanted adults
 - Males (241 fish)
 - Females (400 fish)
- Recaptures at Big Creek Hatchery
 - 86 fish
 - Males (39 fish, 16%), Females (47 fish, 12%)
- Spawning Surveys
 - Tagged fish observed outside BCW
 - Downstream of BCH and in Little Creek

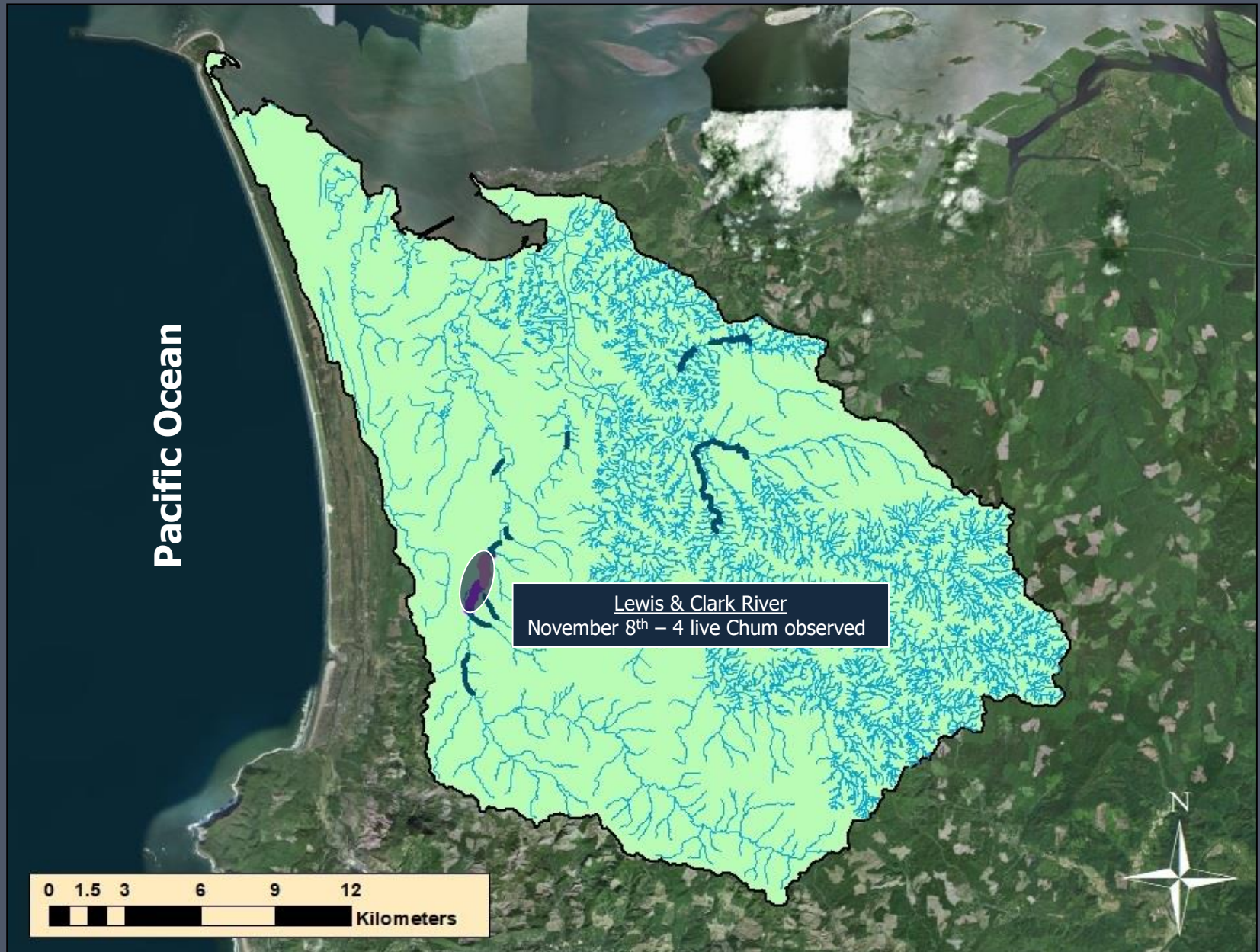




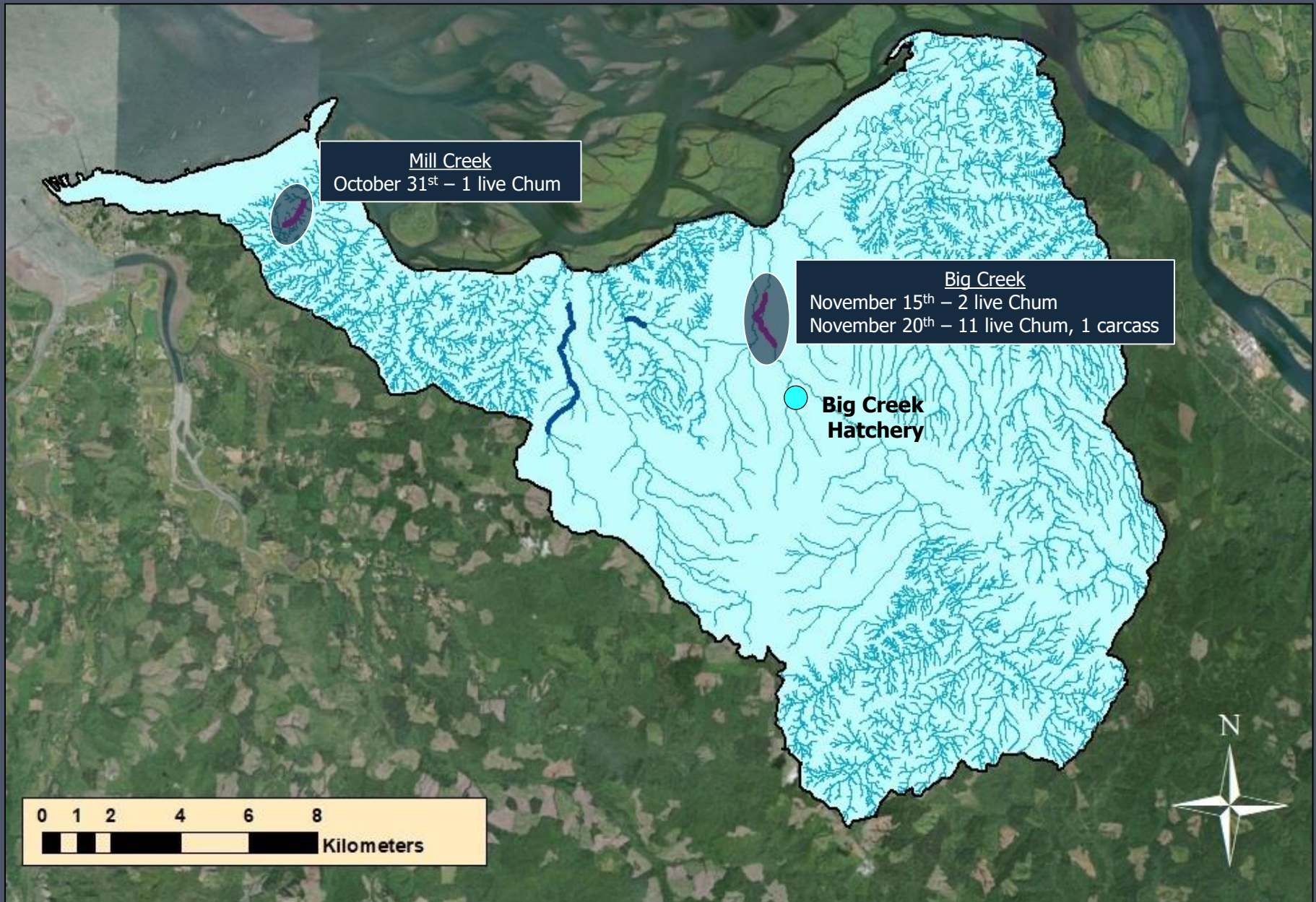
Spawning Surveys (LCR Chum Frame)



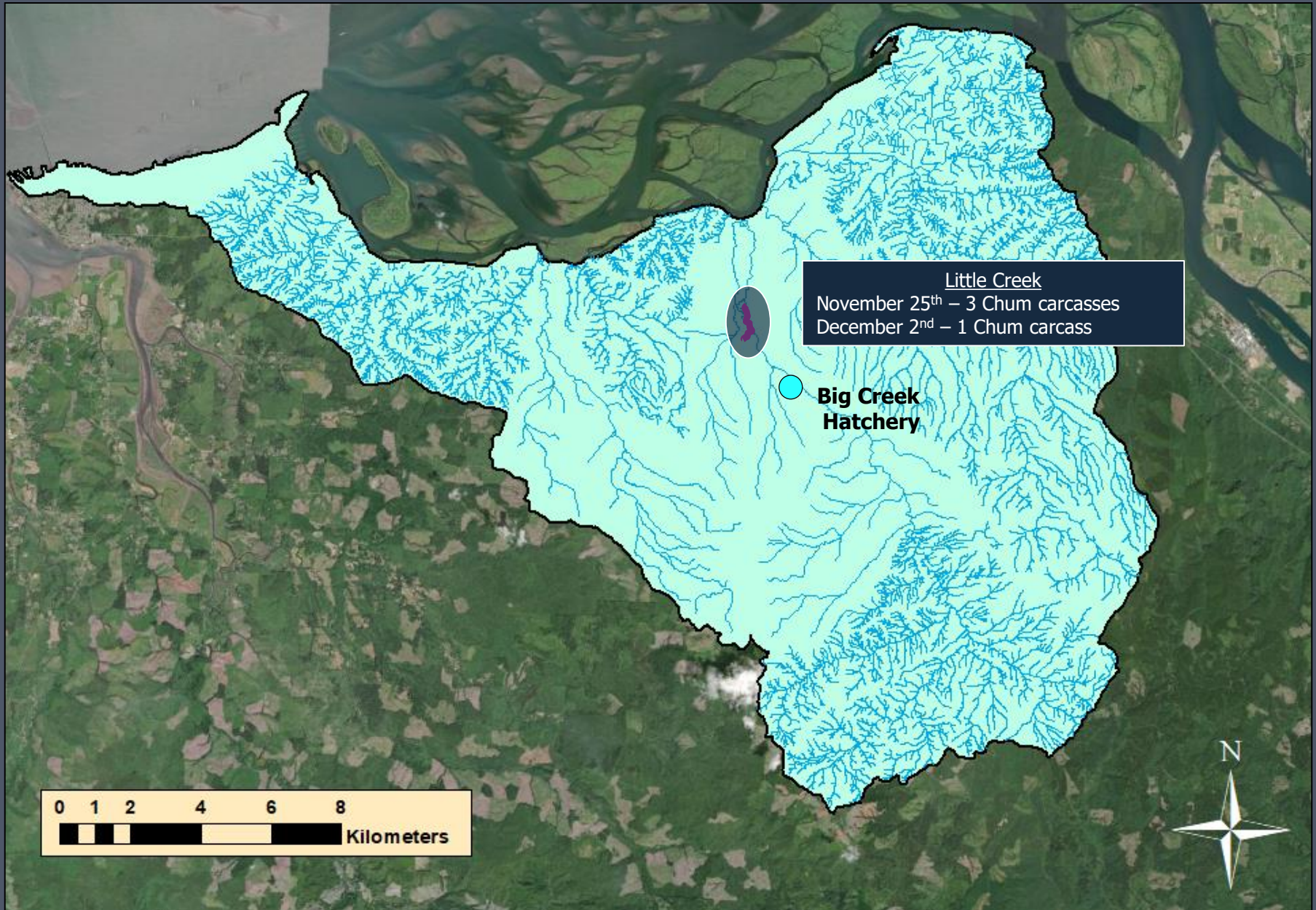
Spawning Surveys (Youngs Bay Watershed - 2017)



Spawning Surveys (Big Creek Watershed - 2018)



Spawning Surveys (Big Creek Watershed - 2019)

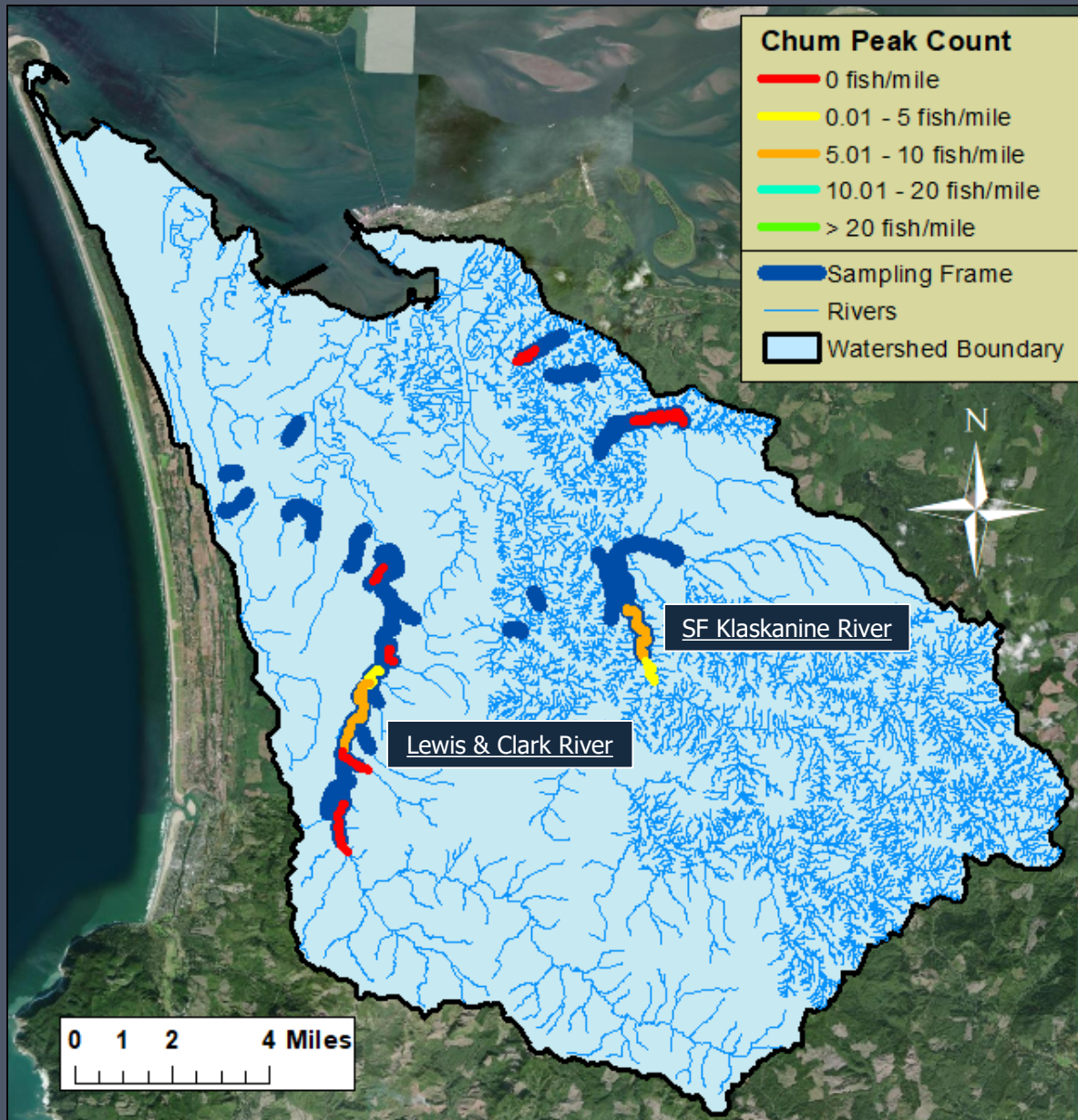


Spawning Surveys

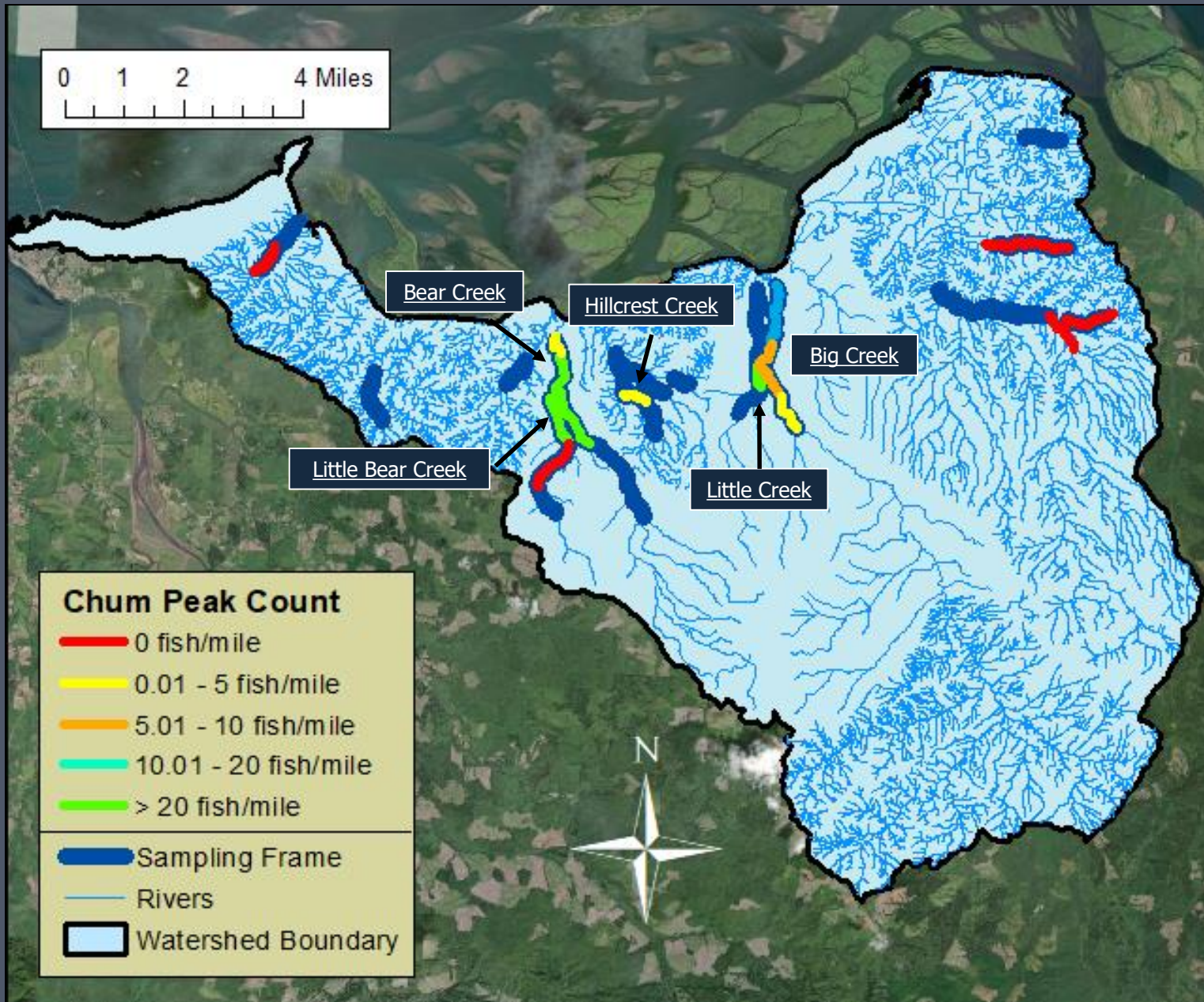
- Adult Chum Salmon observed in 14 different spawning reaches
 - Youngs Bay (5 sites)
 - Big Creek (9 sites)
- Youngs Bay Peak Counts
 - Lewis & Clark River (1.6–10 fish/mile)
 - SF Klaskanine River (1.7–6.7 fish/mile)
- Big Creek Peak Counts
 - Bear Creek (25.7-57.4 fish/mile)
 - Little Bear Creek (158.8 fish/mile)
 - Little Creek (39.6 fish/mile)
 - Big Creek (1.5-16.0 fish/mile)
- Highest observations in Bear Creek watershed – natural origin fish observed
- No fish observed in Clatskanie population and no fry captured in screw trap



Spawning Surveys (Youngs Bay Watershed - 2020)



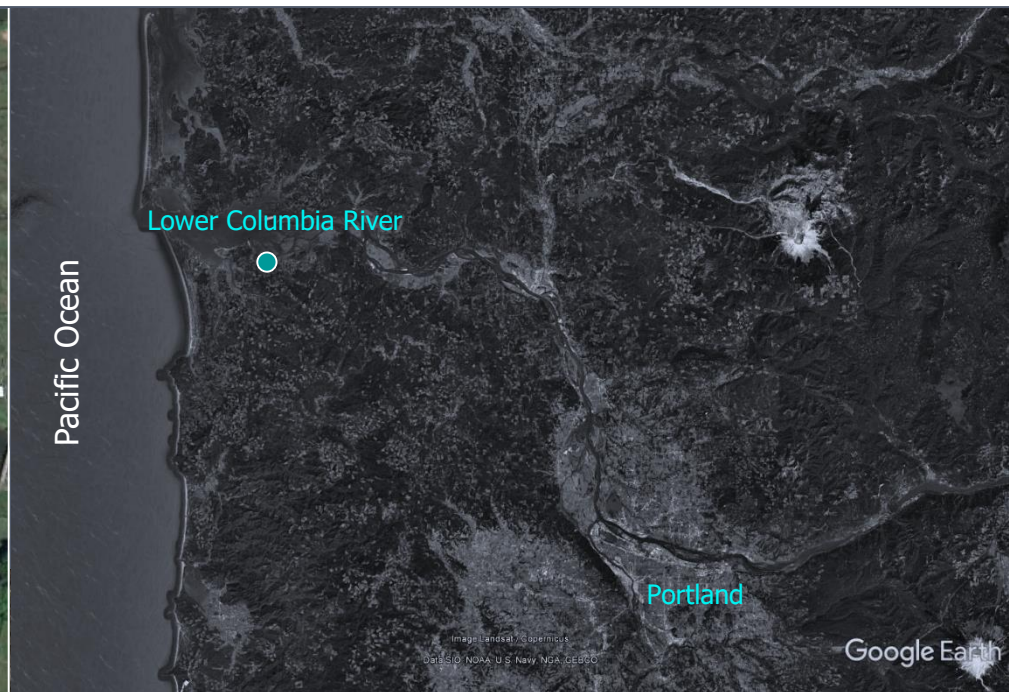
Spawning Surveys (Big Creek Watershed - 2020)



Screw Traps



Bear Creek (Screw Trap)



Bear Creek (Total Catch)



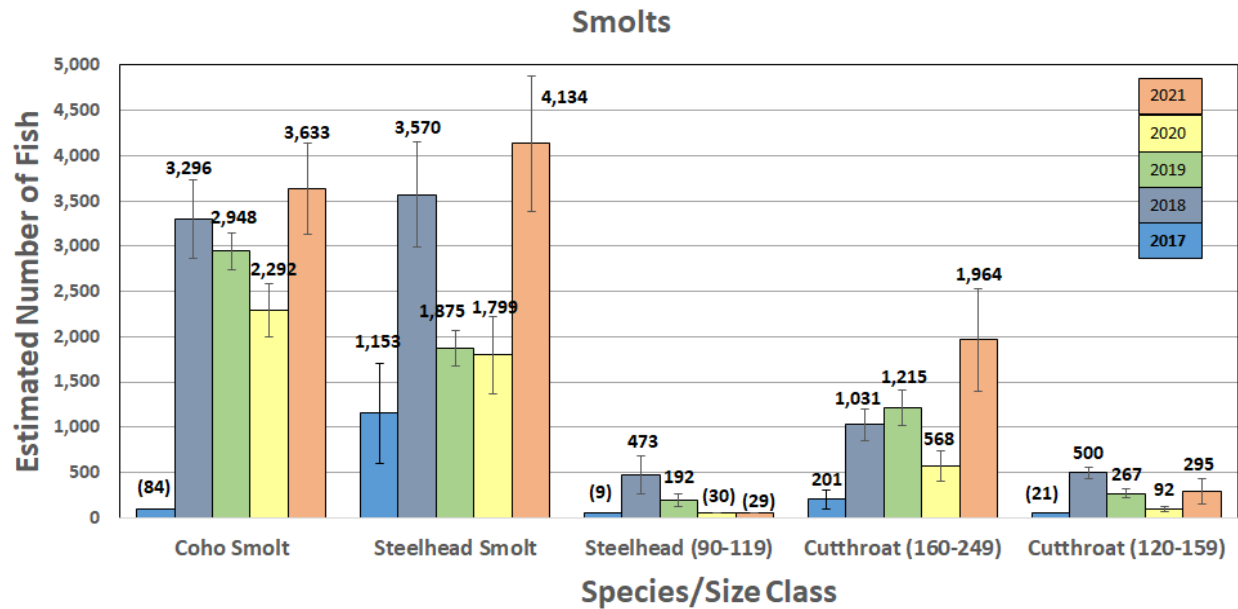
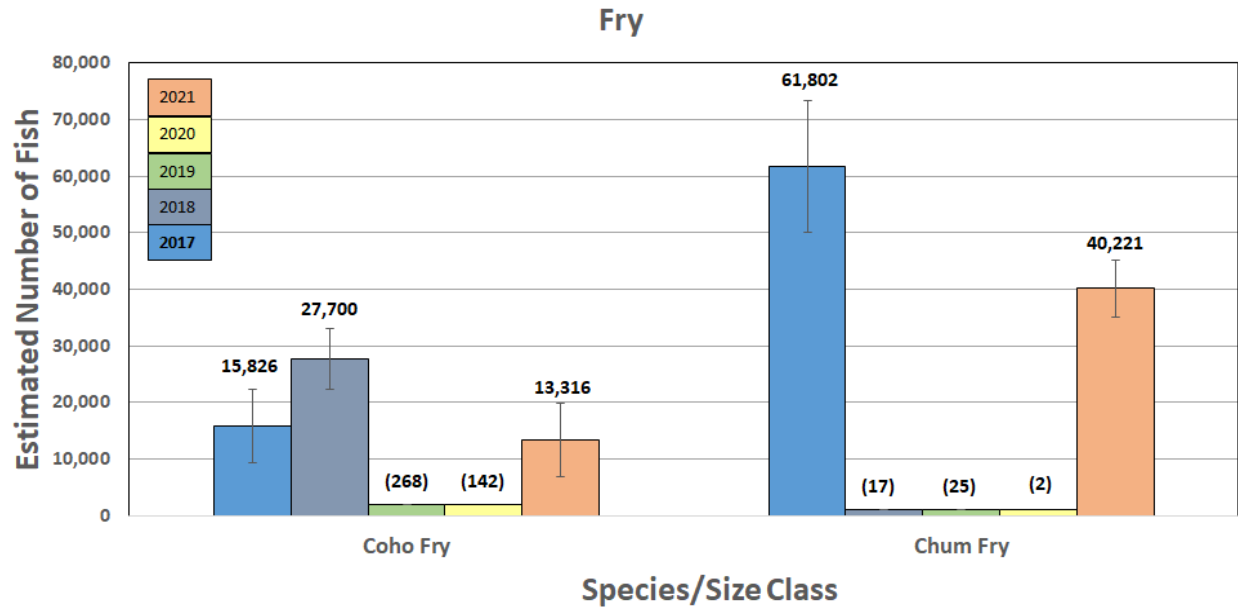
Species	Total Catch	Eff. (%)
Trout Fry	641	
Chinook All	0	
Steelhead (90-119)	29	32.0%
Steelhead (60-89)	2	0.0%
Cutthroat (≥ 250)	24	
Cutthroat (90-119)	5	50.0%
Cutthroat (60-89)	0	

Bear Creek (Abundance Estimates)



Species	Total Catch	Eff. (%)
Coho Smolts	3,633 ± 500	37.1%
Coho Fry	13,316 ± 6,490	10.3%
Trout Fry	641	
Chum Fry	40,221 ± 5,045	19.3%
Chinook All	0	
Steelhead (≥120)	4,134 ± 745	22.6%
Steelhead (90-119)	29	32.0%
Steelhead (60-89)	2	0.0%
Cutthroat (≥250)	24	
Cutthroat (160-249)	1,964 ± 563	18.1%
Cutthroat (120-159)	295 ± 141	26.6%
Cutthroat (90-119)	5	50.0%
Cutthroat (60-89)	0	

Bear Creek (2017 - 2021 Comparison)



Bear Creek (Hatchery Fish)



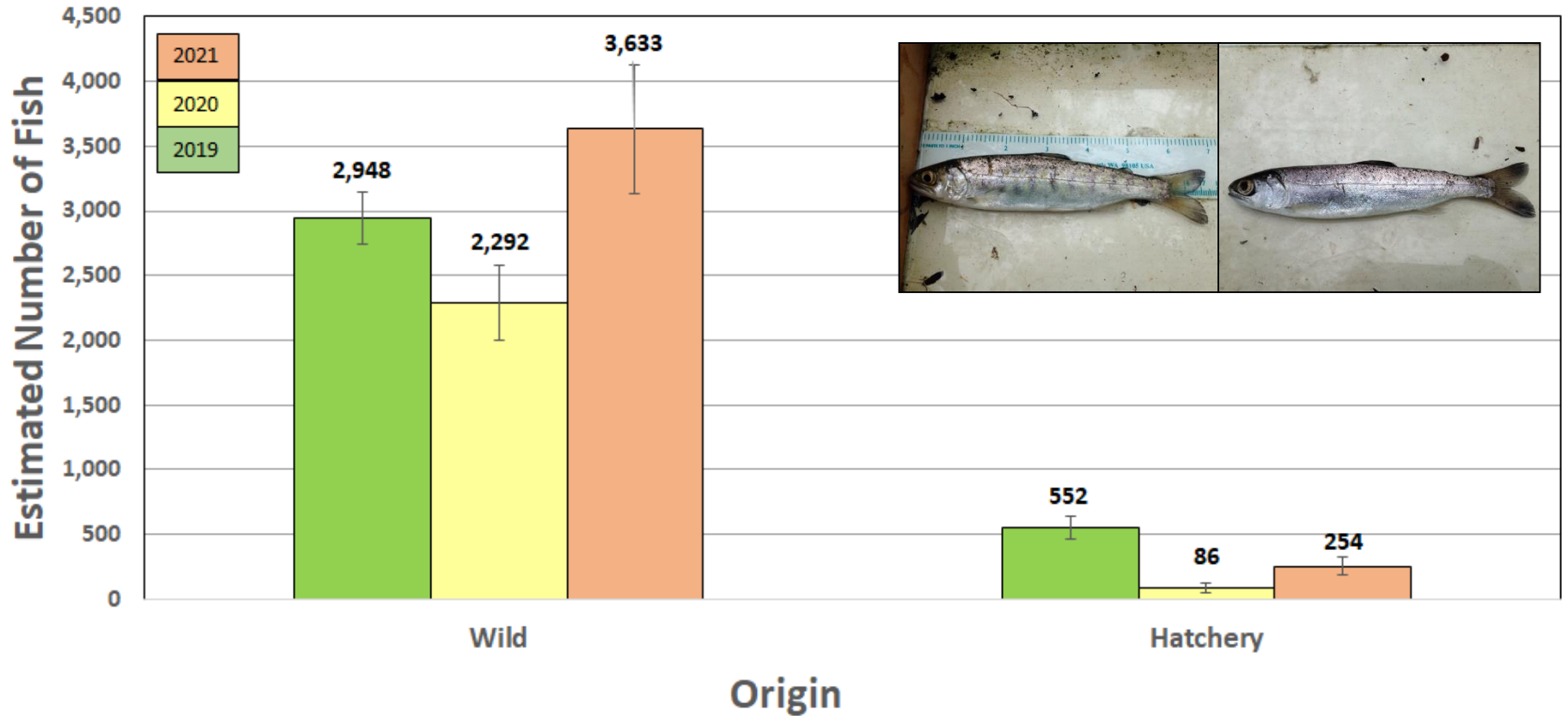
Species	Catch				
	2017	2018	2019	2020	2021
Coho	1	49	221	34	89
Steelhead	0	6	38	8	0
Chinook	8	1	3	9	3

* 2 hatchery coho detected positive for CWTs



Bear Creek (Hatchery Fish)

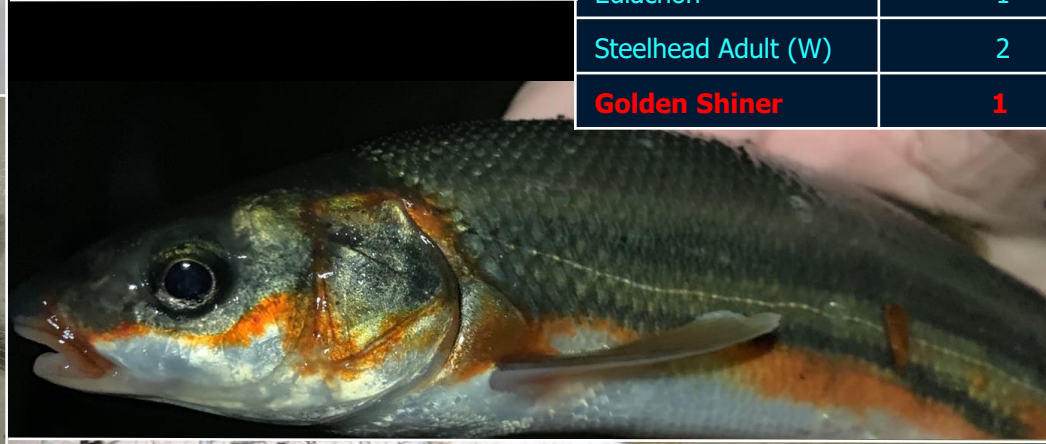
Coho Smolts (Wild vs. Hatchery)



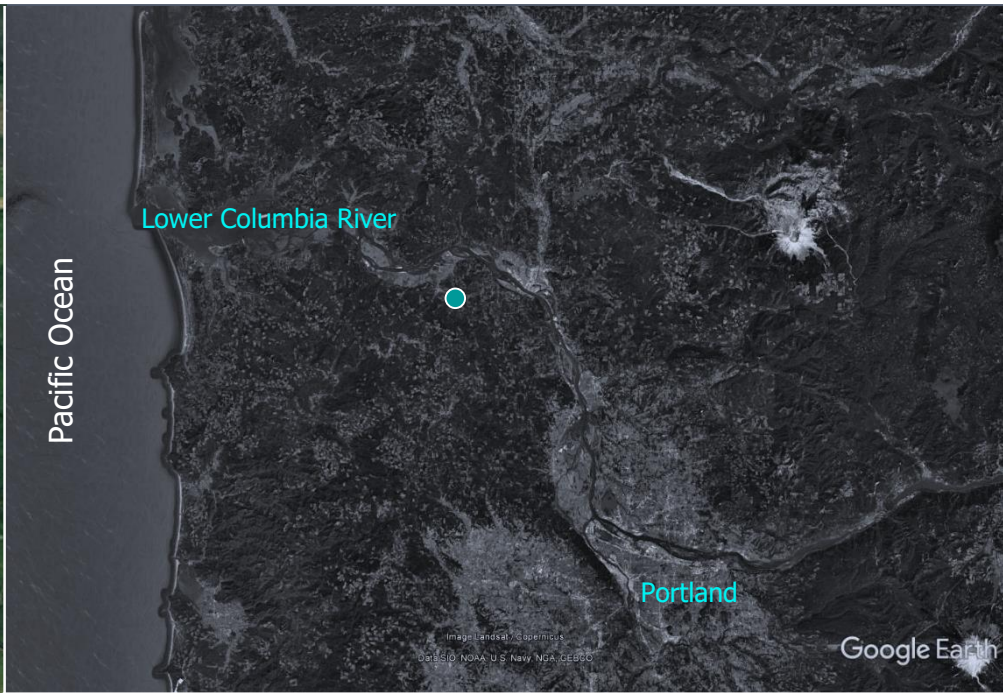
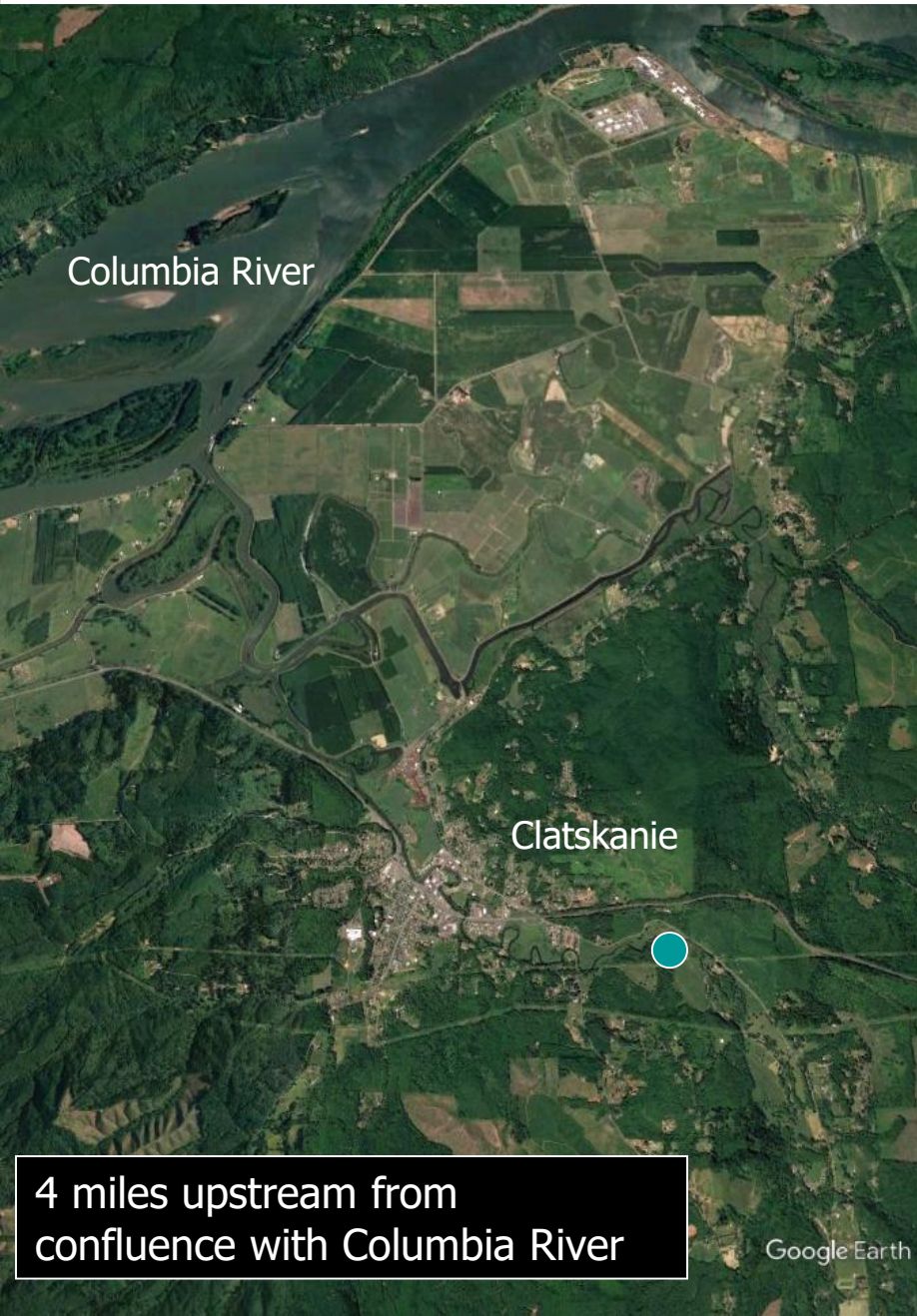
Bear Creek (Other Species)



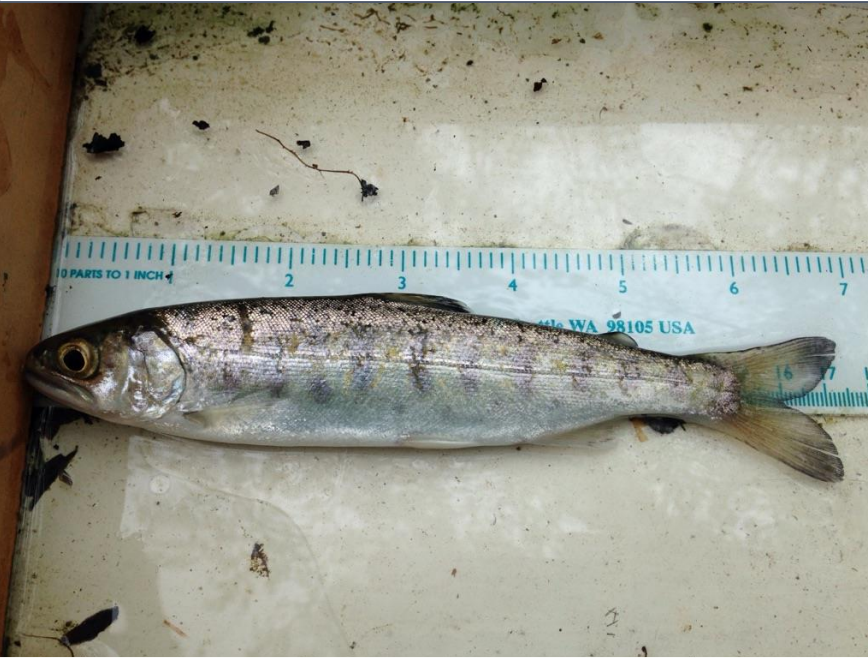
Species	Catch
Peamouth	6,945
Brook Lamprey Adult	830
Cottid	447
Lamprey Larva	316
Largescale Sucker	209
Pac Lamprey Adult	20
Pac Lamprey Juvenile	2
Eulachon	1
Steelhead Adult (W)	2
Golden Shiner	1



Clatskanie River



Clatskanie River (Total Catch)



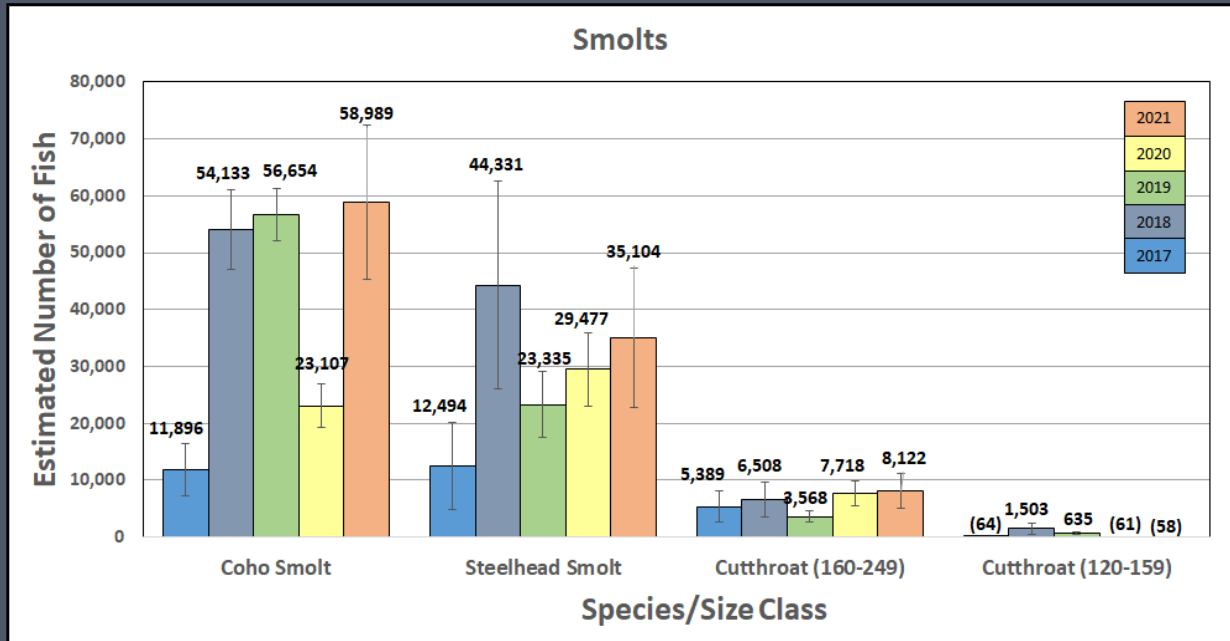
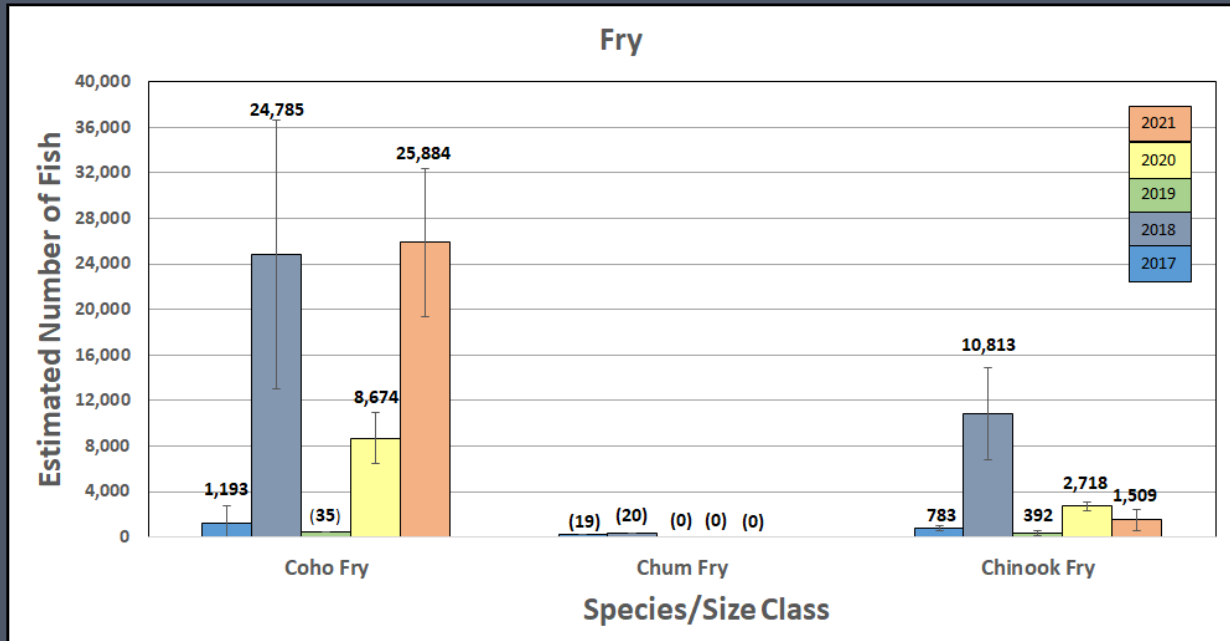
Species	Total Catch	Eff. (%)
Trout Fry	19	
Chum Fry	0	
Steelhead (90-119)	10	11.1%
Steelhead (60-89)	0	
Cutthroat (≥ 250)	44	
Cutthroat (120-159)	58	12.1%
Cutthroat (90-119)	4	25.0%
Cutthroat (60-89)	0	

Clatskanie River (Abundance Estimates)

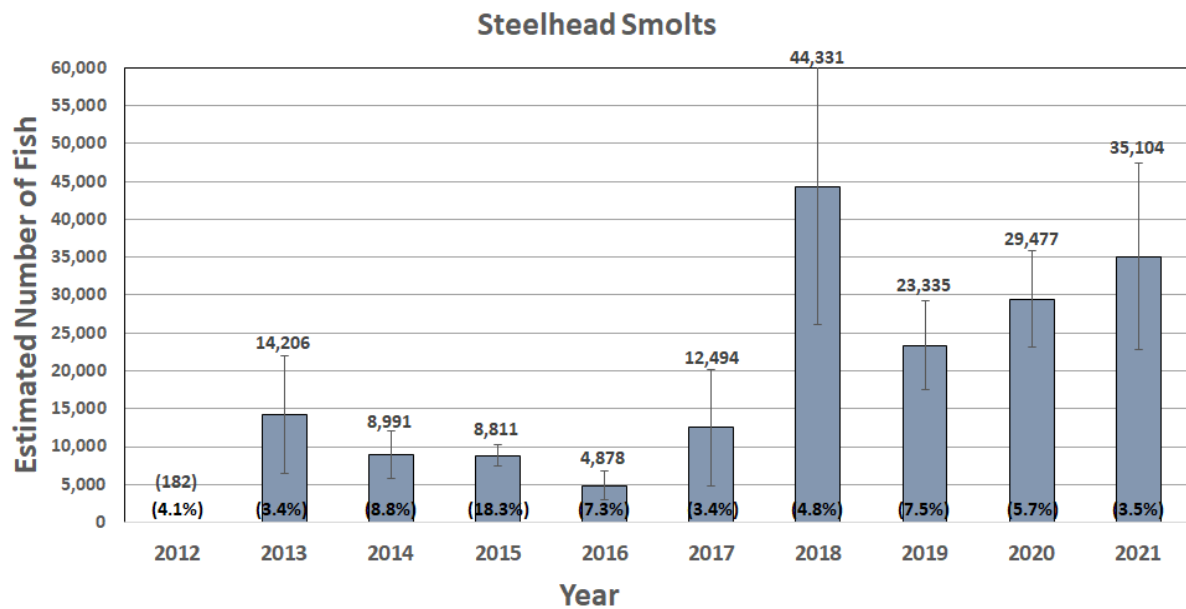
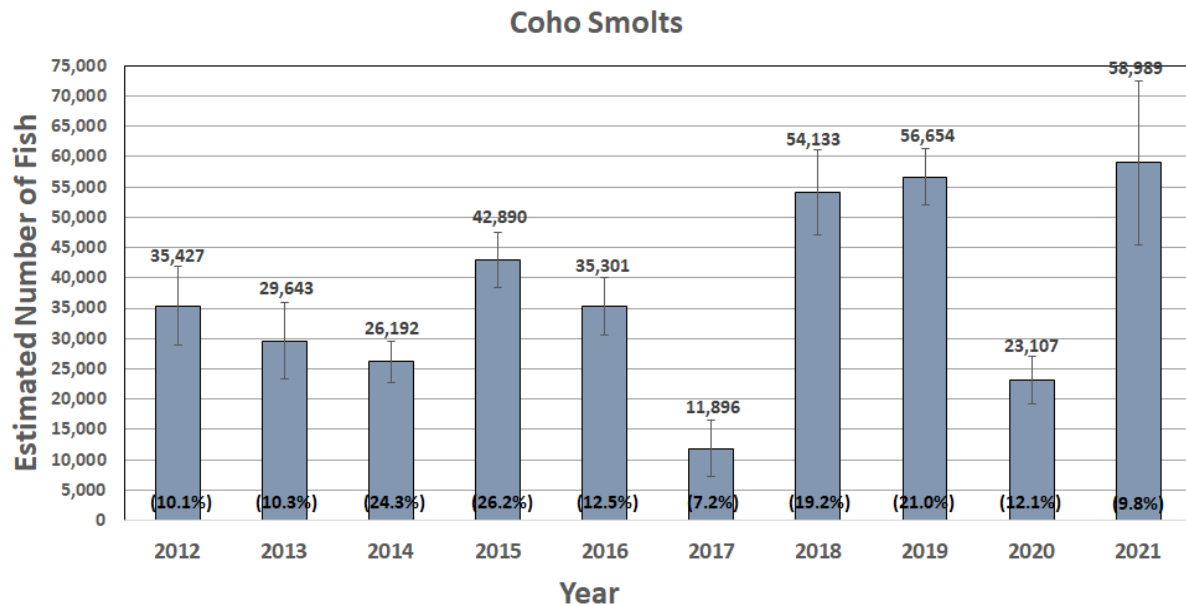


Species	Total Catch	Eff. (%)
Coho Smolt	58,989 ± 13,559	9.8%
Coho Fry	25,884 ± 6,493	10.3%
Trout Fry	19	
Chum Fry	0	
Chinook All	1,509 ± 898	18.4%
Steelhead (≥120)	35,104 ± 12,291	3.5%
Steelhead (90-119)	10	11.1%
Steelhead (60-89)	0	
Cutthroat (≥250)	44	
Cutthroat (160-249)	8,122 ± 3,067	5.9%
Cutthroat (120-159)	58	12.1%
Cutthroat (90-119)	4	25.0%
Cutthroat (60-89)	0	

Clatskanie River (2017 - 2021 Comparison)



Clatskanie River (Annual Comparison)



Clatskanie River (Hatchery Fish)



Species	Catch				
	2017	2018	2019	2020	2021
Coho	0	1	0	4	1
Steelhead	0	0	0	1	0
Chinook	1	1	1	8	2

* None detected positive for CWTs



Clatskanie River (Other Species)



Species	Catch
Cottid	606
Lamprey Larva	507
Brook Lamprey Adult	477
Peamouth	275
Stickleback	167
Pac Lamprey Adult	110
Redside Shiner	51
Northern Pikeminnow	46
Largescale Sucker	20
Eulachon	1
Banded Killifish	2
Goby	2
Pumpkinseed	2
Smallmouth Bass	1

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Pacific Coastal Salmon Recovery Fund (NOAA)
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ODFW

Erik Suring
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Brian Libercajt
Lane Jackson
Jonathan LaTour

Landowners (Screw Traps)

Carl & Stephanie Smith (Clatskanie River)
Jama Evans (Bear Creek)
Russell & Kristen Mead (Bear Creek)
Scott and Bonnie Thompson (Bear Creek)



Questions?

We **finally** got a few hundred of these!

