

SALMON AND TROUT ECOLOGY AND HABITAT OF SUSITNA BASIN RECREATION RIVERS



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Photo by Travis Rummel

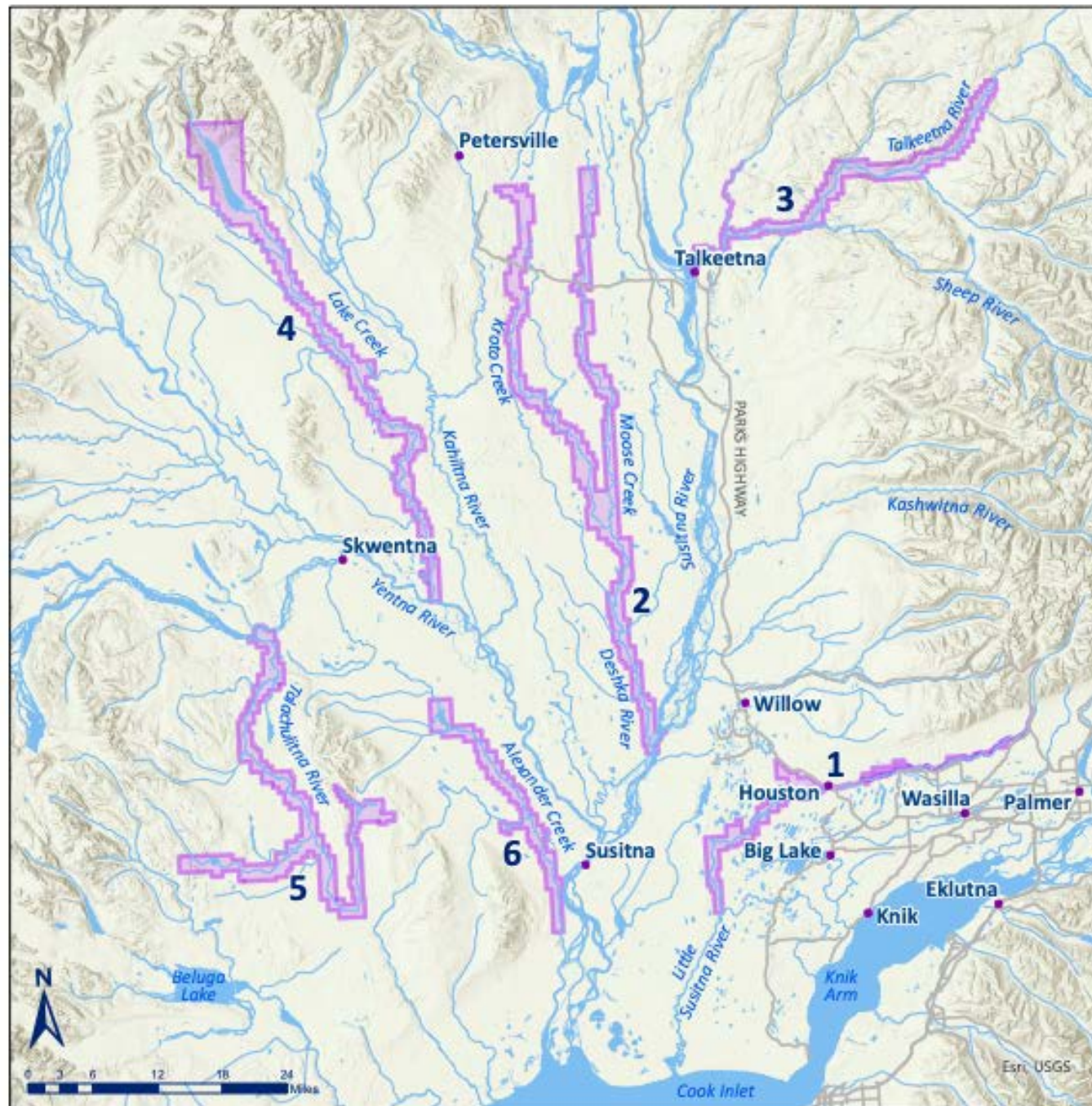
SUSITNA BASIN RECREATION RIVERS MANAGEMENT UNITS

1. Little Susitna River
2. Deshka River
(Kroto Creek / Moose Creek)
3. Talkeetna River
4. Lake Creek
5. Talachulitna River
6. Alexander Creek



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Created: December 2021
SB, DNR, DMLW, RADS
Projected Coordinate System: NAD 1983
UTM Zone 8 North



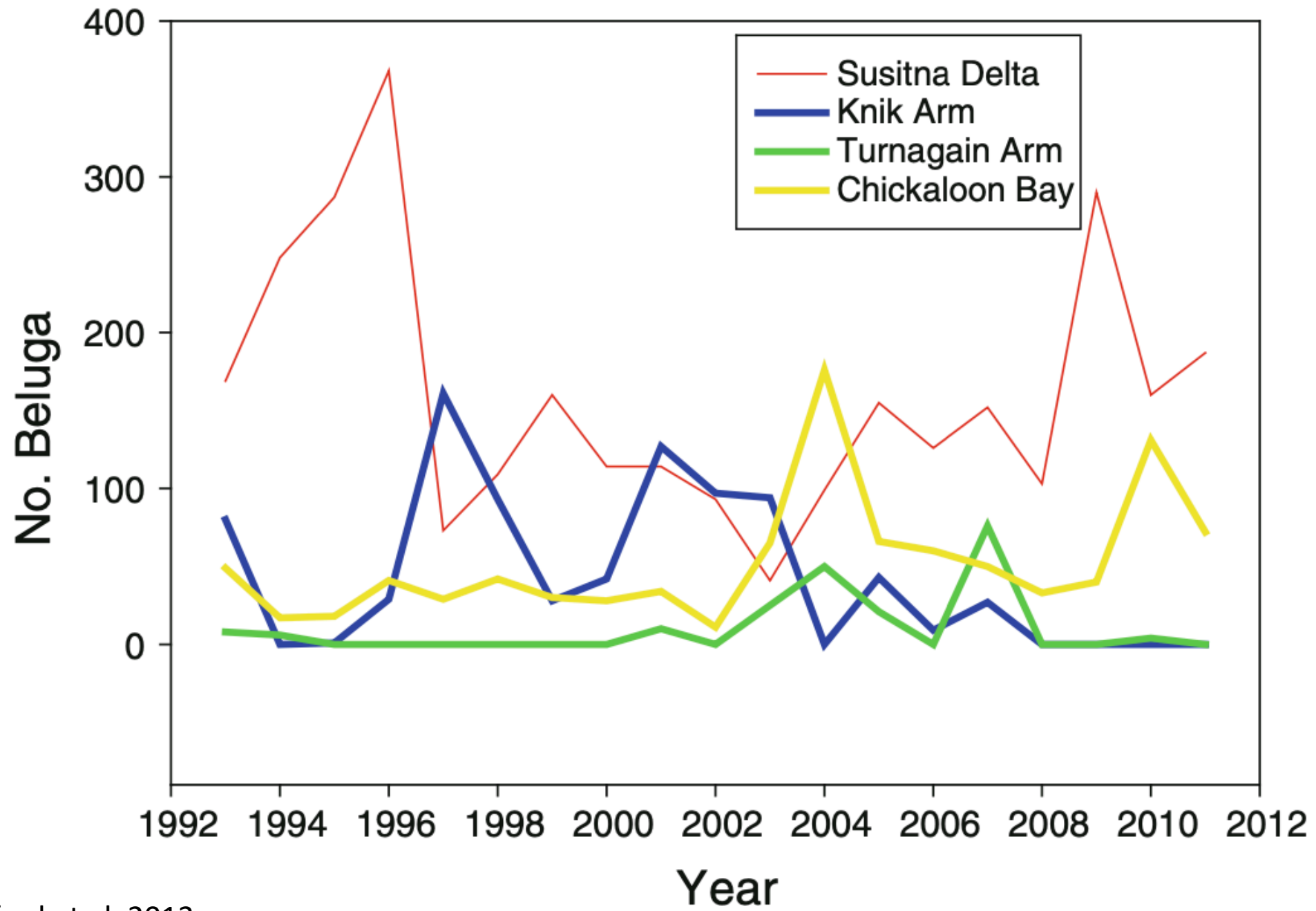
Cook Inlet Commercial and Sport Fisheries

COMMERCIAL

- 2,900 jobs (UCI)
- \$149 M labor income (UCI)
- \$30 M revenue (CI)

SPORT

- 11,535 jobs (SC AK)
- \$989M expenditures (SC AK)
- \$390M revenue (SC AK)

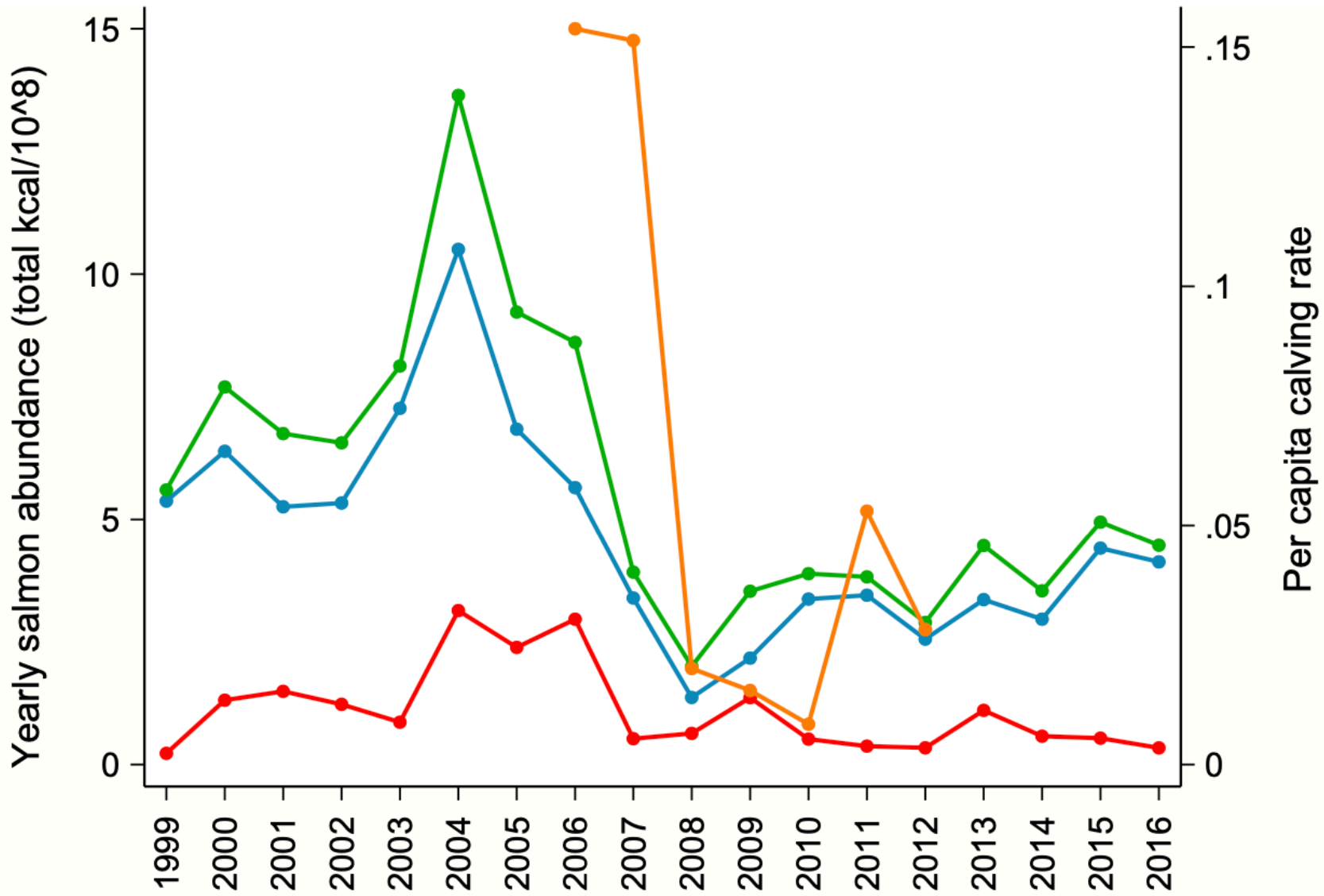


KING SALMON IN ALASKA

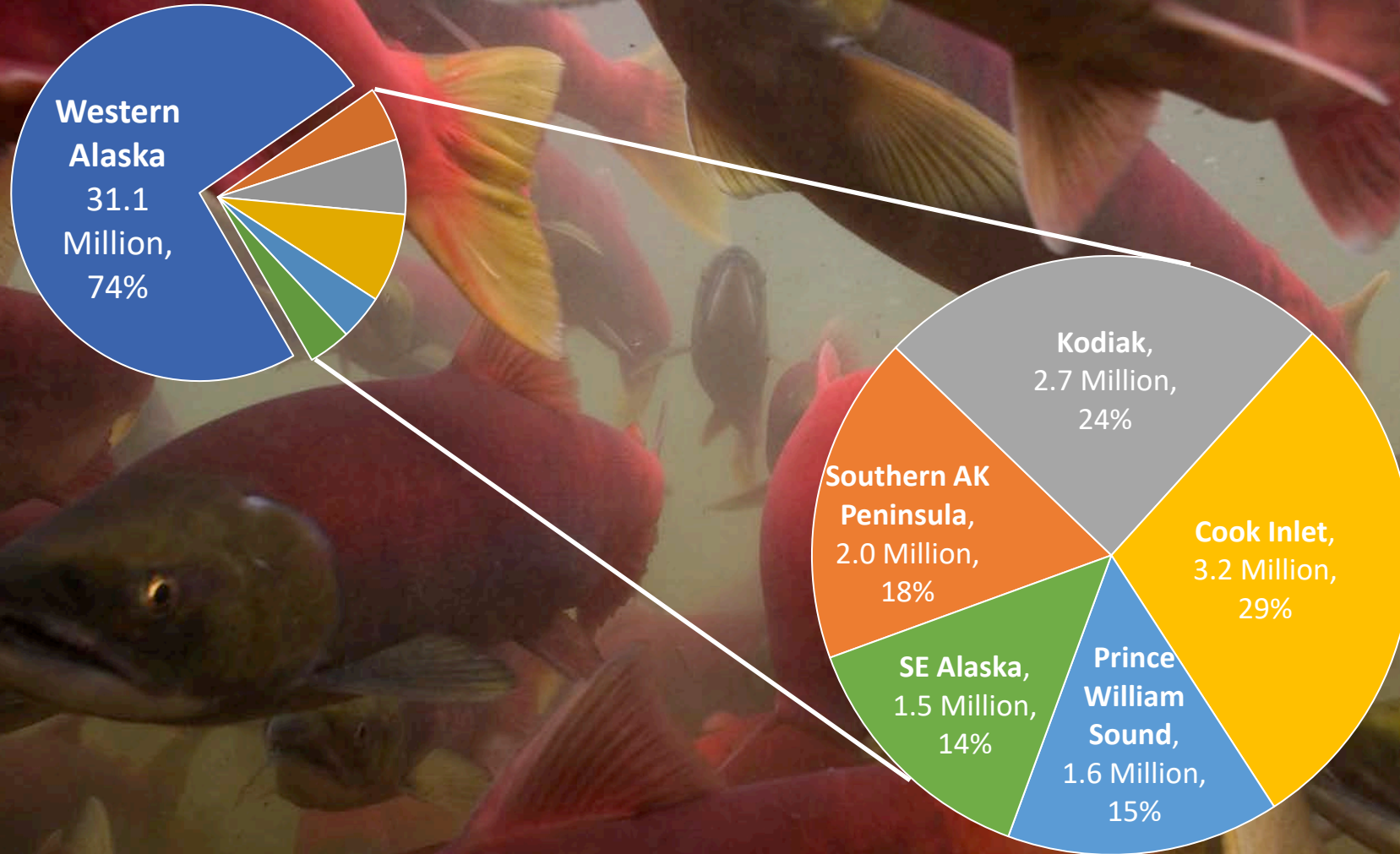
1. Nushagak
2. Kuskokwim
3. Yukon
- 4. Susitna**
5. Copper (PWS)
6. Taku
7. Stikine

KING SALMON IN THE SUSITNA

- Susitna escapement ~2X the Kenai
- Declines documented as early as the 1960's
- Stocking since 1980's
- Sport harvest regulations increasing
- Sport and commercial harvest numbers are similar
- New genetic markers



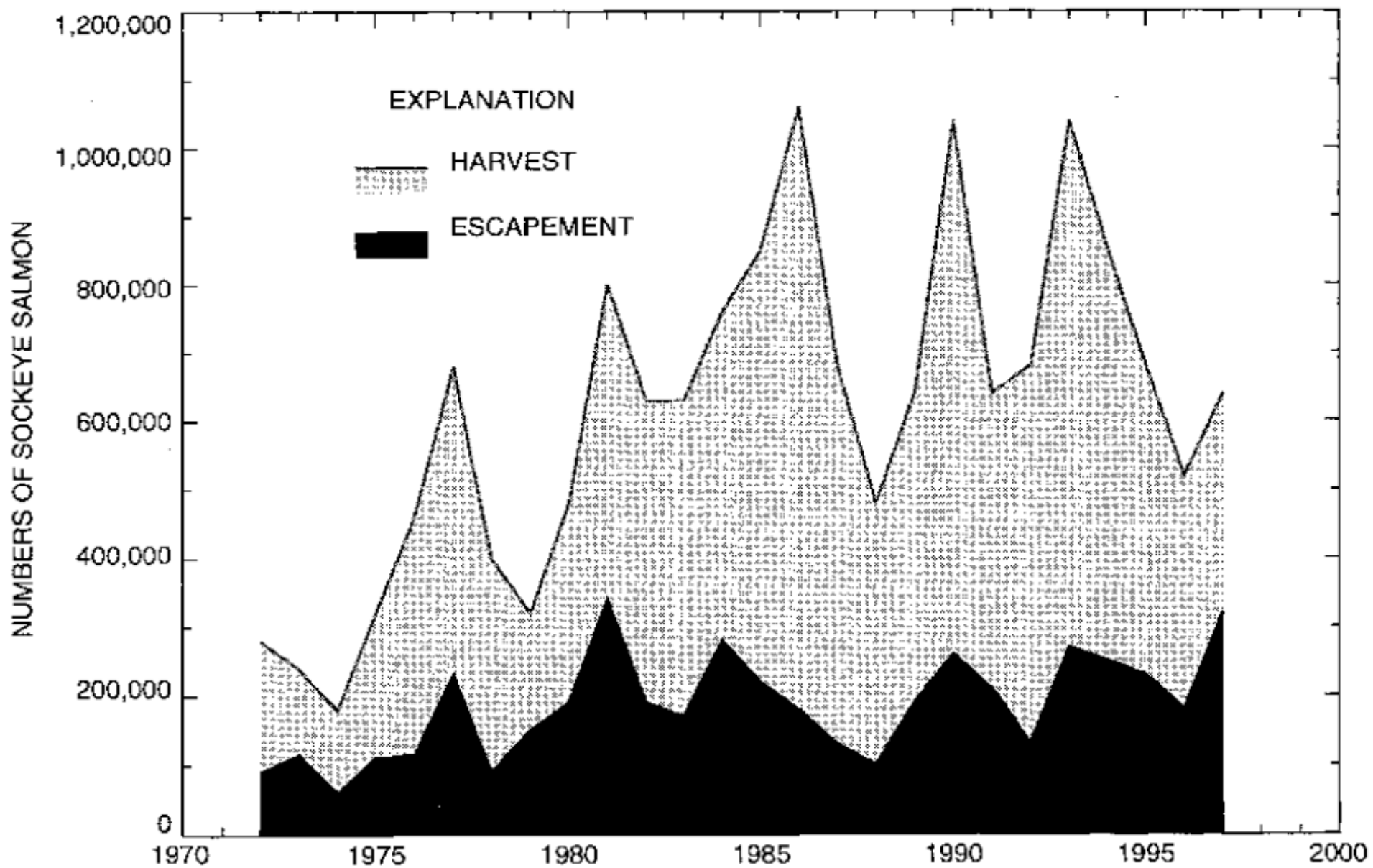
SOCKEYE SALMON IN ALASKA



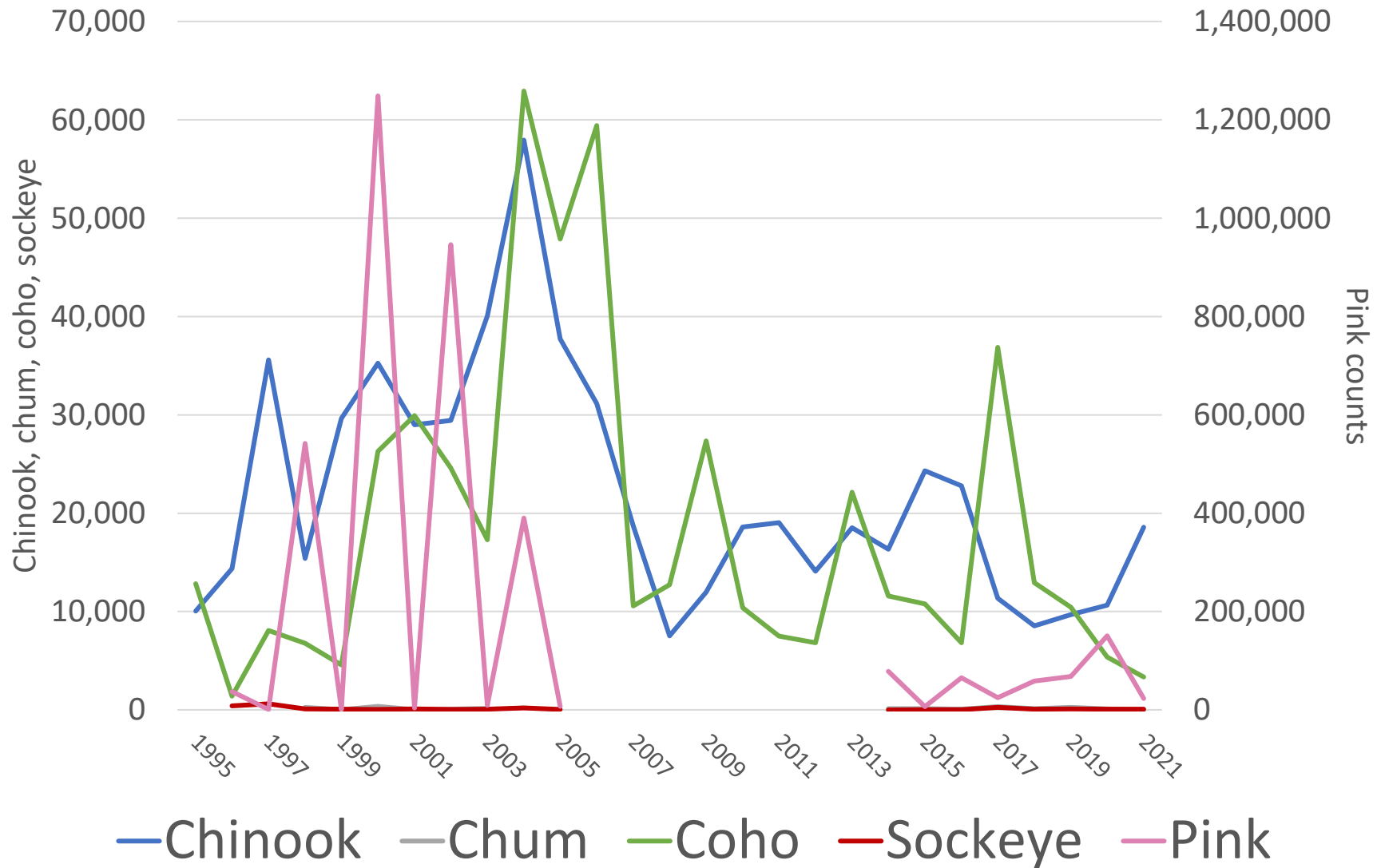
SOCKEYE SALMON IN THE SUSITNA

- Most commercially valuable species
- About half are “river-type”
- Yentna produces 75%
- Stock of yield concern since 2008

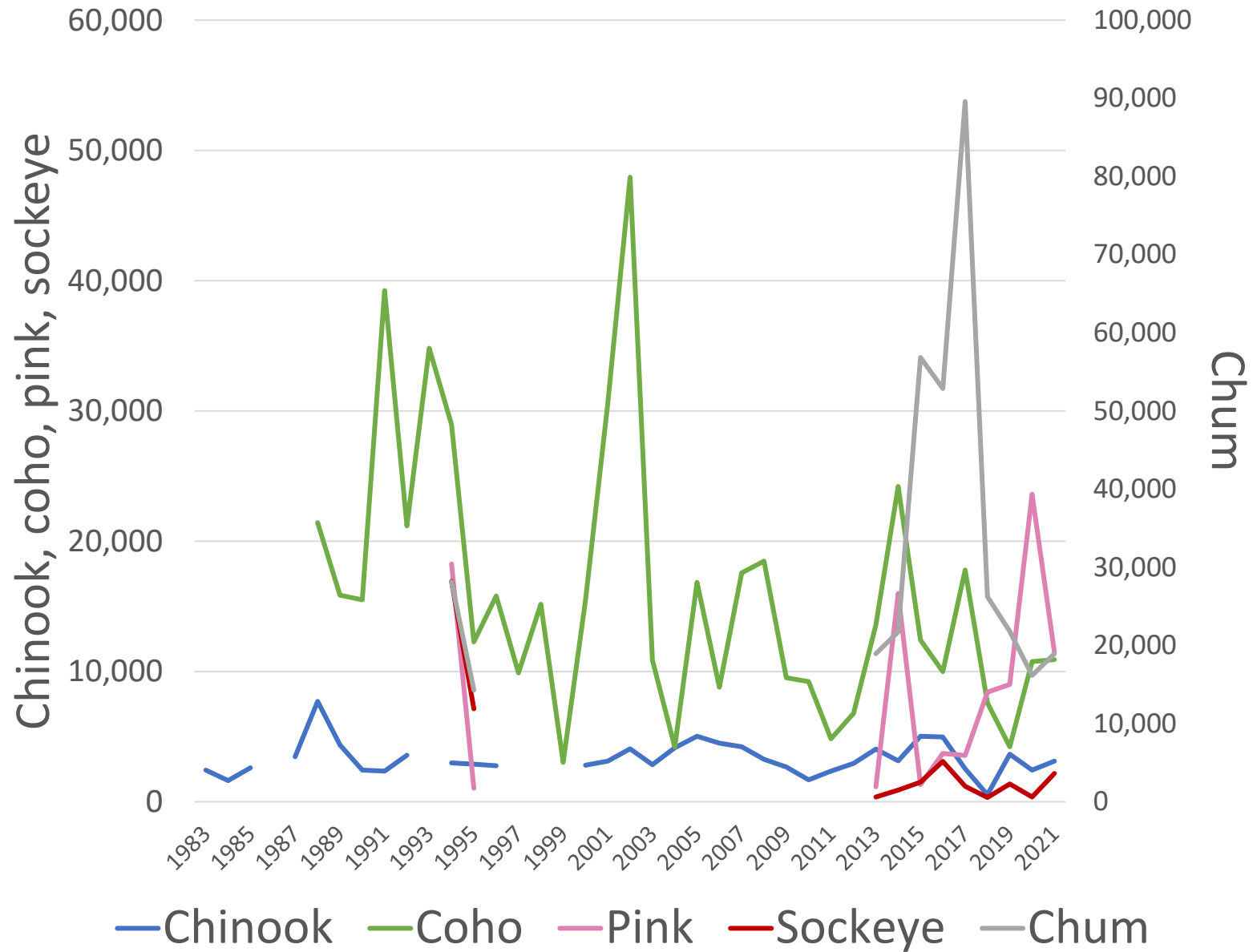
Photo by Matt Stoecker



Deshka River Weir Counts



Little Susitna River Weir Counts



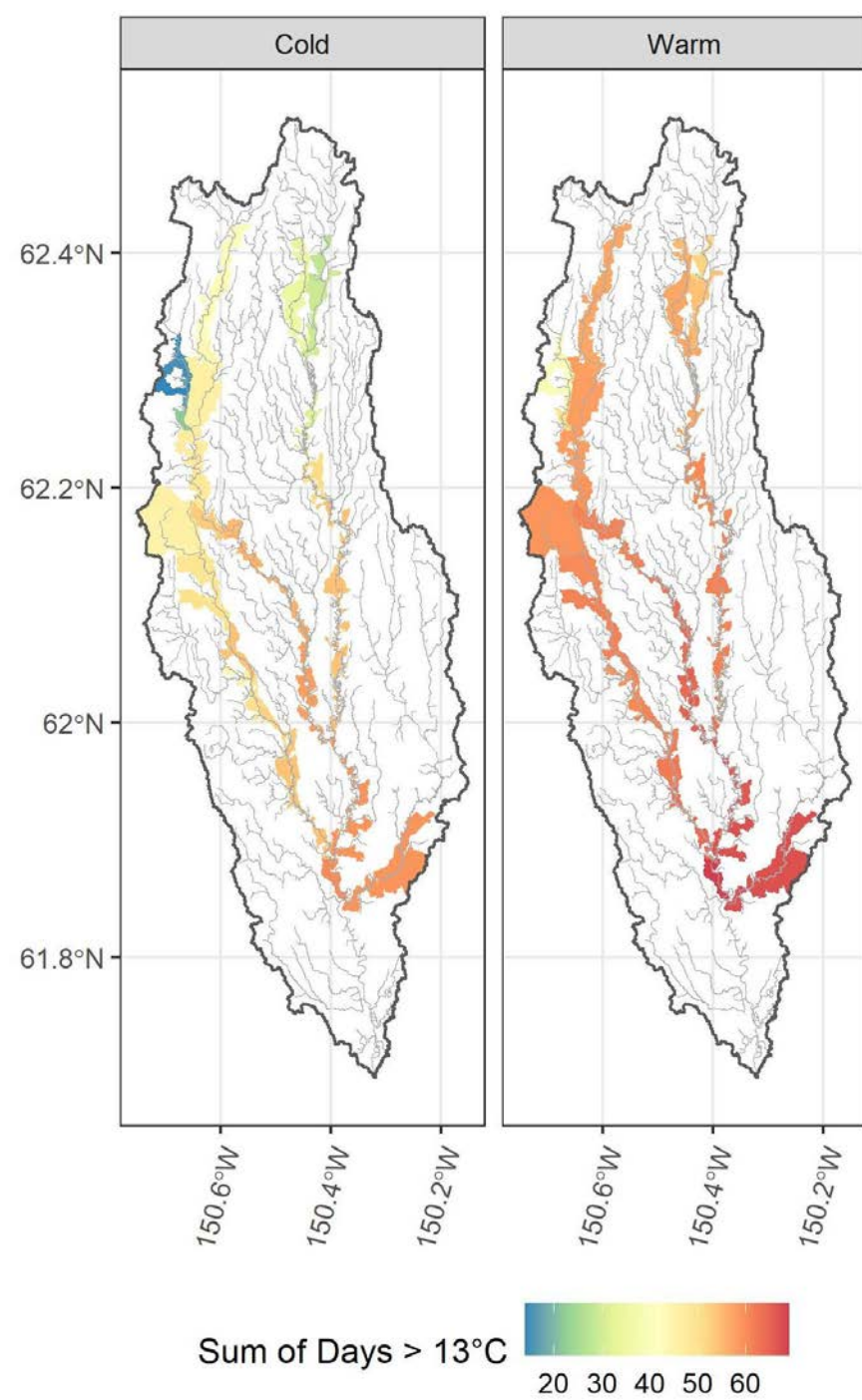
ADFG Data



Bradley 2022



From APRN



Shaftel et al. 2020

	Chinook	Coho	Sockeye	Pink	Chum
Alexander Creek	1979, 1982-2017	2016-17	2016-17	2016-17	2016-17
Deshka River	1979, 1982-1994a, 1995-2021	1995-2021	1996-2003, 2005, 2008, 2012, 2014-21	1996-2005, 2008, 2012, 2014-21	1996, 1998-2003, 2005, 2012, 2014-21
Lake Creek	1979, 1982-1983, 1985, 1987-1988, 1990-2017	None	None	None	None
Little Susitna River	1983-85, 1987-88, 1990-92, 1998, 2000-11, 2012-21	1986, 1989-2021	1988-89, 1994-2006, 2008-21	1994-95, 2013-21	1994-95, 2013-21
Talachulitna River	1979, 1981-86, 1988, 1990-2017	None	None	None	None
Talkeetna River	None	None	None	None	None
Yentna River	None	None	1981-2008	None	None

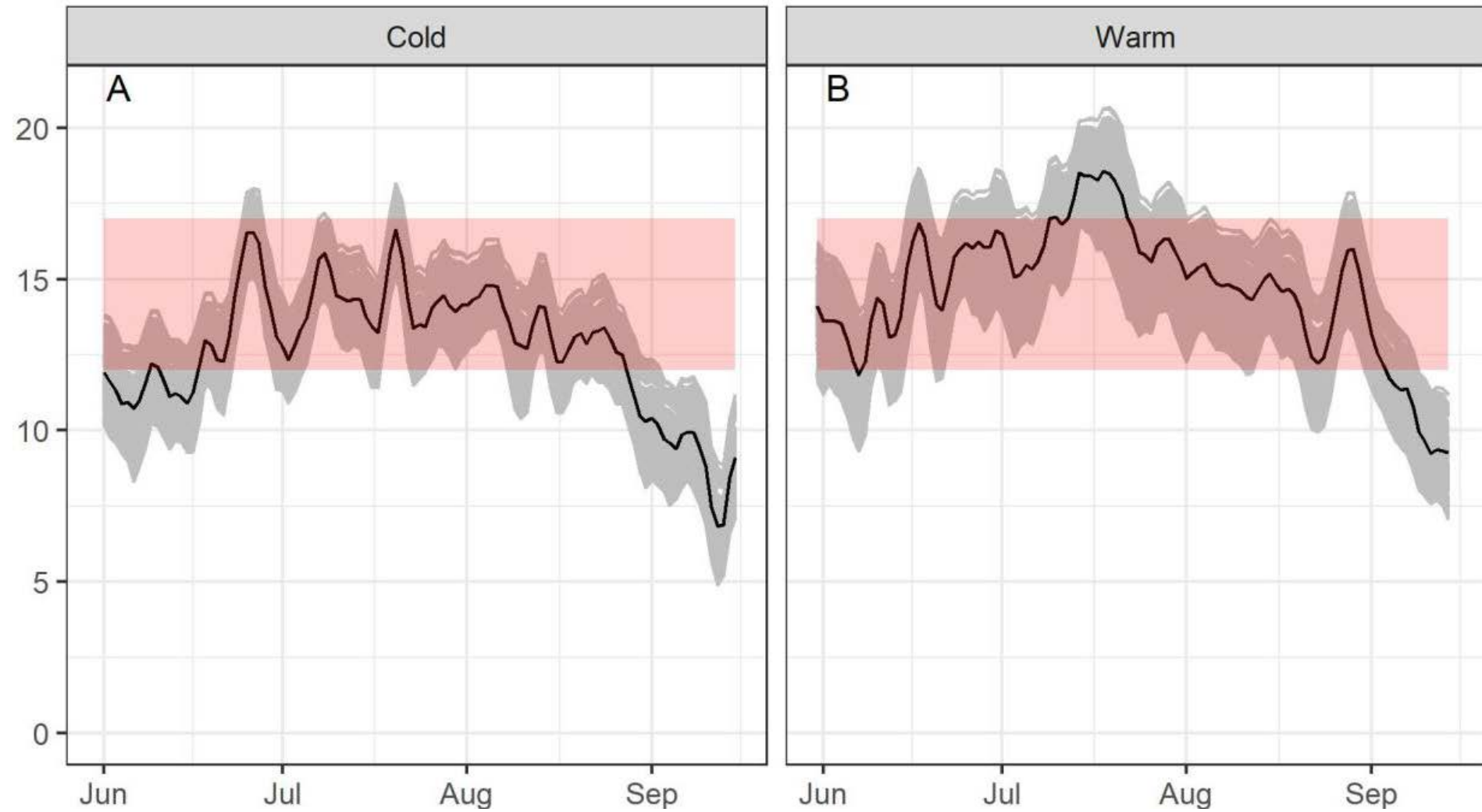
From ADFG [fish count website](#), Munro 2018, Munro and Volk 2018, Oslund et al. 2020, and others

QUESTIONS?



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Species	Return year	Abundance estimate	95% confidence interval
Sockeye	2006	418,197	335,448 - 500,946
	2007	327,732	292,867 - 362,597
	2008	359,540	320,763 – 398,317
Coho	2010	196,417	153,498 – 281,020
	2011	216,555	182,995 – 281,825
	2012	184,316	139,469 – 267,845
	2014	158,698	137,817 – 183,294
	2015	262,281	228,128 – 297,514
Chum	2010	356,996	284,573 – 476,270
	2011	1,752,032	1,556,974 – 2,073,042
	2012	329,345	237,012 – 735,368
Chinook	2014	90,492	74,498 – 116,748
	2015	137,000	122,207 – 153,764
	2016	97,426	86,142 – 111,334
	2017	63,340	45,846 – 62,734