

SPORT FISHERIES OF NORTHERN COOK INLET

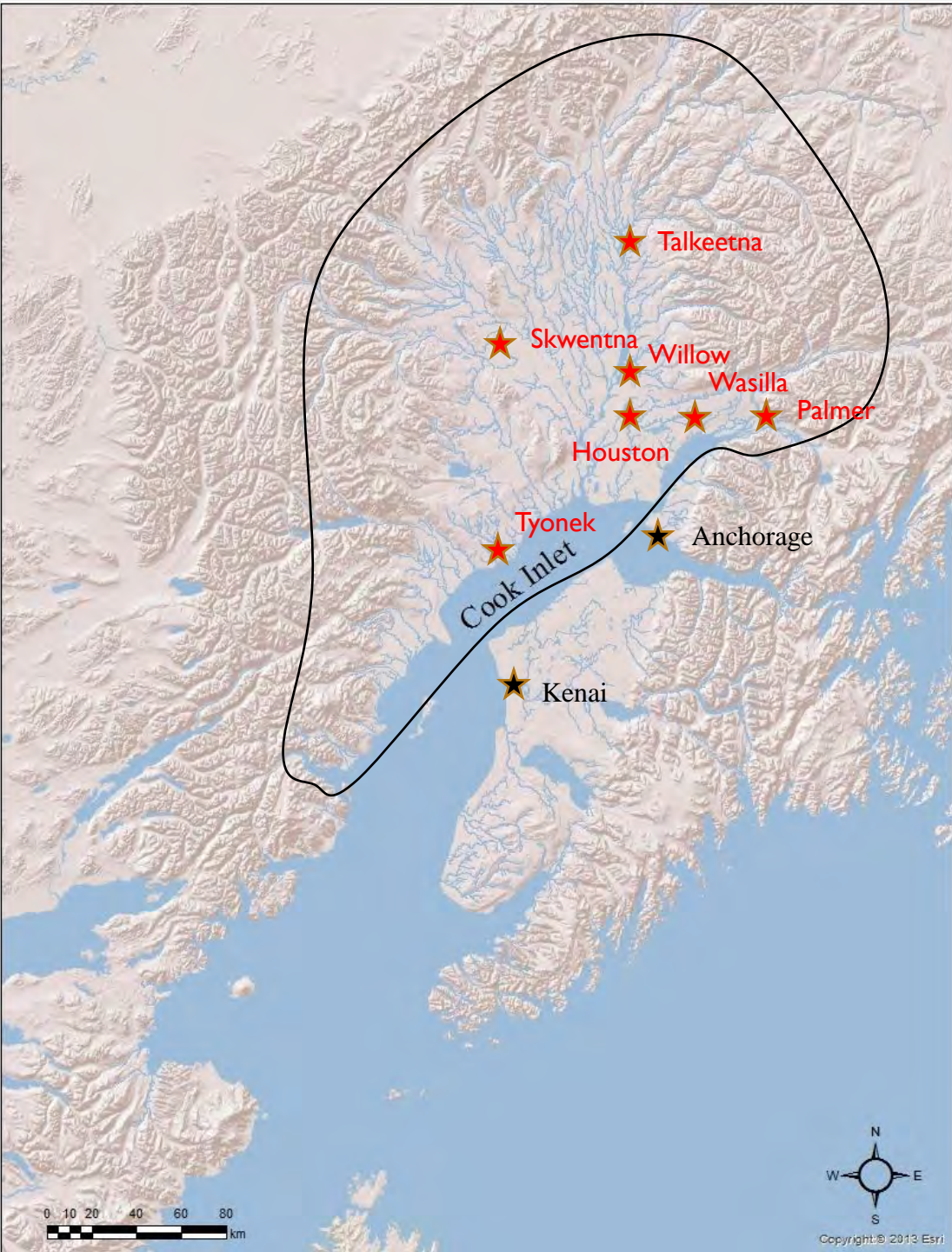


Samantha Oslund

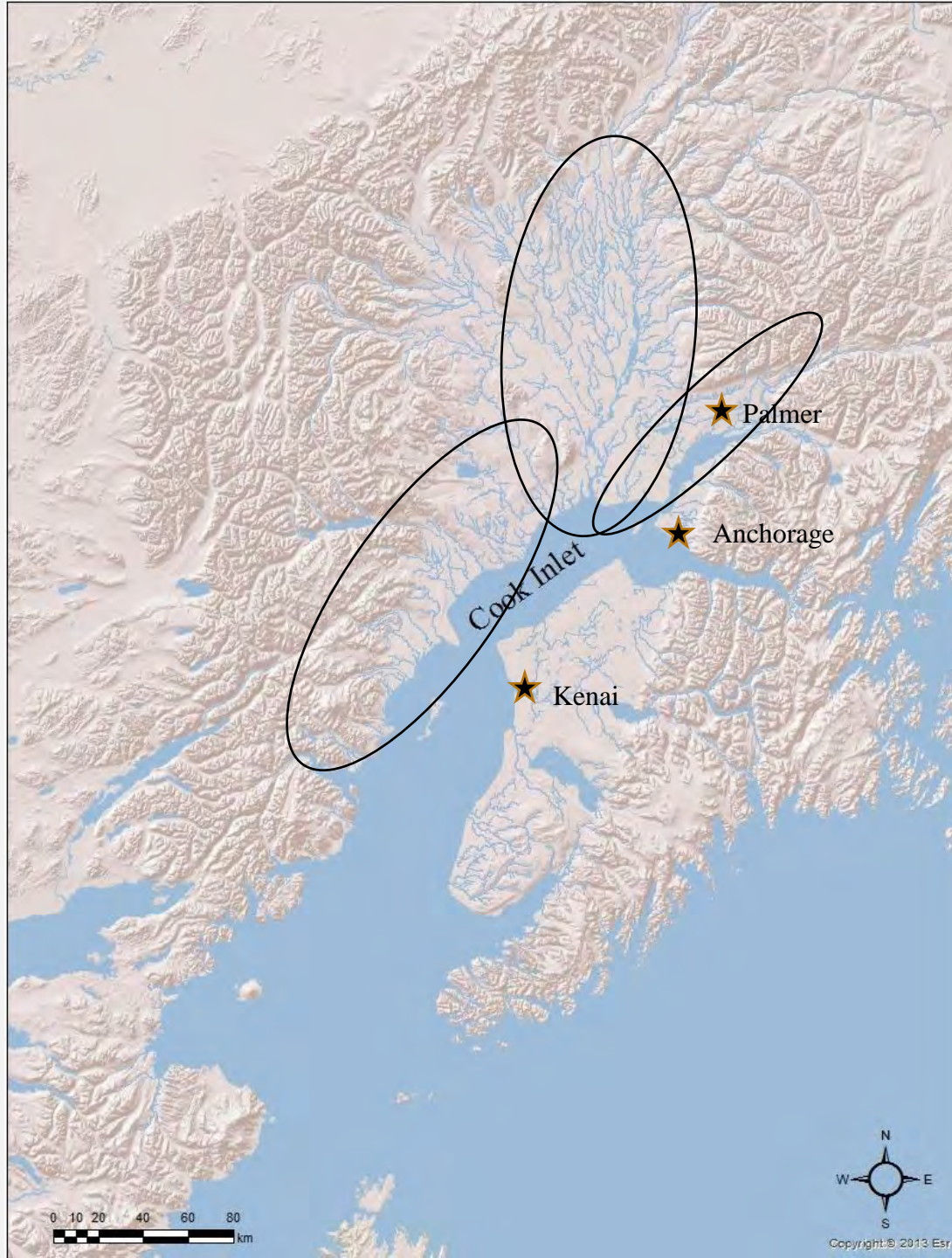
Alaska Department of Fish and Game
Division of Sport Fish
Palmer

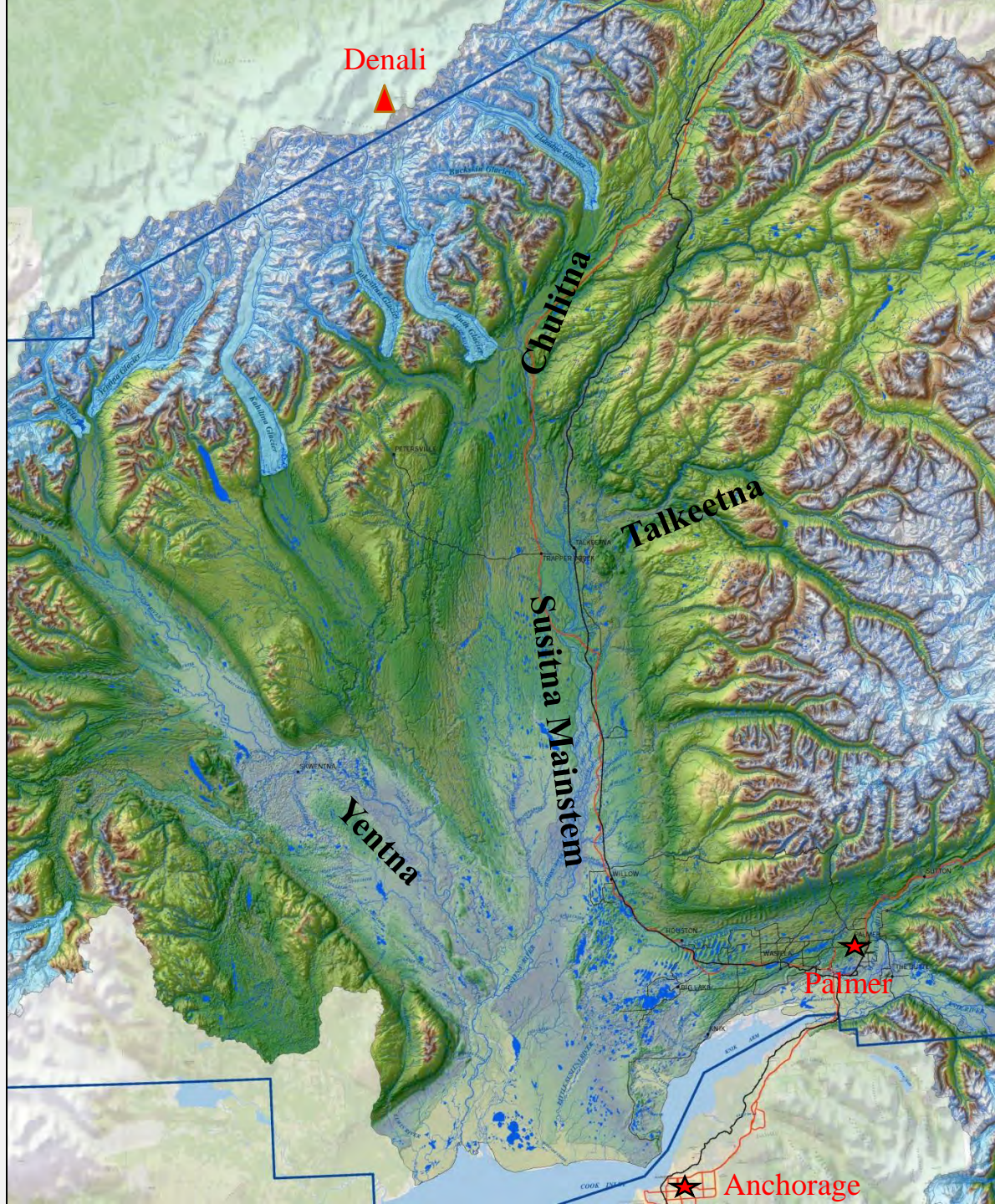
Oral Report
RC 3
TAB 9

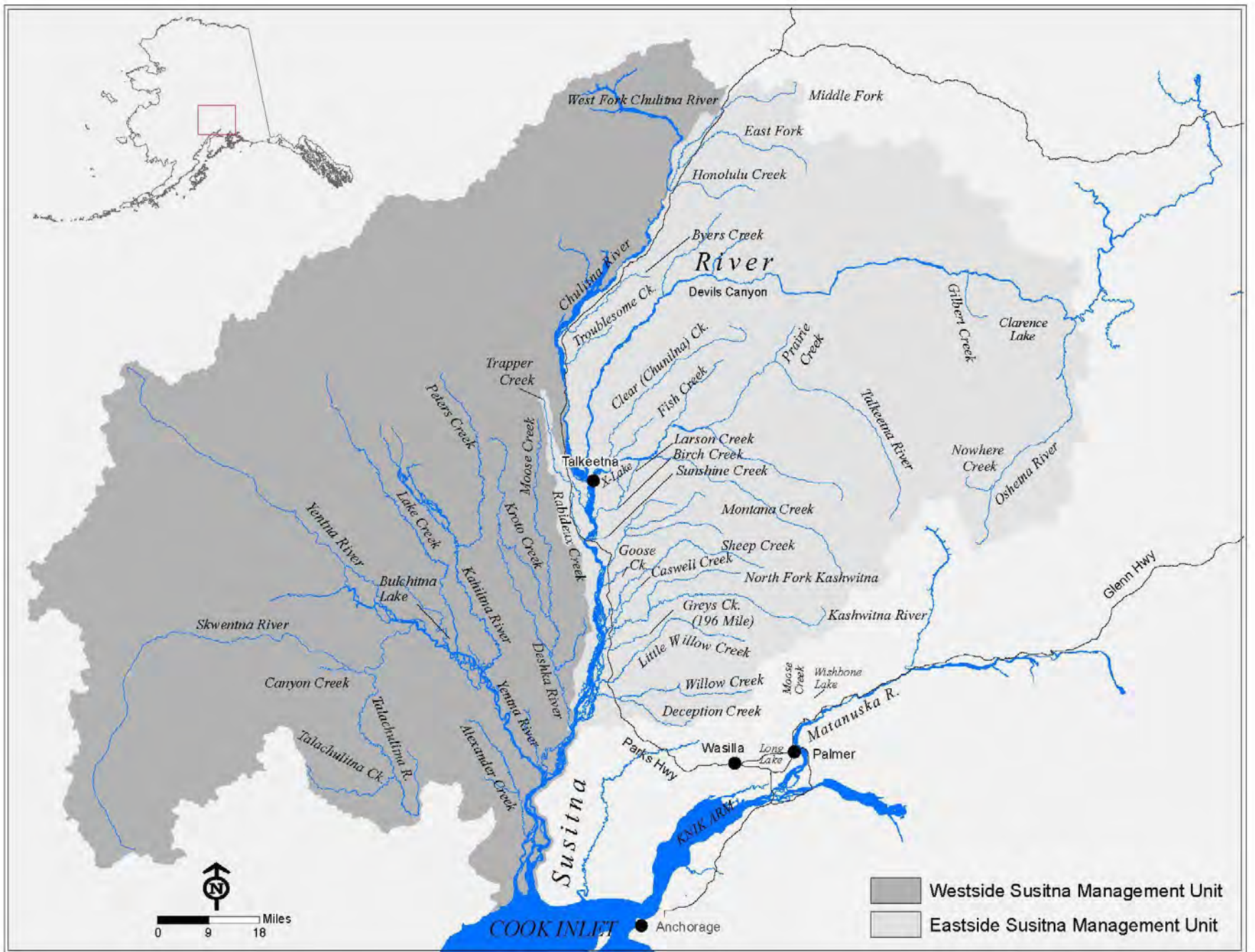
Northern Cook Inlet (NCI)



Susitna Drainage
West Cook Inlet
Knik Arm







West Fork Chulitna River

Middle Fork

East Fork

Honolulu Creek

Byers Creek

River

Devils Canyon

Chulitna River

Troublesome Ck.

Clear (Chumilna) Ck.

Fish Creek

Prairie Creek

Gilbert Creek

Clarence Lake

Trapper Creek

Peters Creek

Moose Creek

Krnoo Creek

Talkeetna Lake

Larson Creek

Birch Creek

Sunshine Creek

Talkeetna River

Nowhere Creek

Ostema River

Yenina River

Lake Creek

Kahitna River

Deaska River

Rabidoux Creek

Montana Creek

Goose Ck.

Caswell Creek

Sheep Creek

North Fork Kashwitna

Glenn Hwy

Skwentna River

Bulchitna Lake

Kashwitna River

Greys Ck. (196 Mile)

Kashwitna River

Canyon Creek

Talochulitna R.

Yenina River

Alexander Creek

Little Willow Creek

Willow Creek

Deception Creek

Moose Creek

Wishbone Lake

Matanuska R.

Susitna

Wasilla

Long Lake

Palmer

Parks Hwy

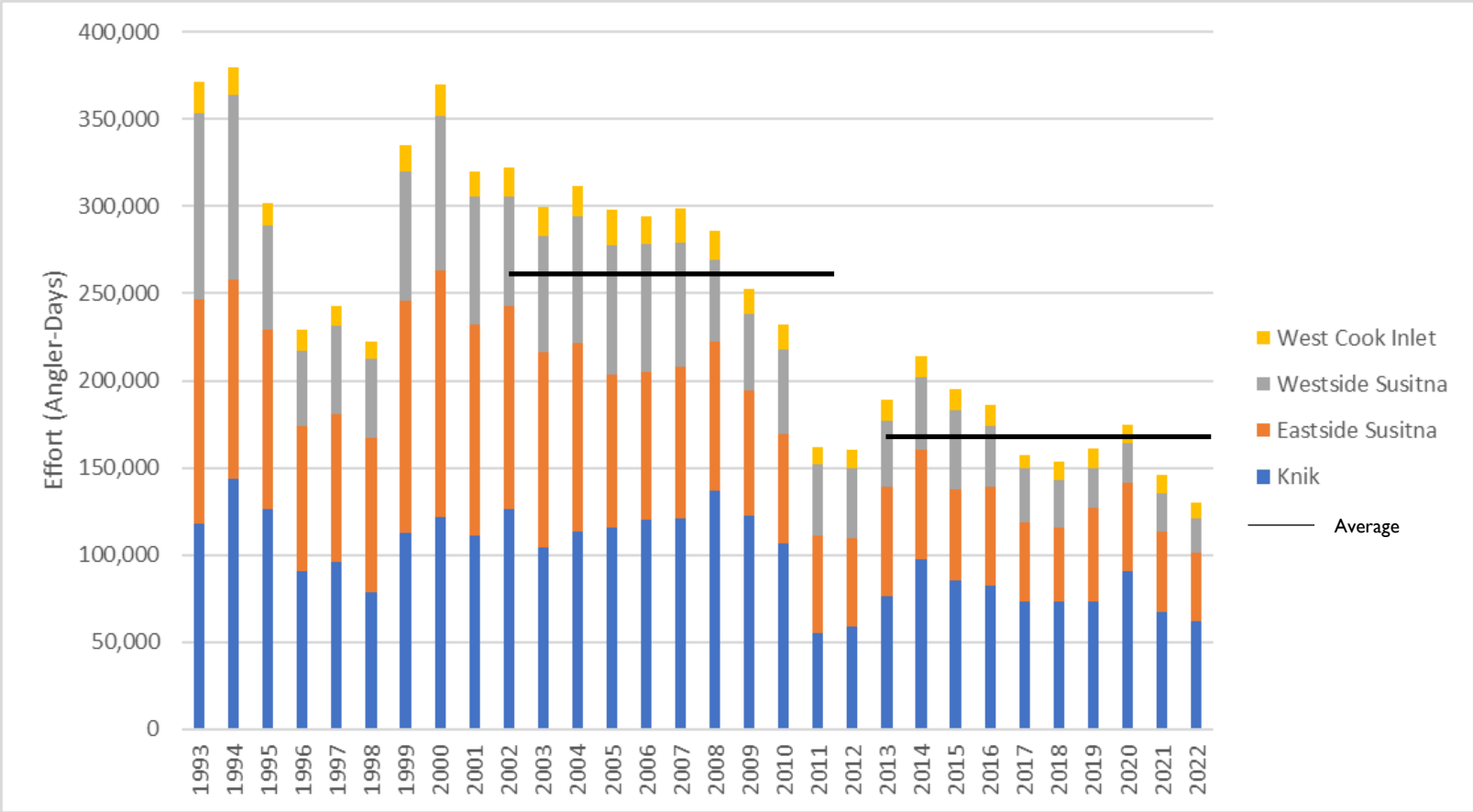
● Anchorage

COOK INLET

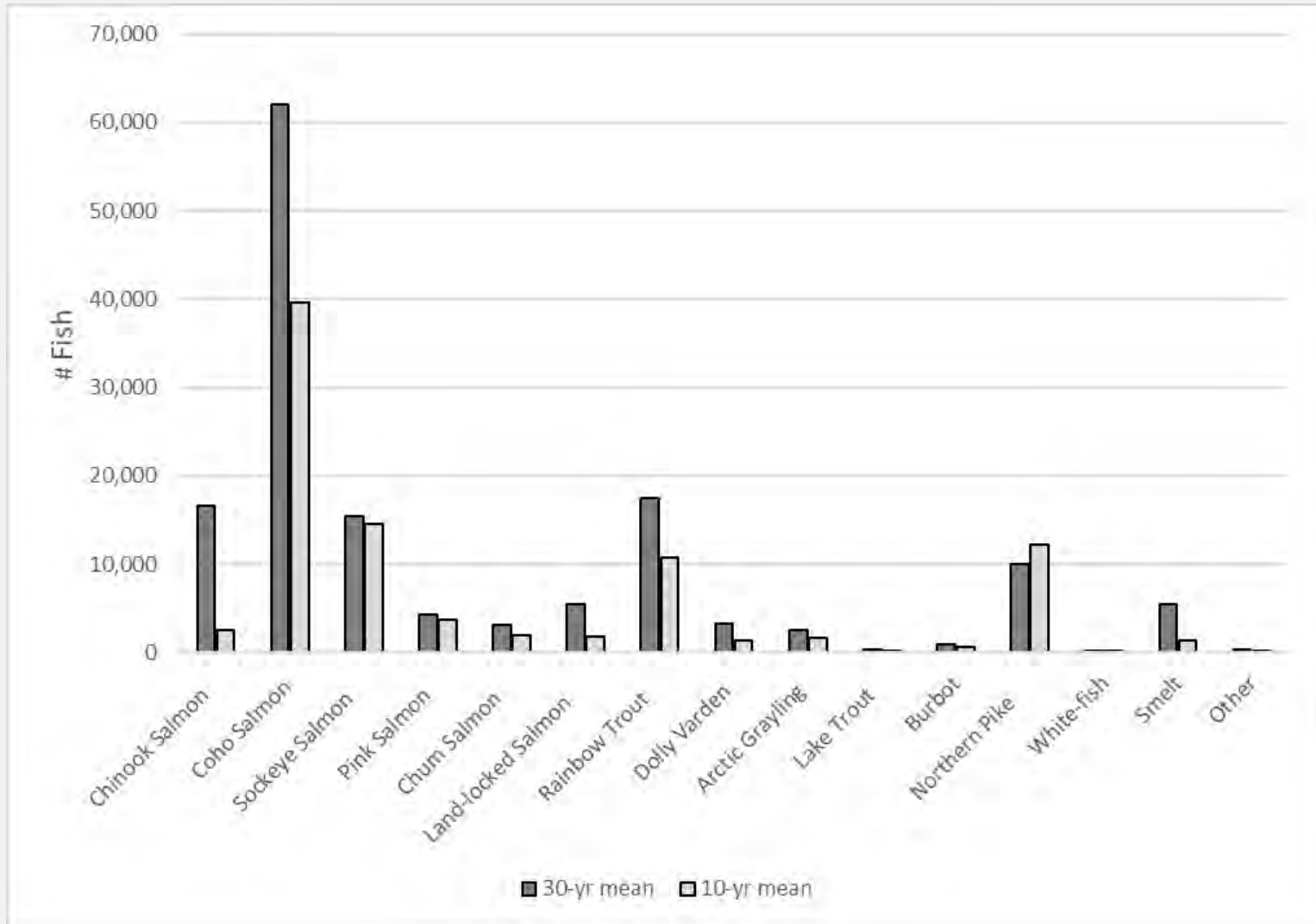
Westside Susitna Management Unit
 Eastside Susitna Management Unit

0 9 18 Miles

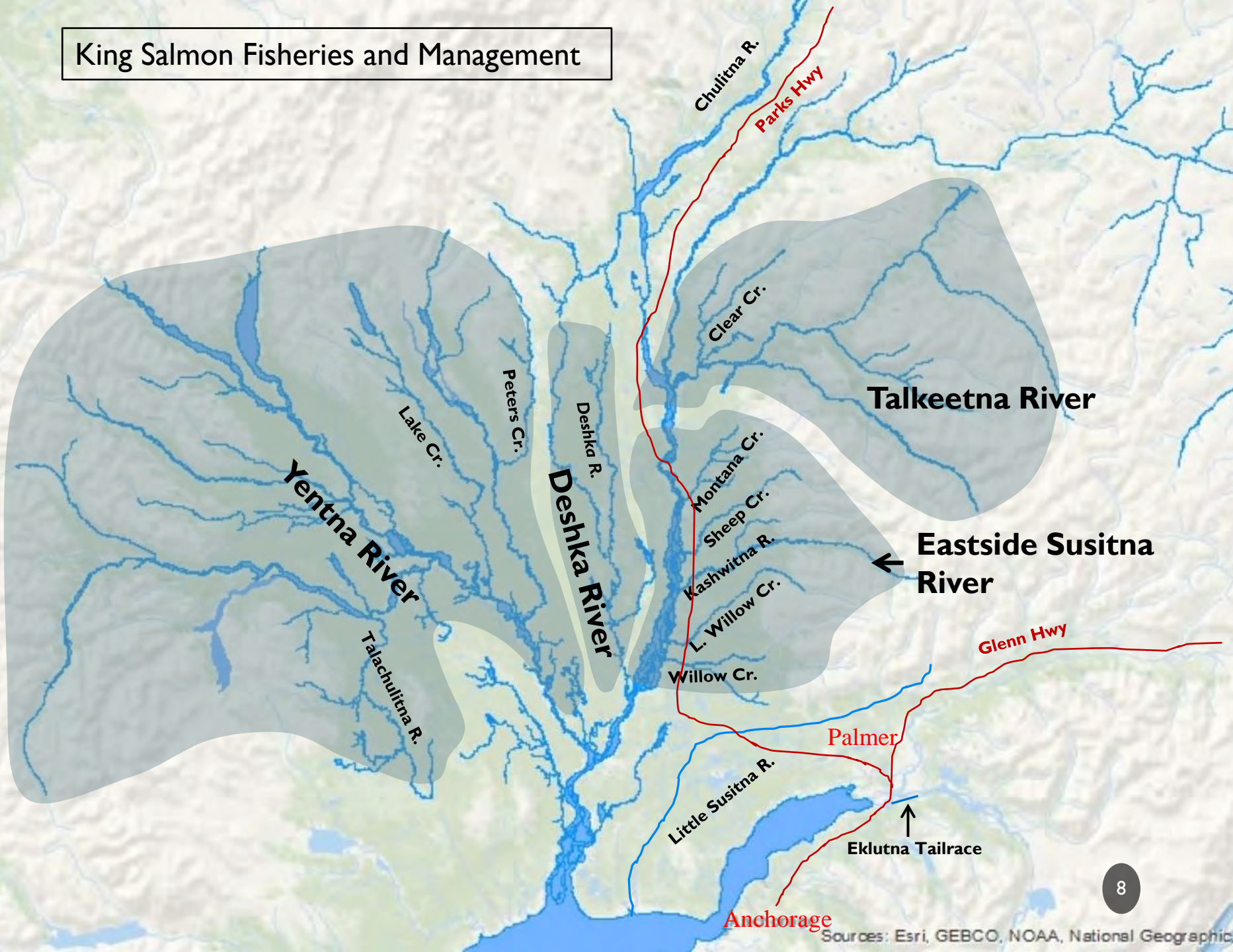
NCI Fishing Effort



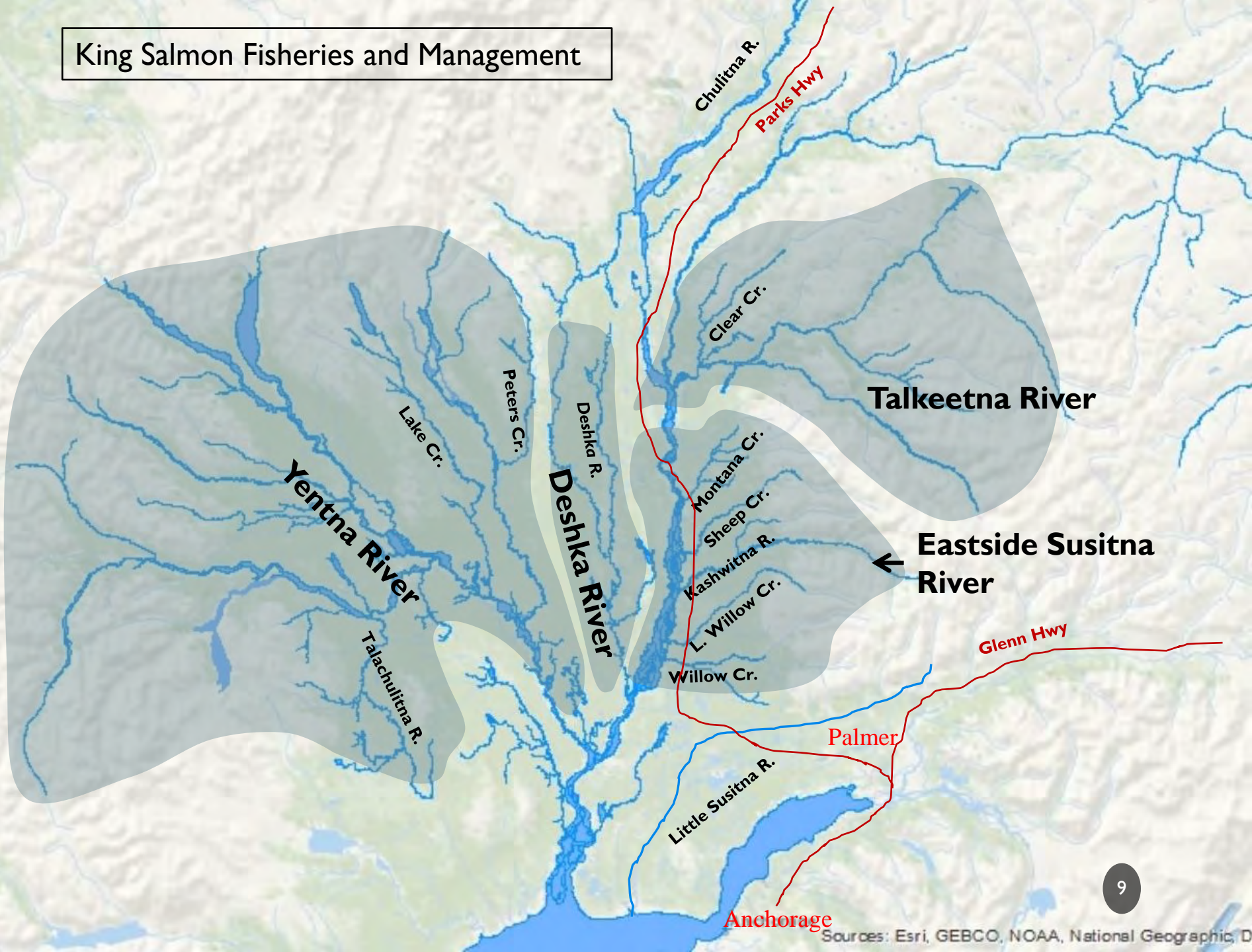
Northern Cook Inlet Sport Harvest by Species



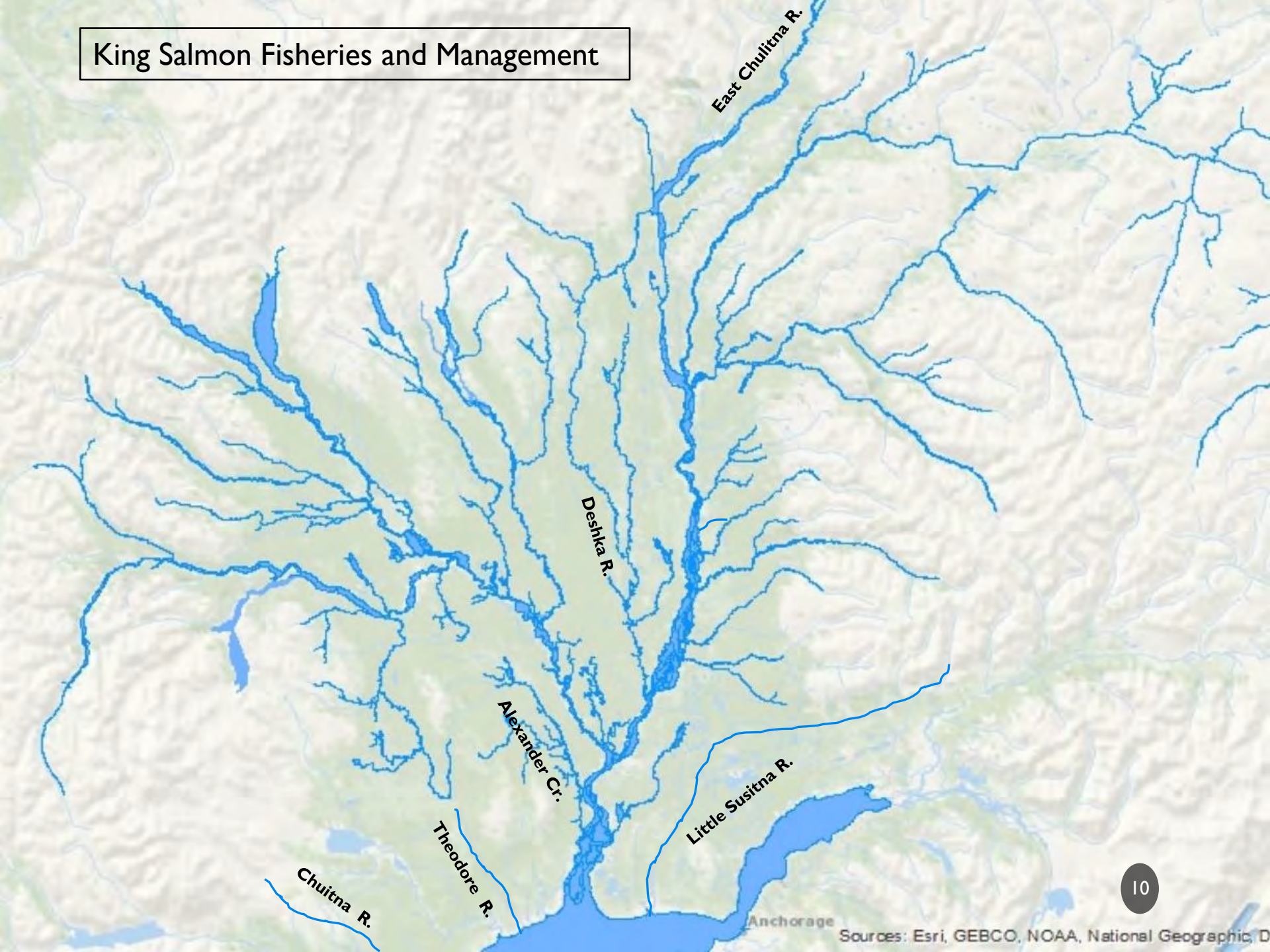
King Salmon Fisheries and Management



King Salmon Fisheries and Management



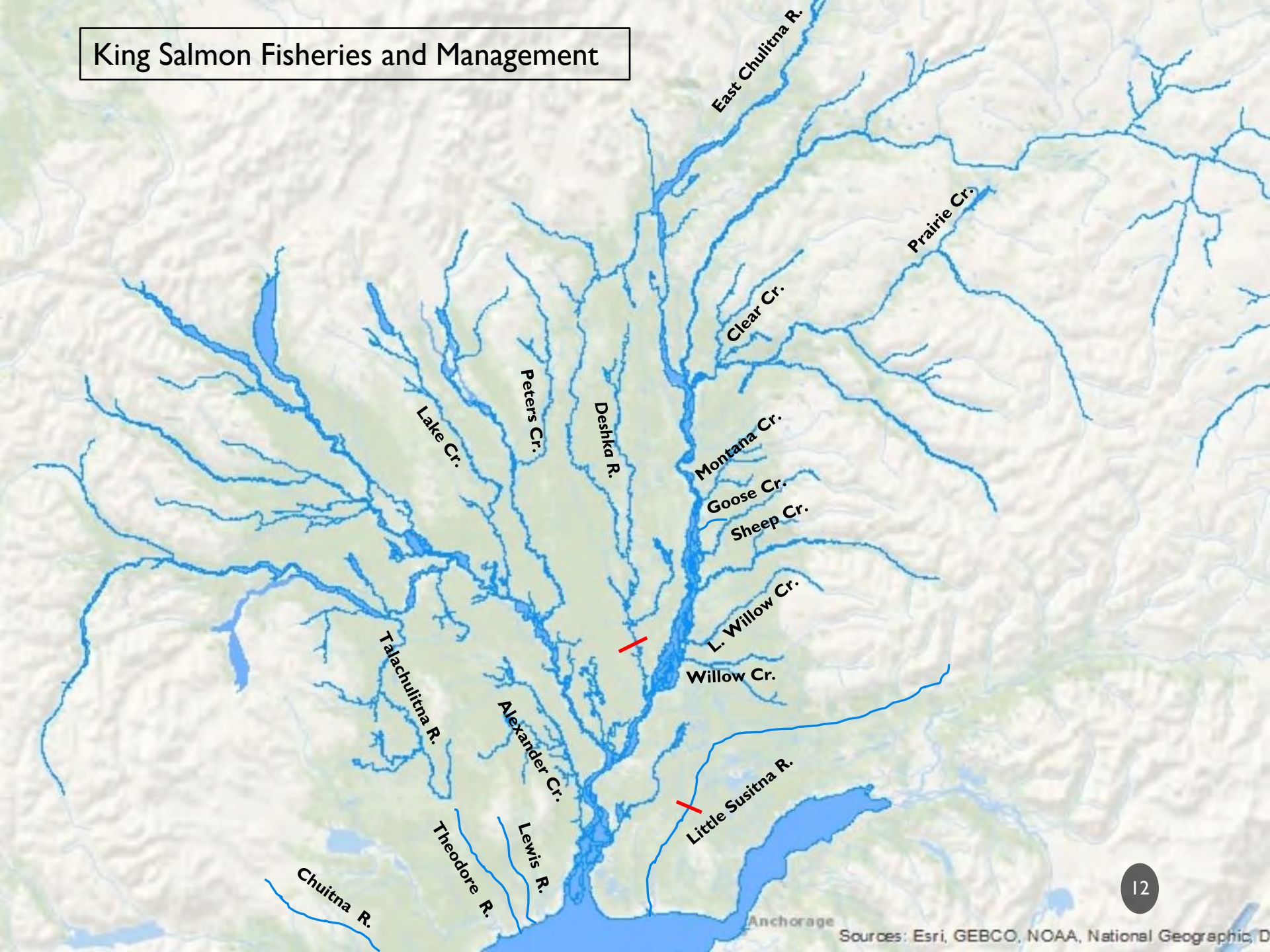
King Salmon Fisheries and Management



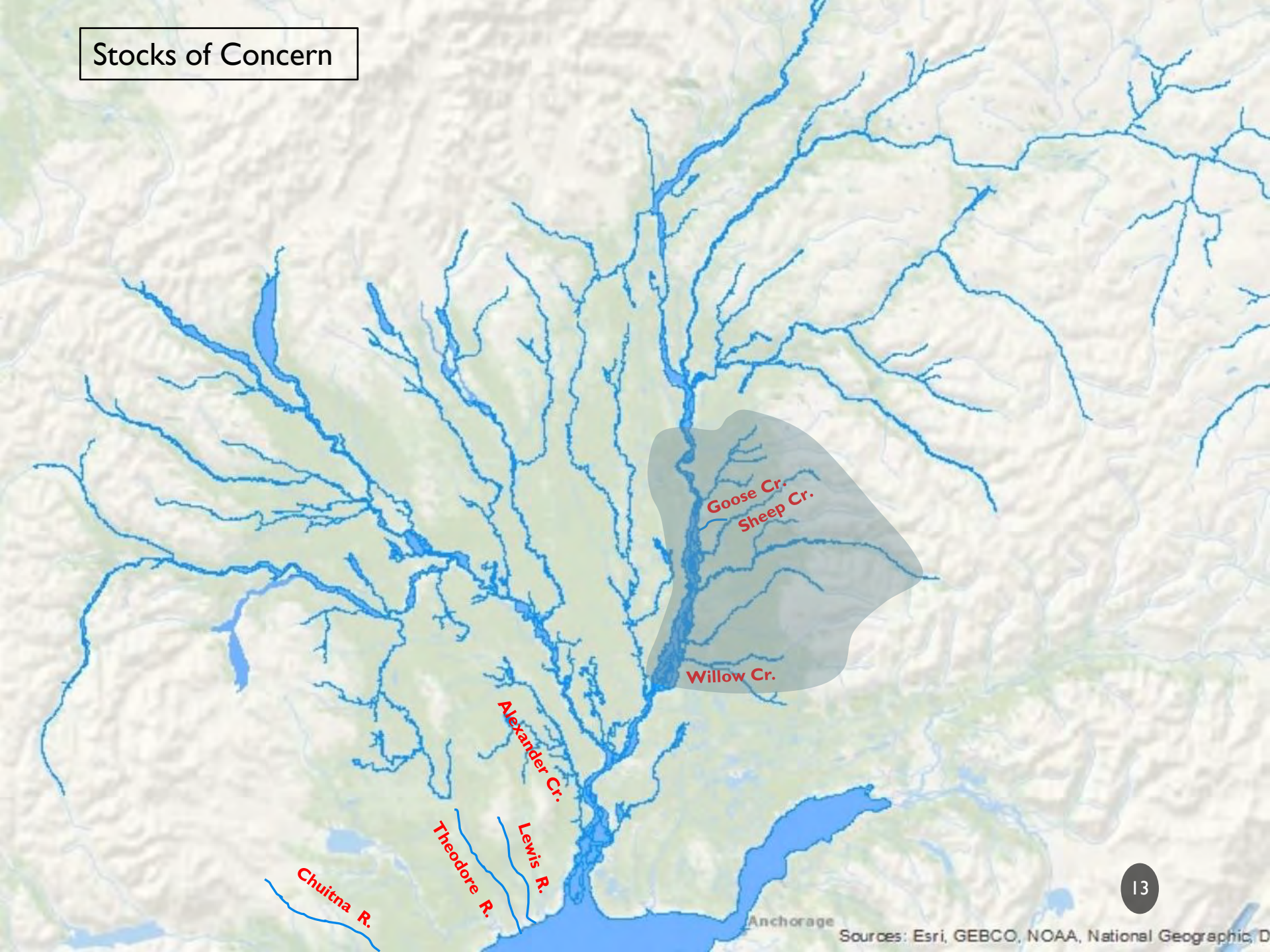
Counting King Salmon by Helicopter



King Salmon Fisheries and Management



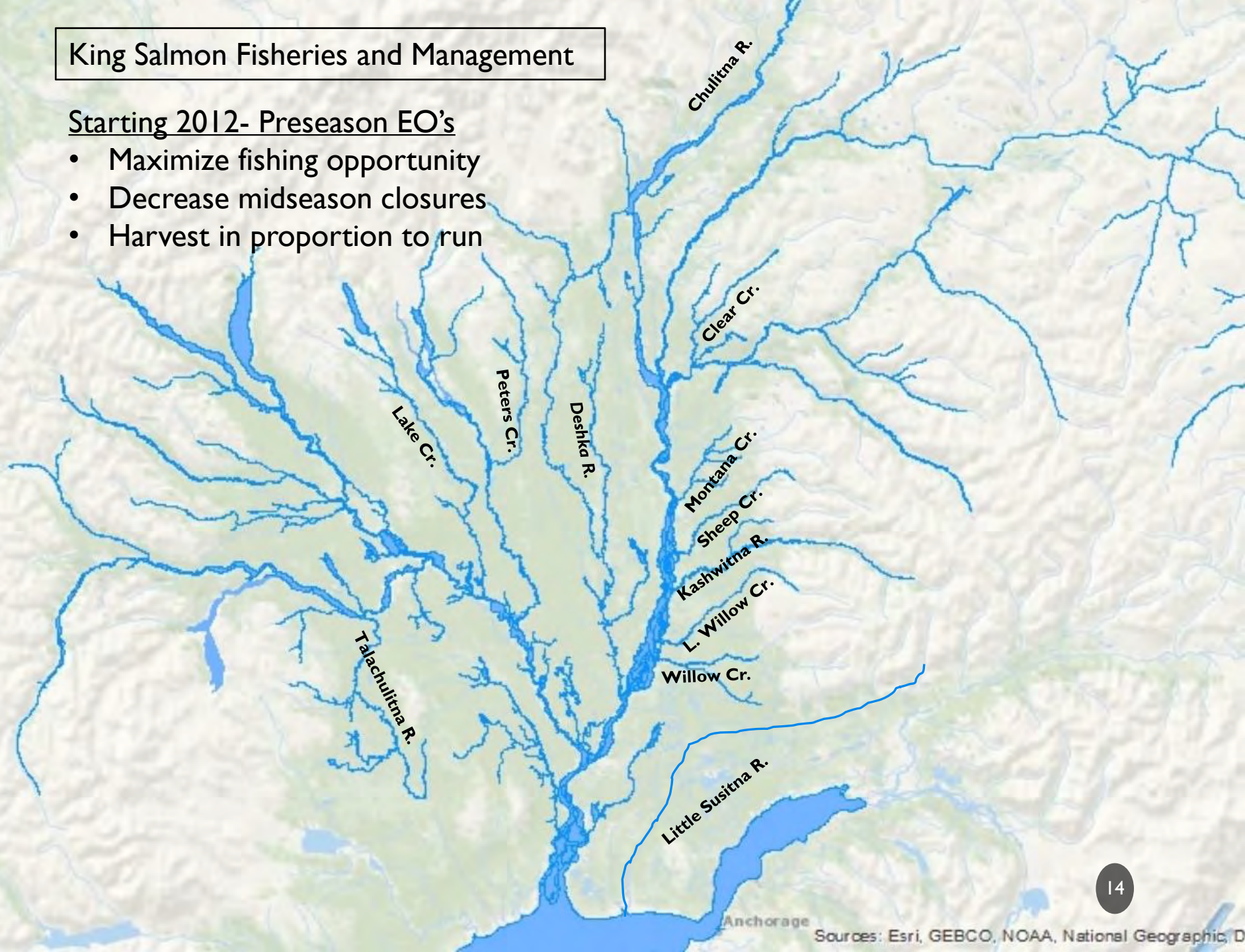
Stocks of Concern



King Salmon Fisheries and Management

Starting 2012- Preseason EO's

- Maximize fishing opportunity
- Decrease midseason closures
- Harvest in proportion to run



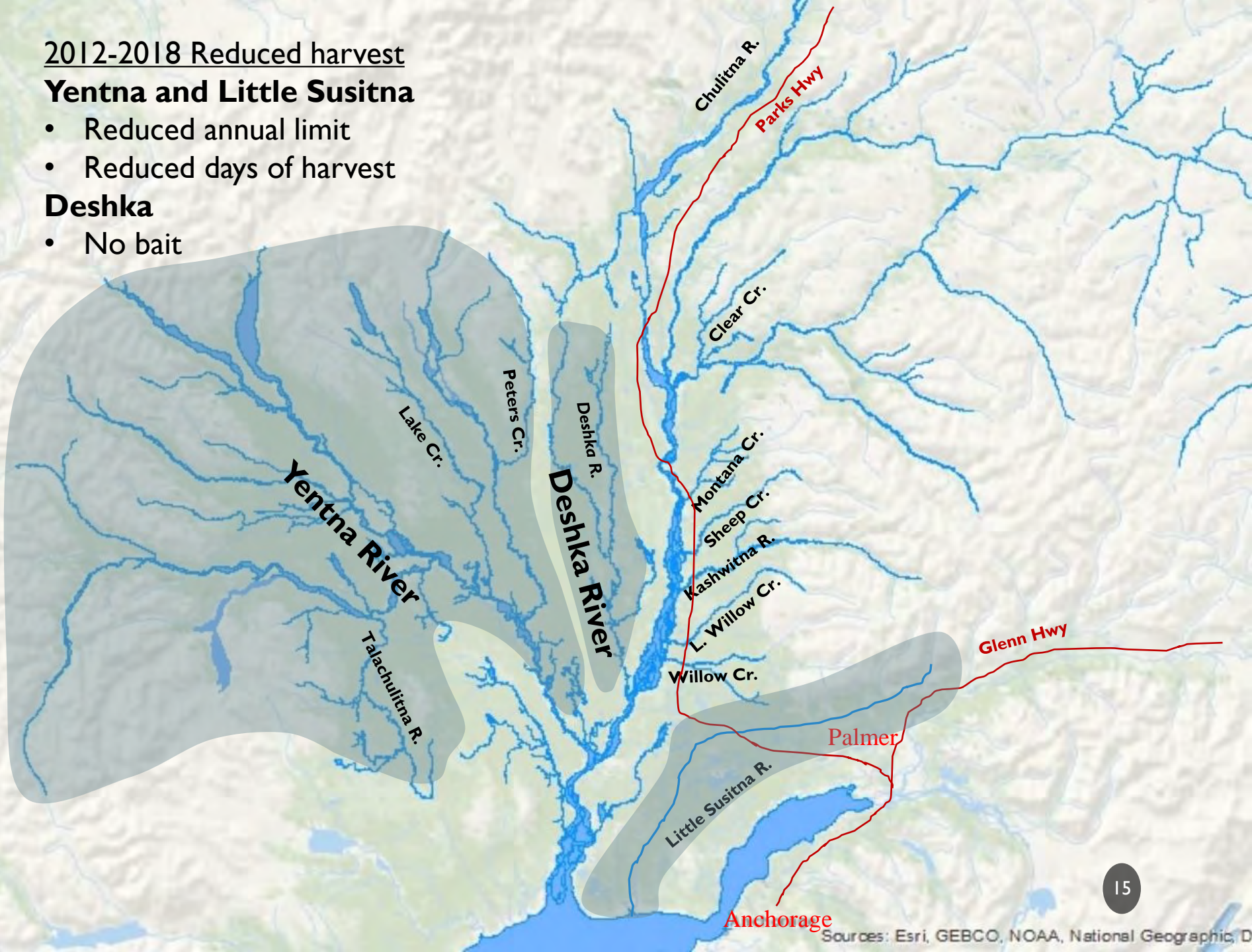
2012-2018 Reduced harvest

Yentna and Little Susitna

- Reduced annual limit
- Reduced days of harvest

Deshka

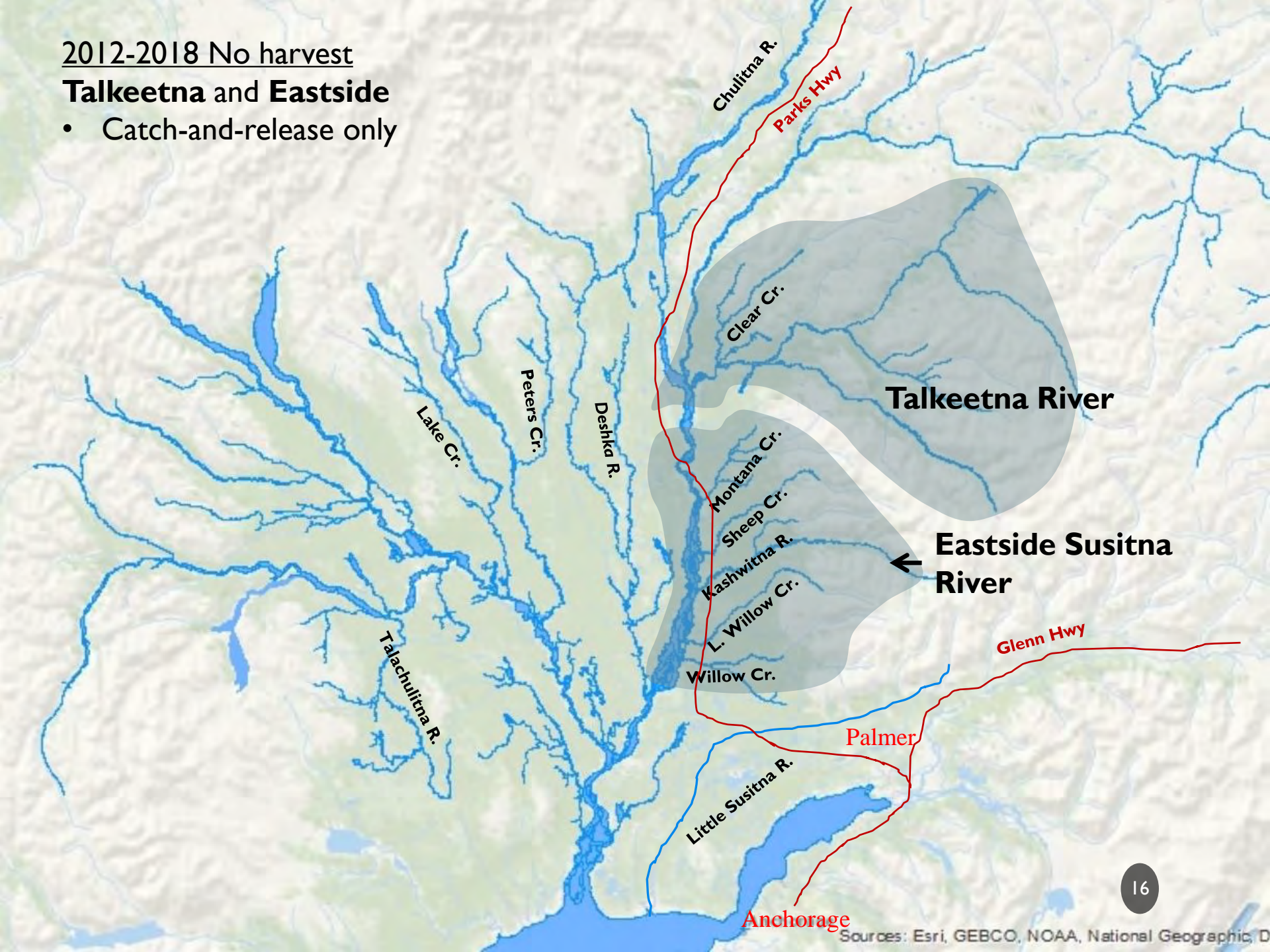
- No bait



2012-2018 No harvest

Talkeetna and Eastside

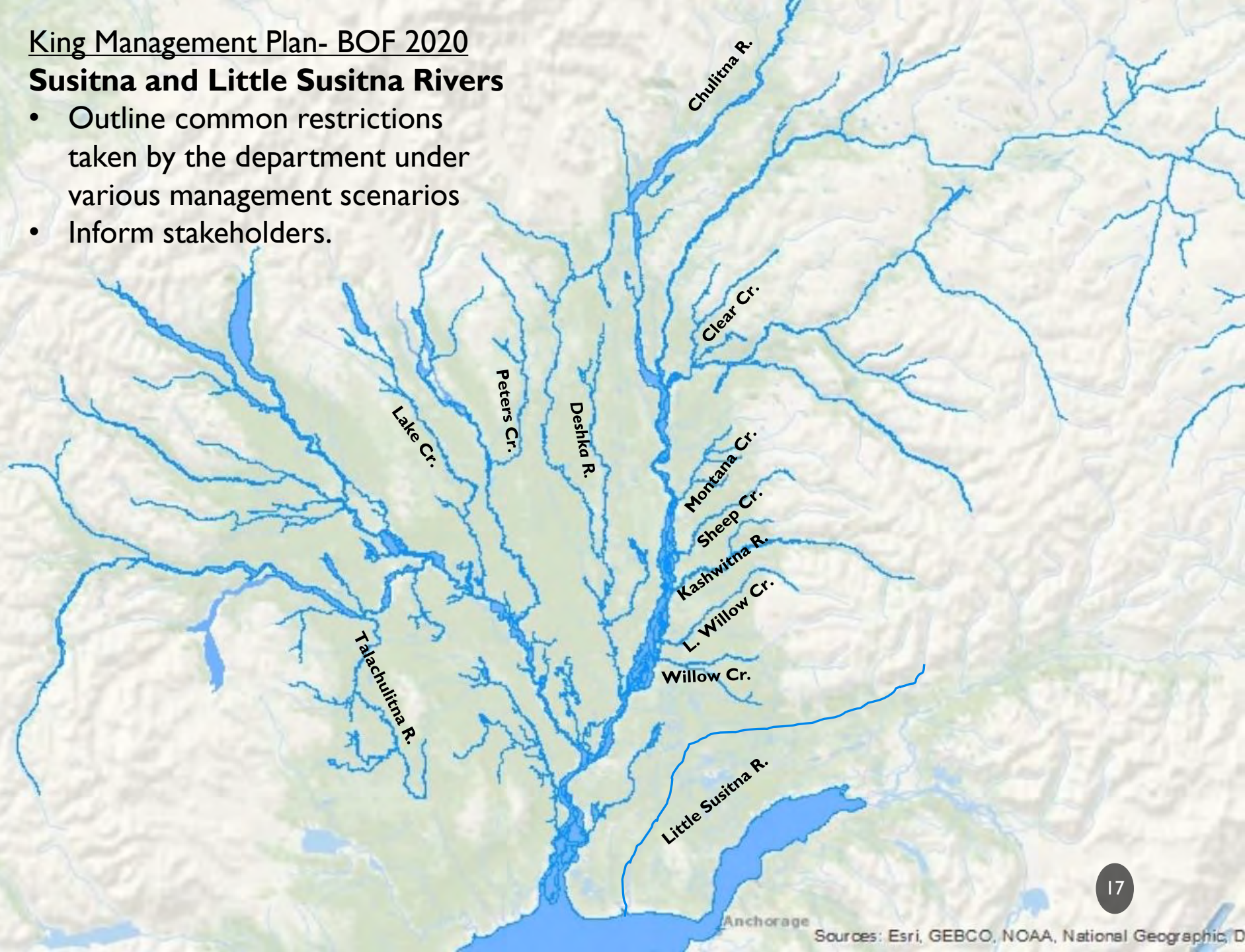
- Catch-and-release only



King Management Plan- BOF 2020

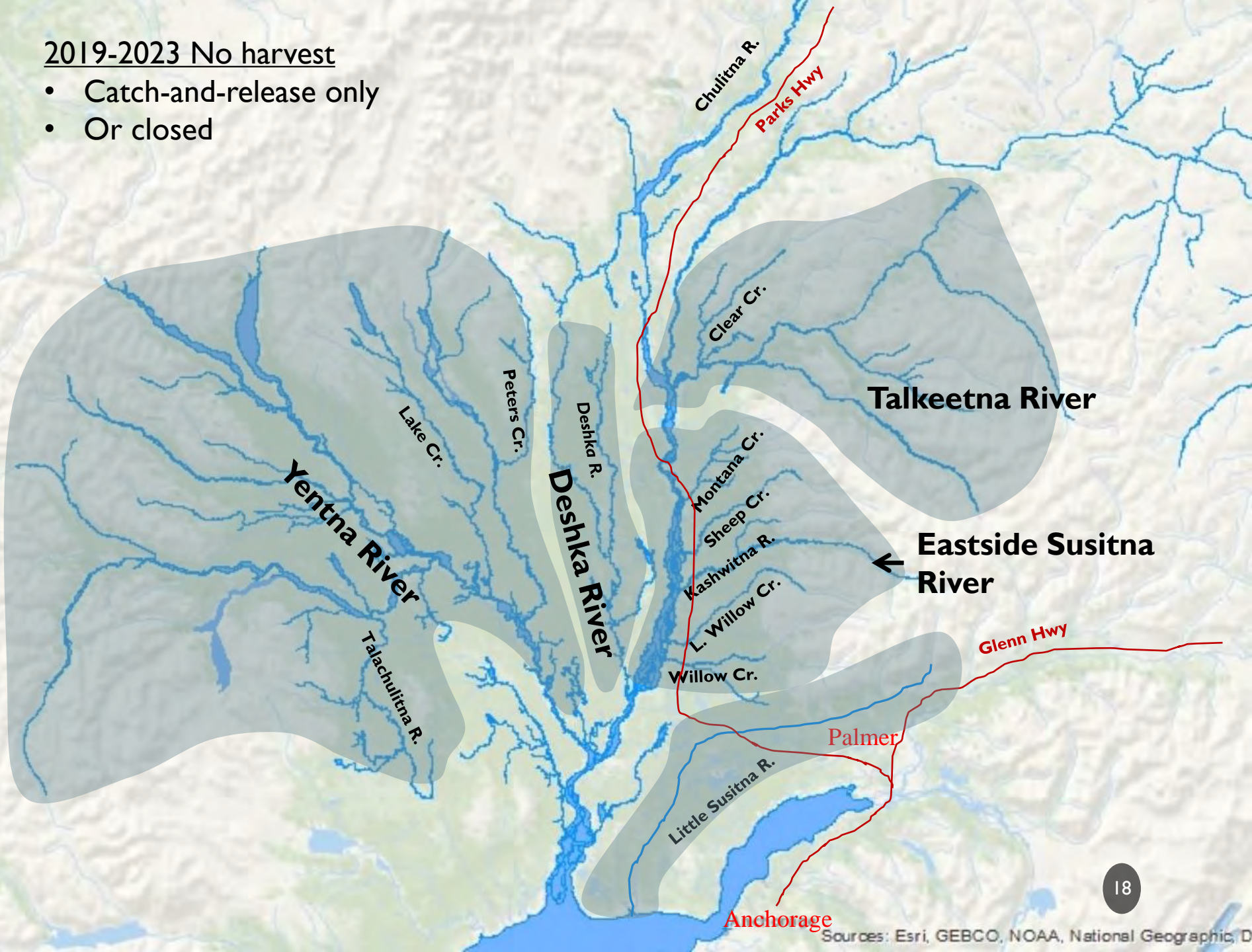
Susitna and Little Susitna Rivers

- Outline common restrictions taken by the department under various management scenarios
- Inform stakeholders.



2019-2023 No harvest

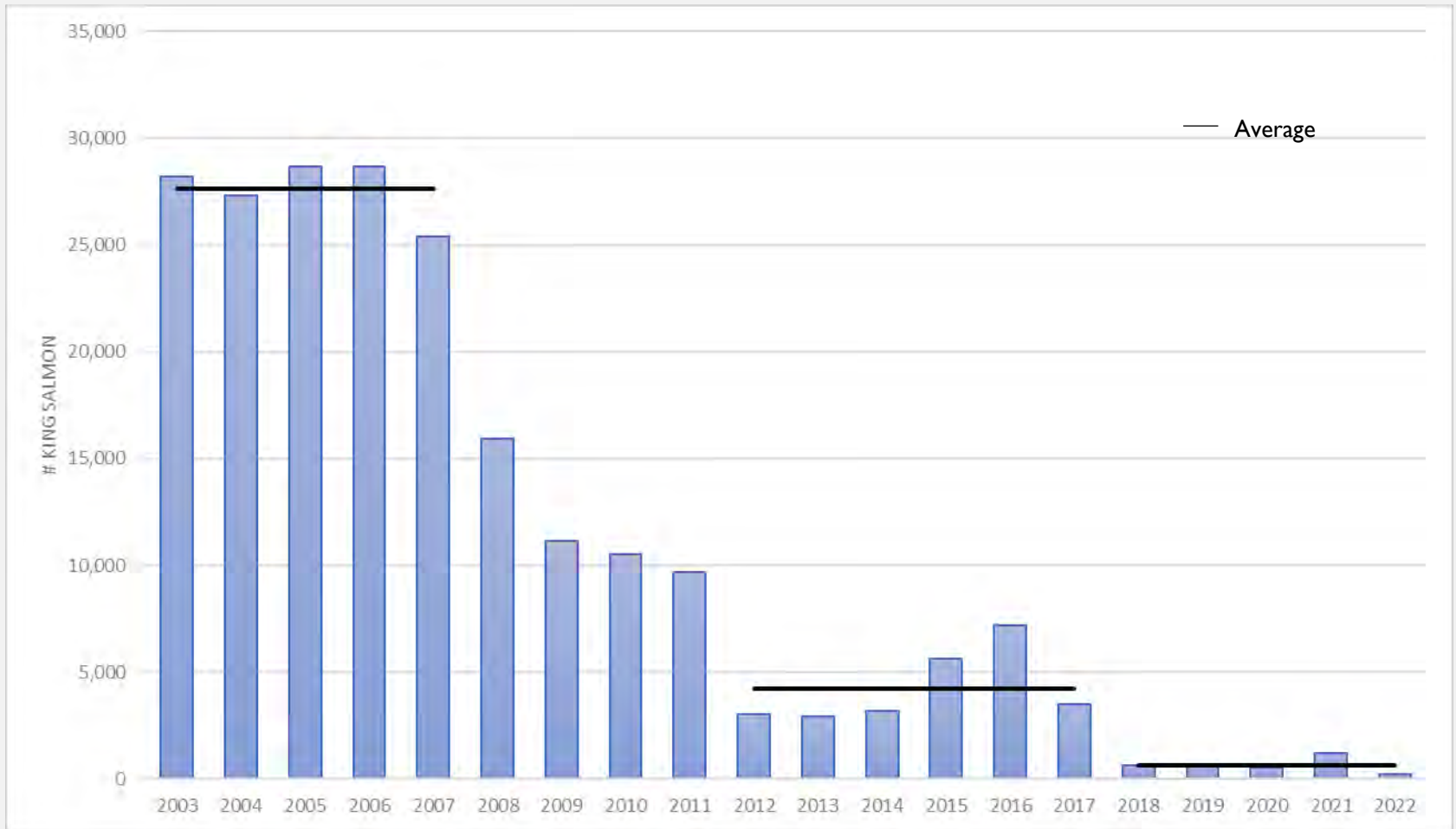
- Catch-and-release only
- Or closed



King Salmon Fisheries and Management

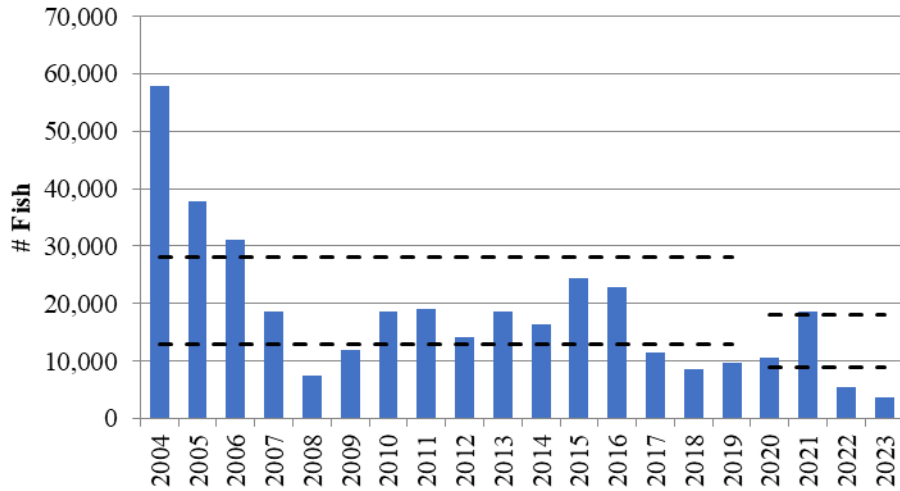


NCI King Salmon Sport Harvest

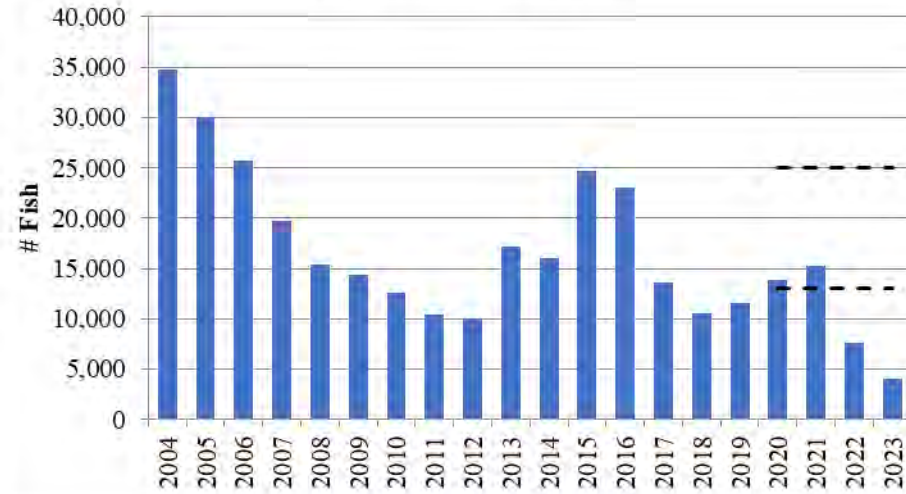


Susitna King Stock Escapements (Proposals 218-219, 239)

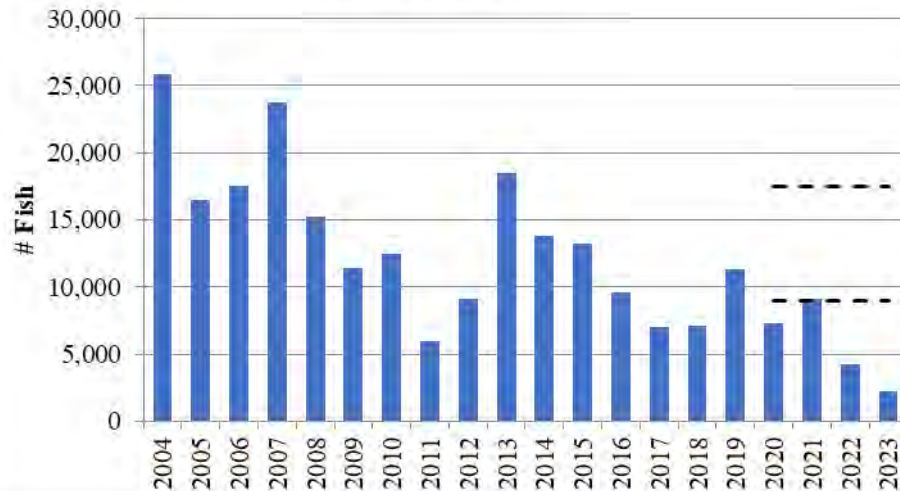
Deshka River



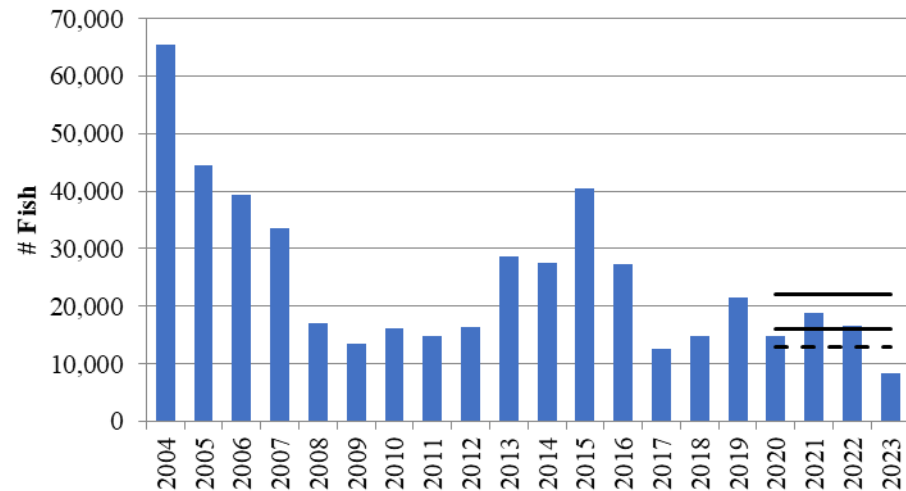
Eastside Susitna



Talkeetna River



Yentna River

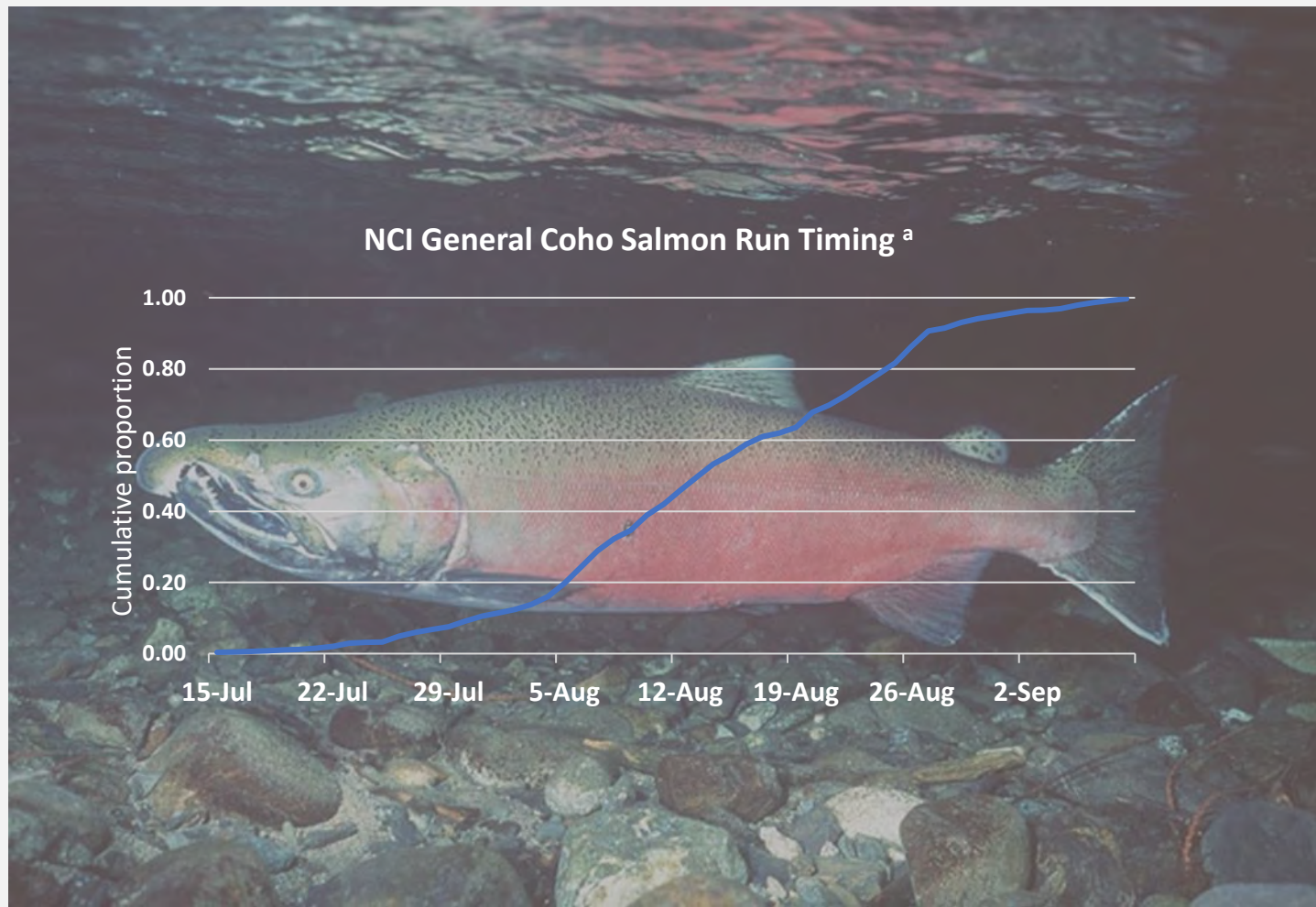


Escapement Goal Range= Dotted Line

Optimal Escapement Goal Range= Solid Line



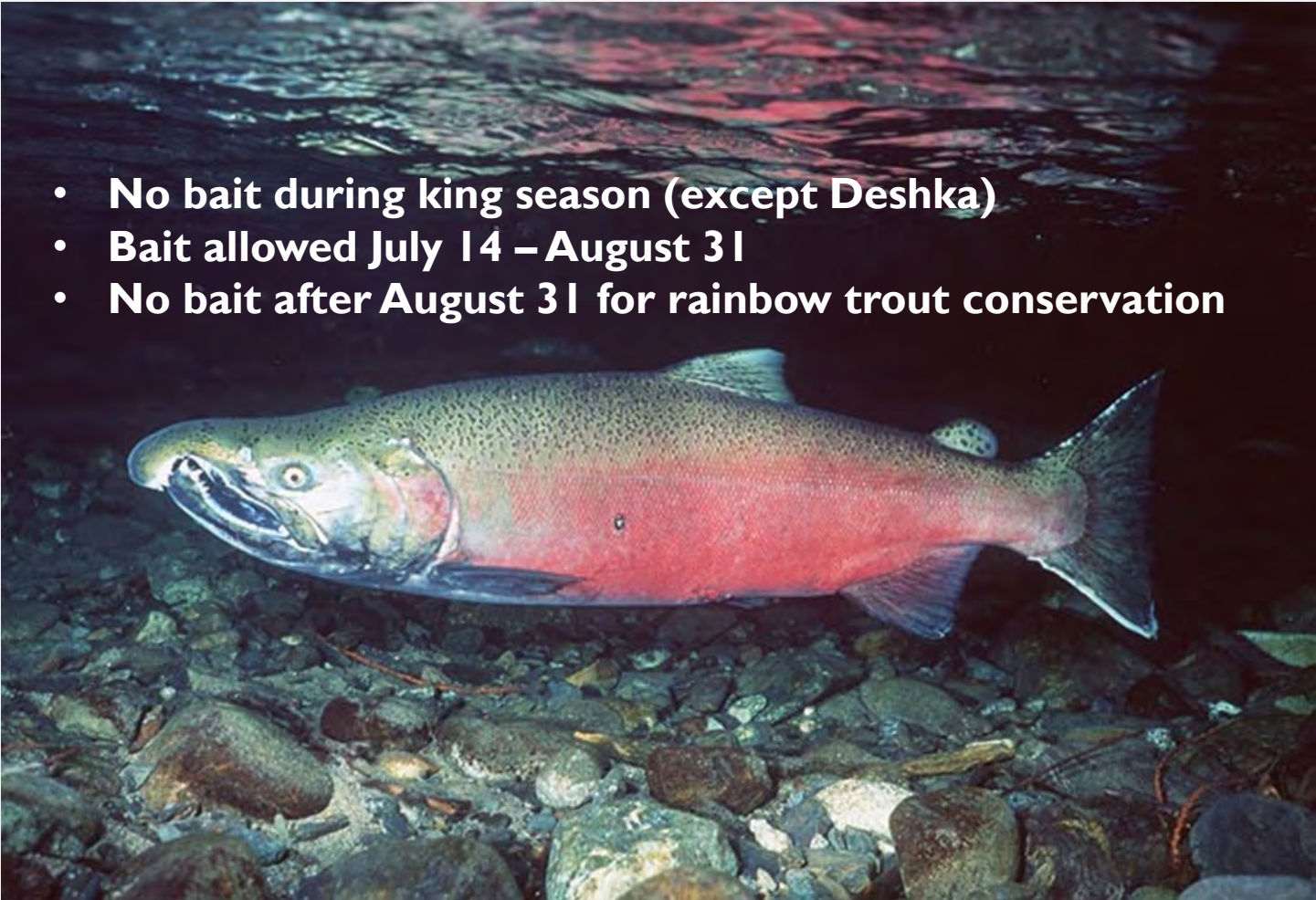
NCI Coho Salmon Sport Fisheries



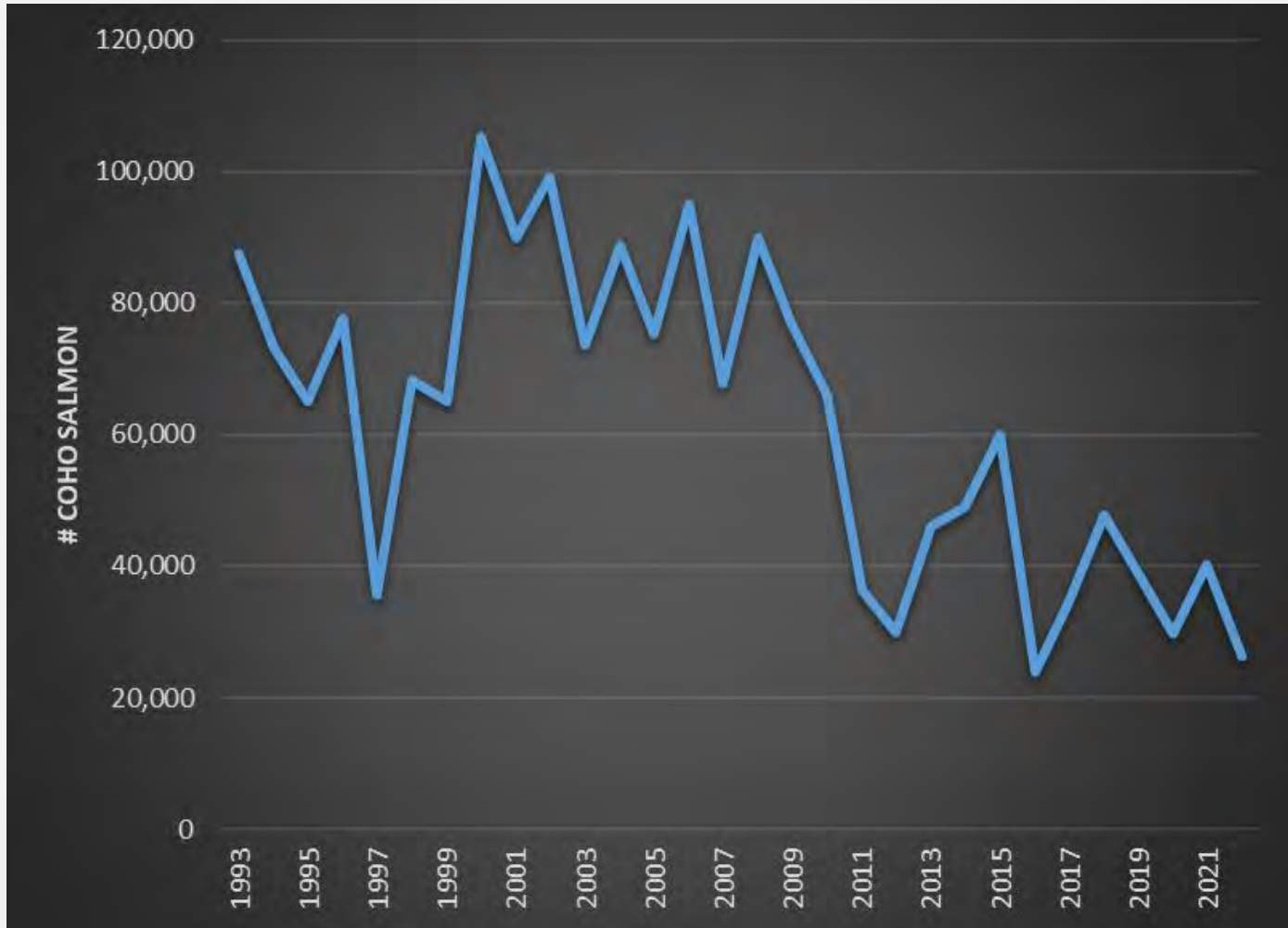
^a based on Little Susitna coho salmon

NCI Coho Salmon Sport Fisheries

- **No bait during king season (except Deshka)**
- **Bait allowed July 14 – August 31**
- **No bait after August 31 for rainbow trout conservation**

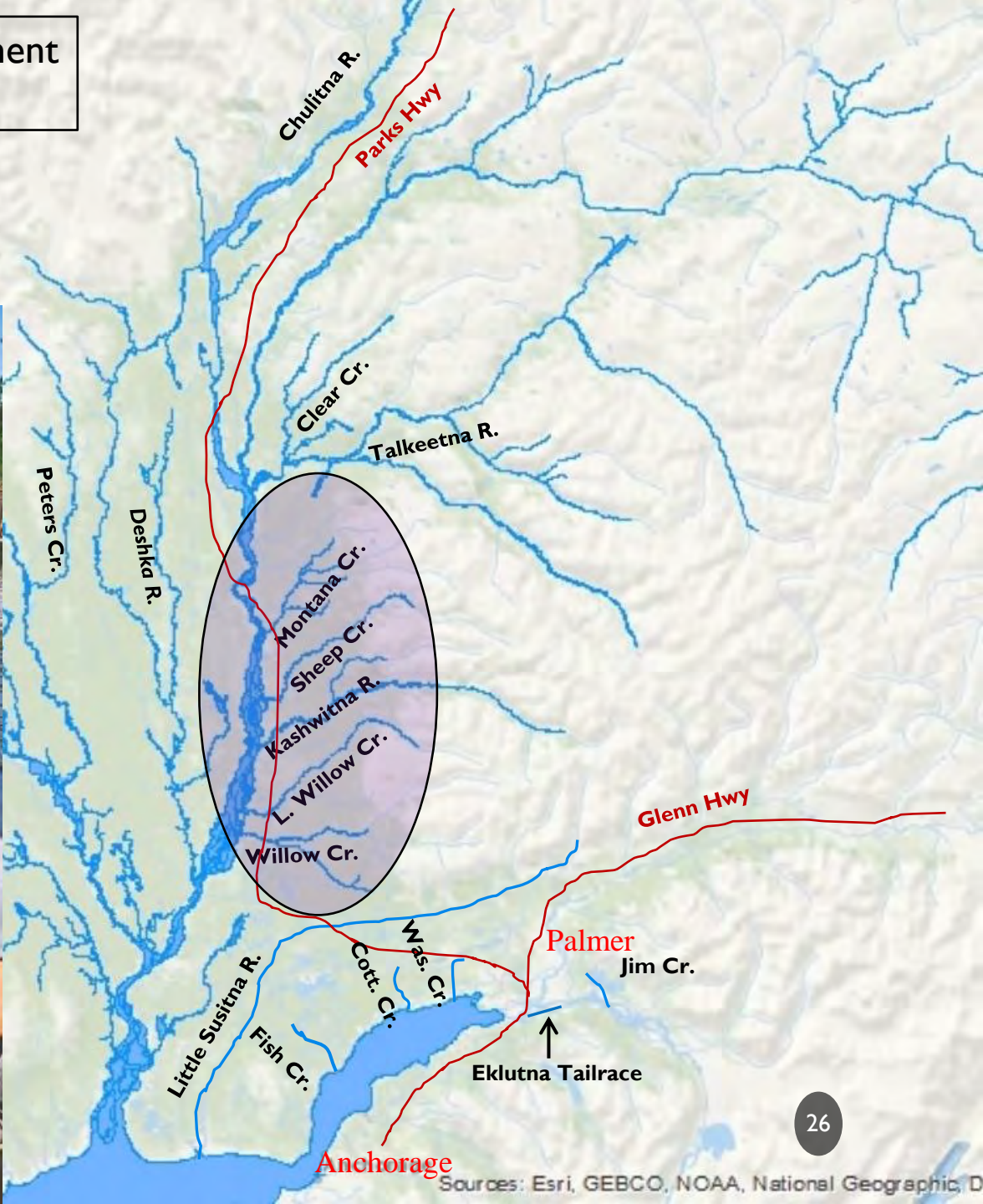


NCI Coho Salmon Sport Harvest, 1993-2022.



Coho Salmon Fisheries and Management (Proposal 221)

Unit 2 Parks Hwy:
7 days per week;
2 per day and in possession;
Bait allowed July 14-Aug 31



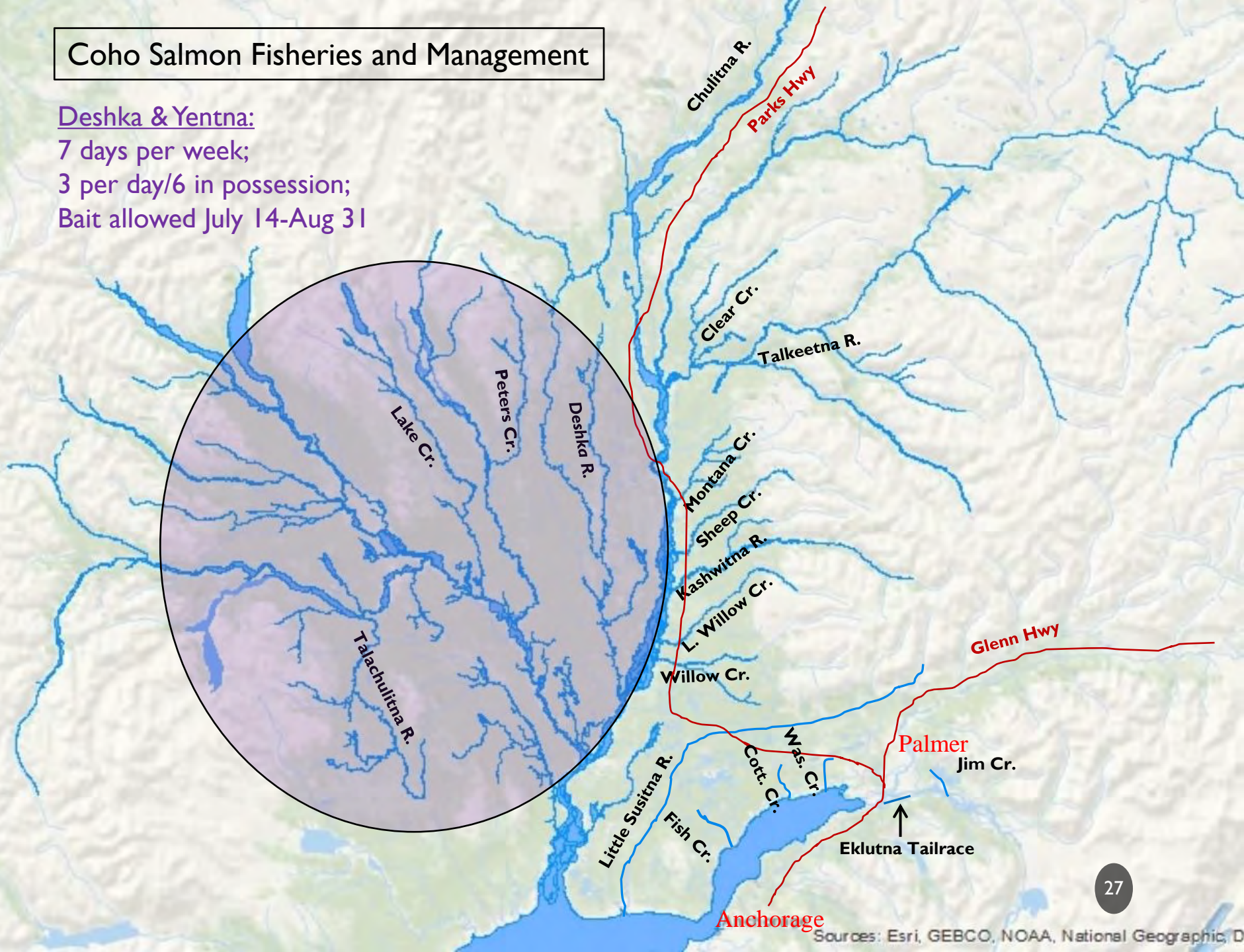
Coho Salmon Fisheries and Management

Deshka & Yentna:

7 days per week;

3 per day/6 in possession;

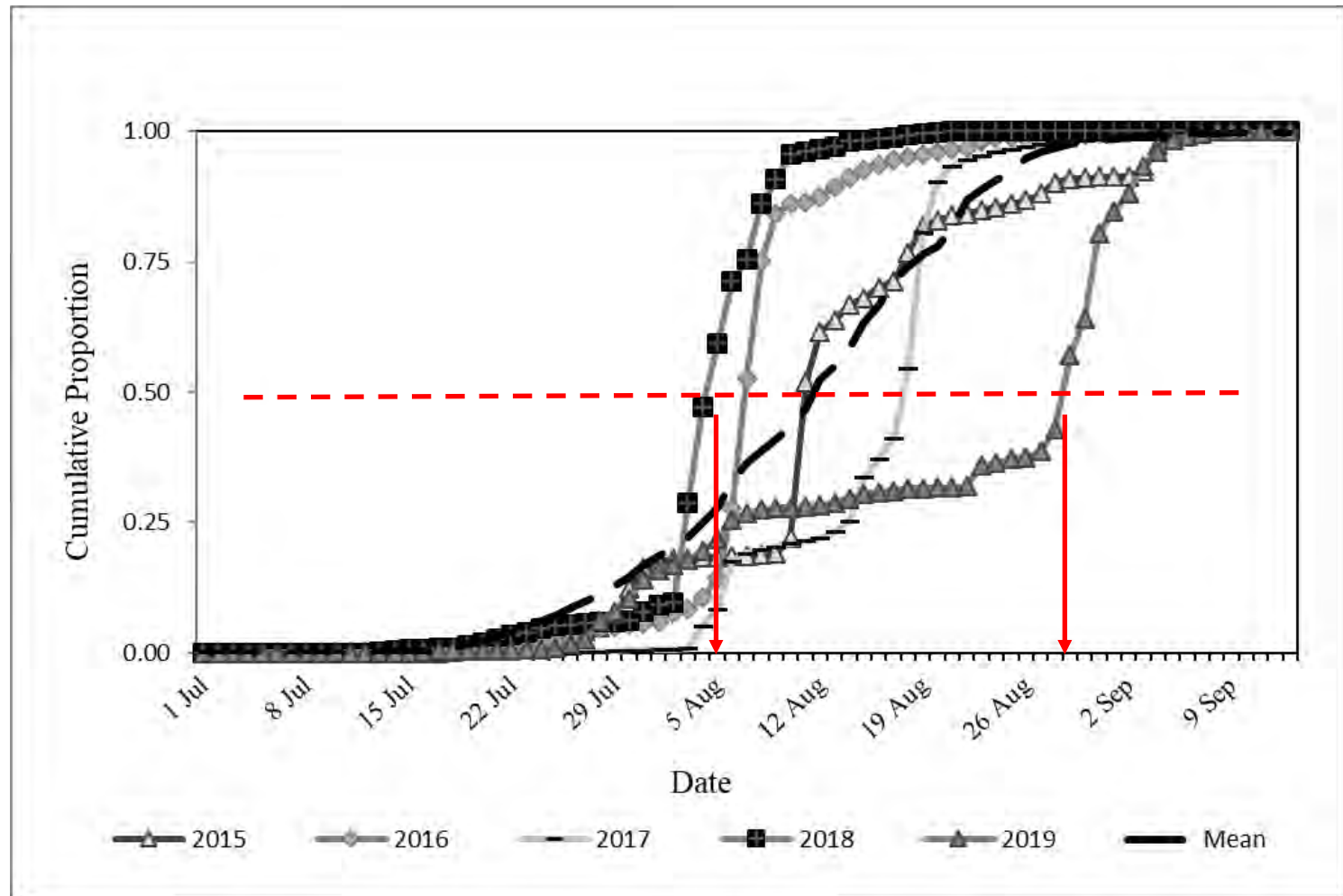
Bait allowed July 14-Aug 31



Coho Salmon Fisheries and Management



Deshka Coho Salmon Run Timing

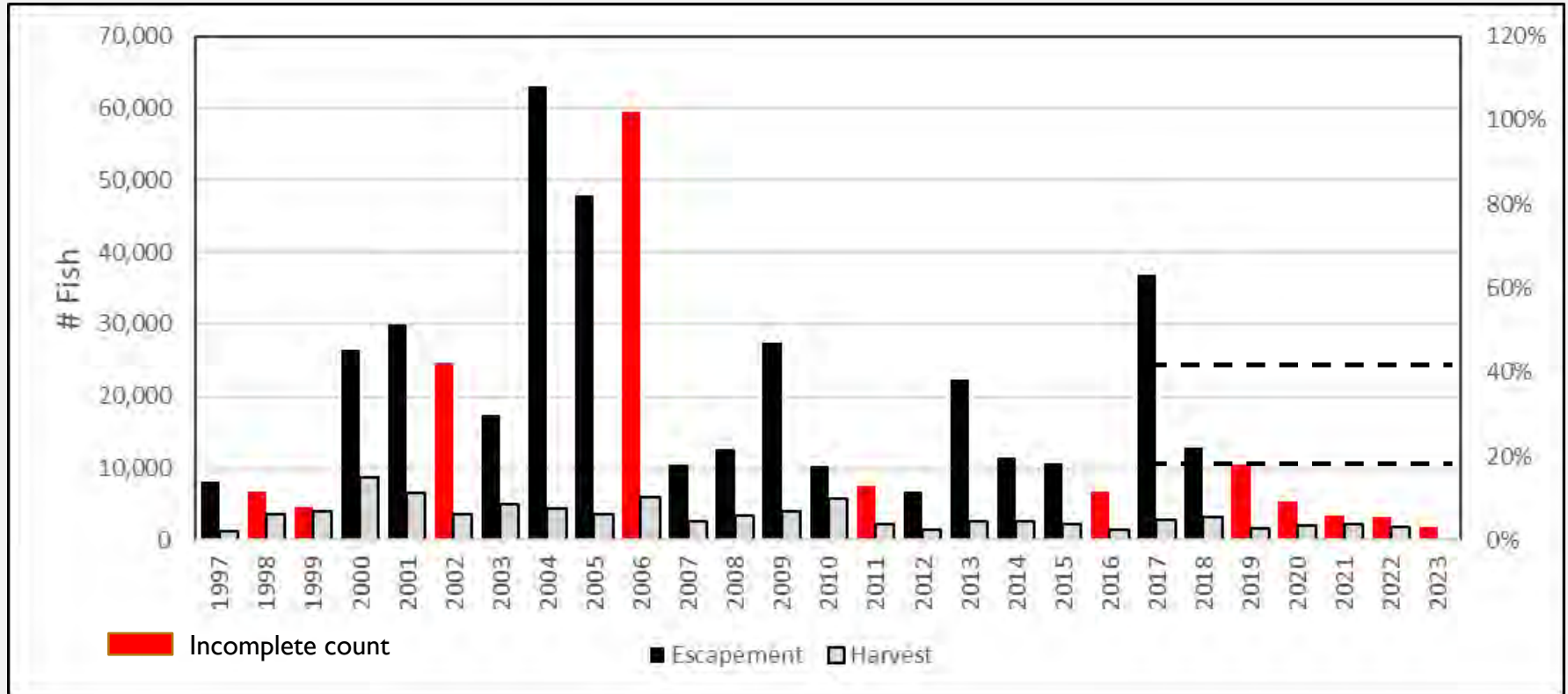




2017-2018:

- Susitna drainage bag limits liberalized inseason based on Deshka weir counts.

Deshka River Coho Salmon Harvest and Escapement



Dotted line = escapement goal range

GSI Estimates of Deshka Coho Harvest Rates in Sport and Commercial Fisheries (Proposals 229-231)

	Escapement	Commercial harvest ^a	Sport harvest	Total run	Commercial harvest rate	Sport harvest rate	Total harvest rate
<u>Deshka River</u>							
2013	22,341	11,543	2,658	36,542	32%	7%	39%
2014	11,578	3,163	2,598	17,339	18%	15%	33%
2015	10,775	4,049	2,221	17,045	24%	13%	37%

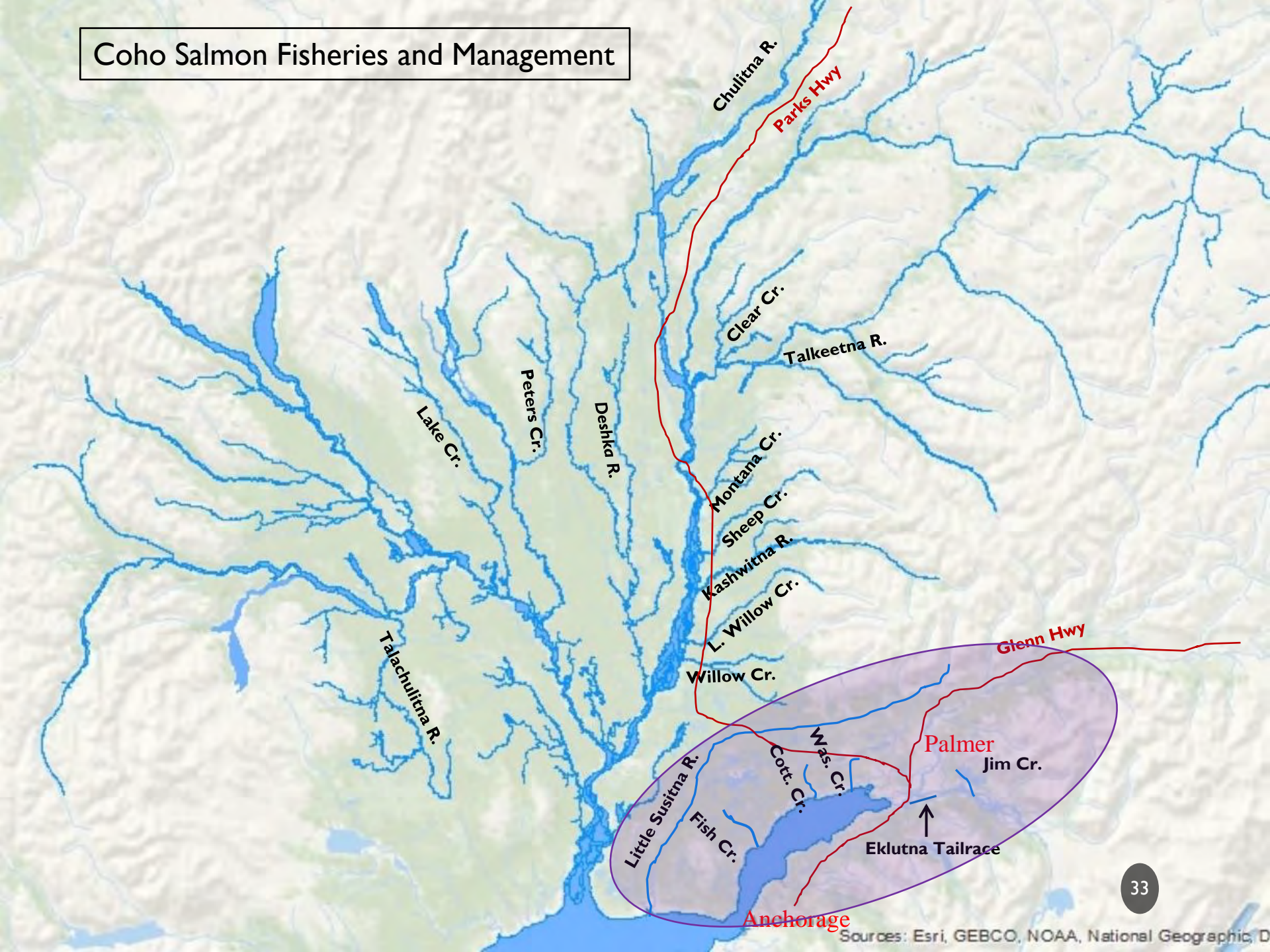
^a Marine harvest estimated by updated mixed stock analysis using current genetic baseline.

GSI Estimates of Susitna Coho Salmon Harvest Rates in Sport and Commercial Fisheries.

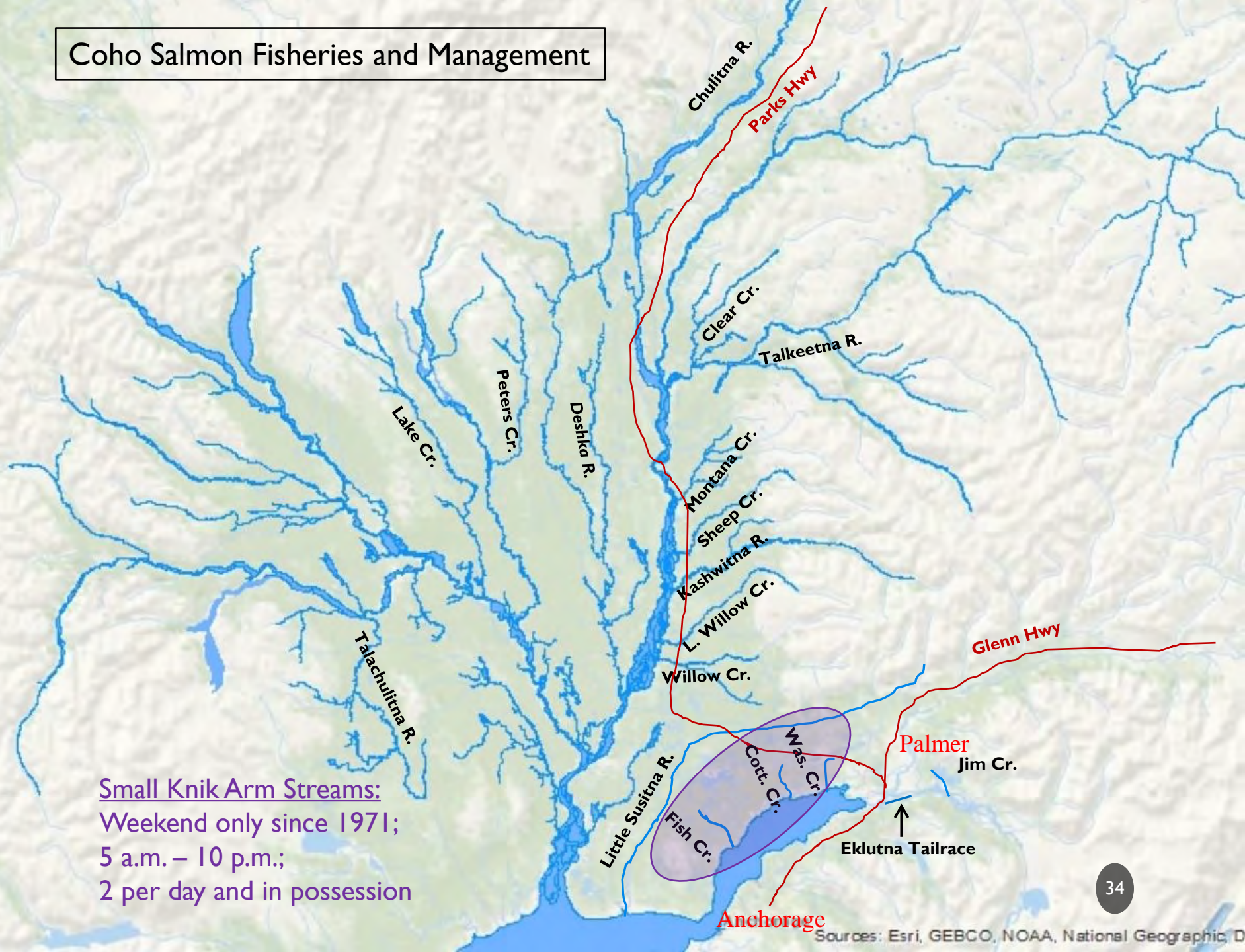
	Commercial harvest ^a	Mainstem abundance	Mainstem inriver	Sport harvest	Commercial harvest rate	Sport harvest rate	Total harvest rate
<u>Mainstem Susitna</u>							
2013	54,462	130,026	184,488	15,647	30%	8%	38%
2014	24,604	84,879	109,483	15,120	22%	14%	36%
2015	30,259	152,500	182,759	17,900	17%	10%	26%
<u>Yentna River</u>							
2013			NA				
2014	19,629	73,819	93,448	9,899	21%	11%	32%
2015	38,224	110,321	148,545	10,928	26%	7%	33%

^a Marine harvest estimated by updated mixed stock analysis using current genetic baseline.

Coho Salmon Fisheries and Management



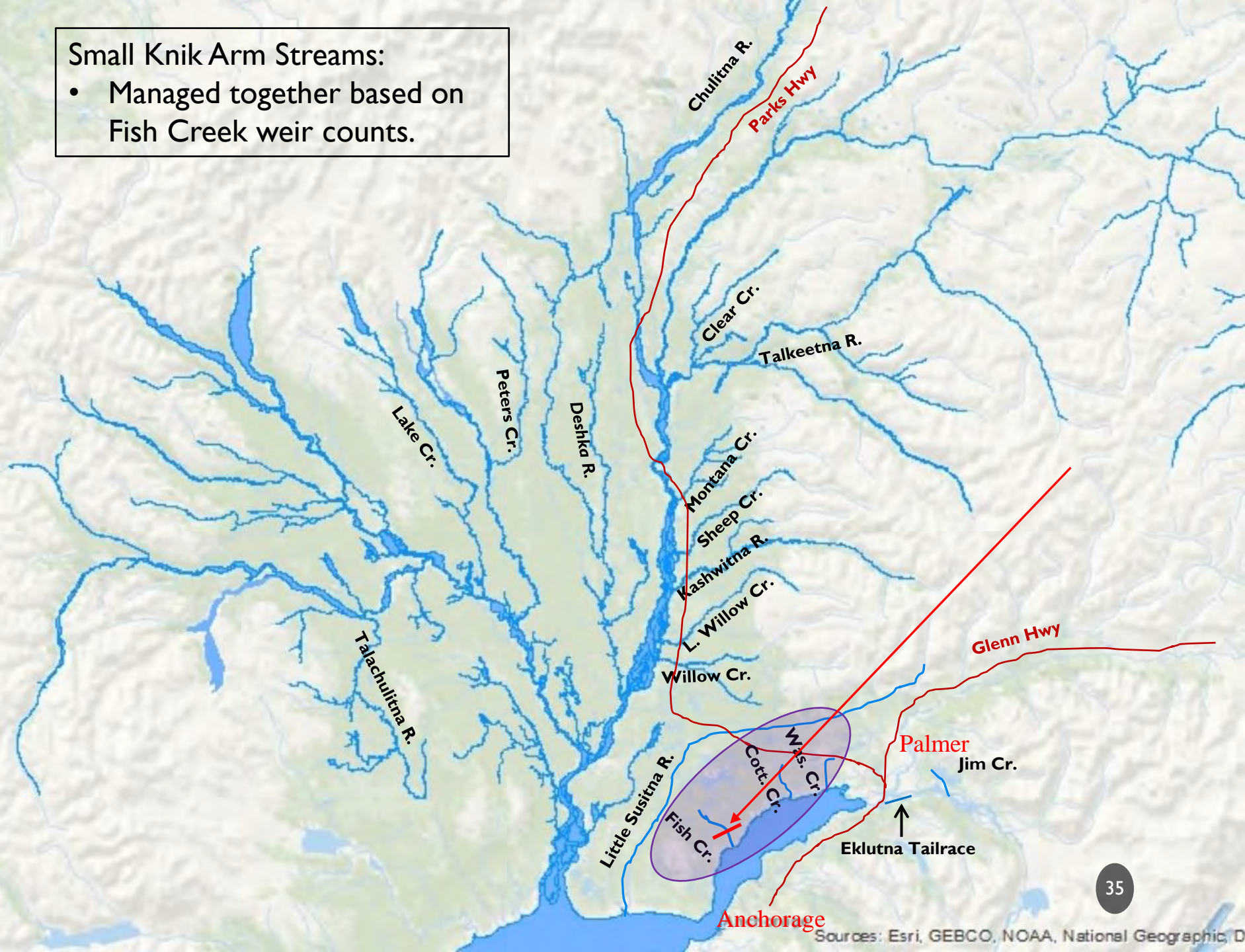
Coho Salmon Fisheries and Management



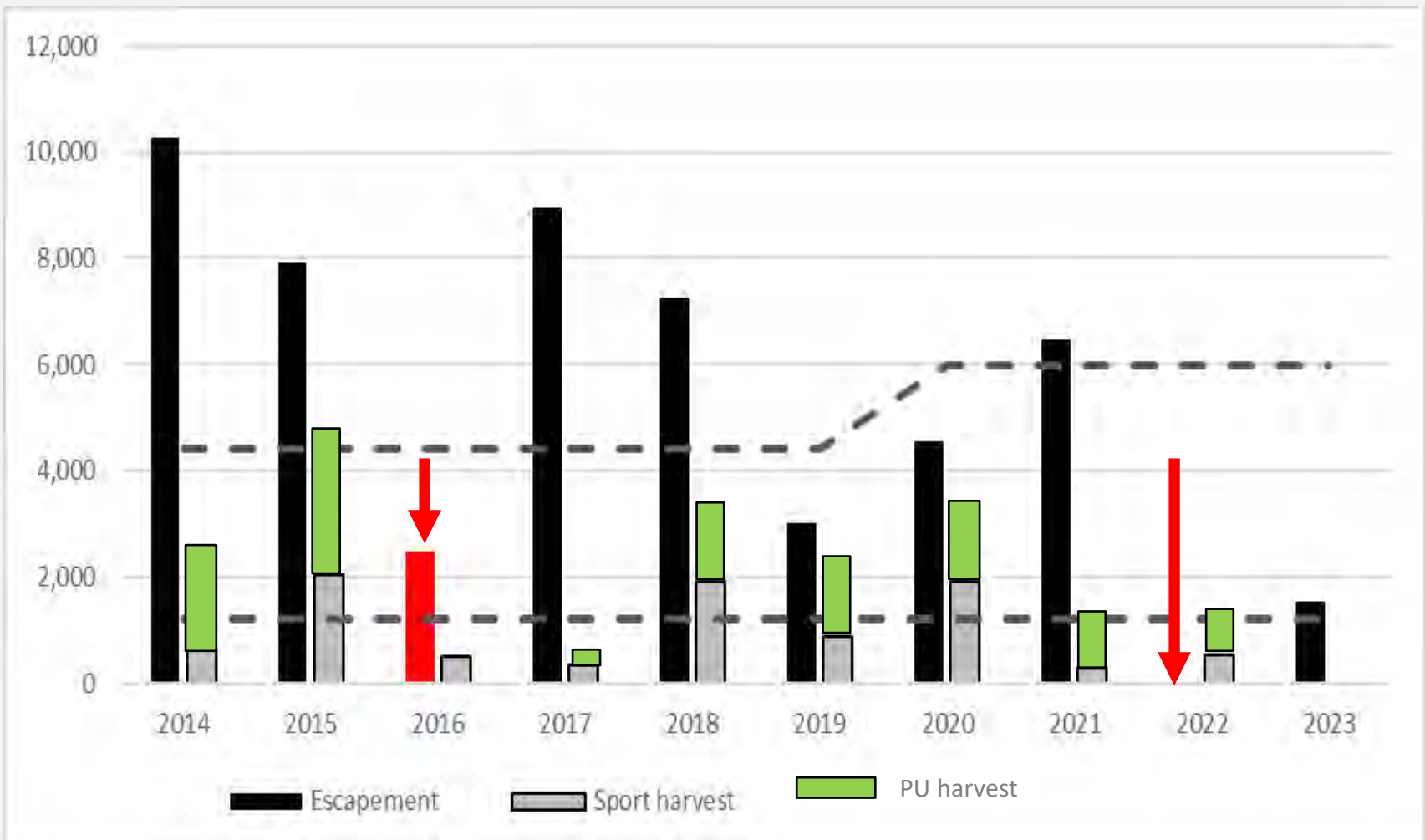
Small Knik Arm Streams:
Weekend only since 1971;
5 a.m. – 10 p.m.;
2 per day and in possession

Small Knik Arm Streams:

- Managed together based on Fish Creek weir counts.



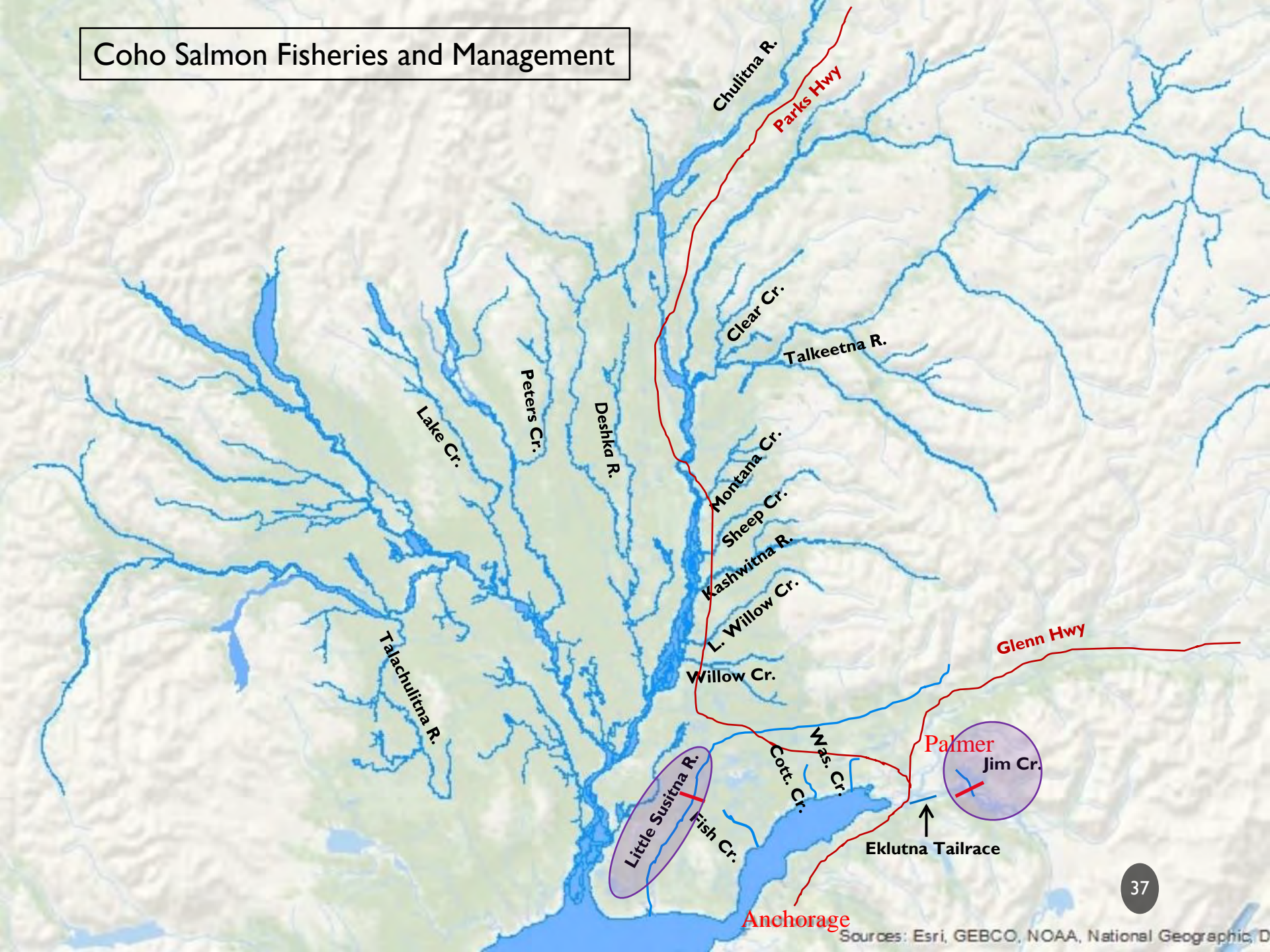
Fish Creek Coho Salmon Escapement and Harvest (Proposals 243 and 245)



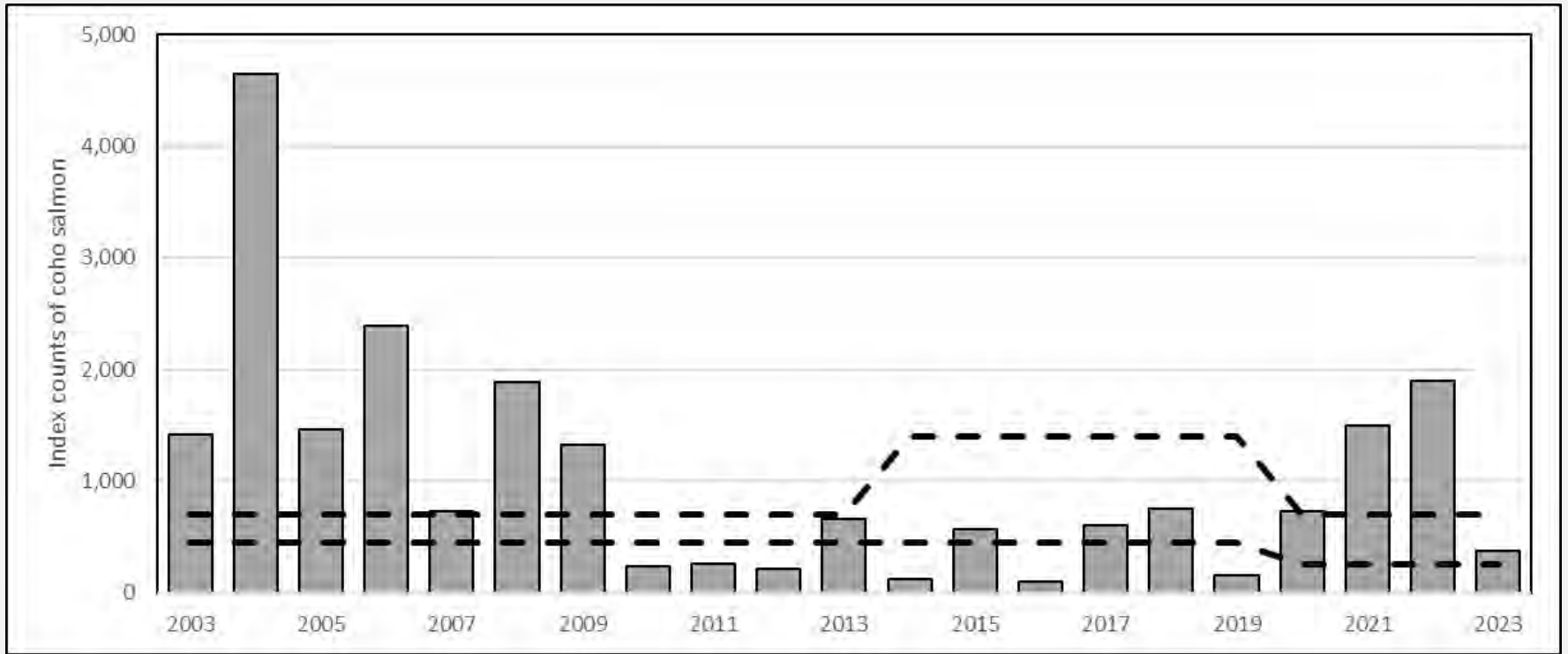
Dotted line = escapement goal range

█ Incomplete count

Coho Salmon Fisheries and Management

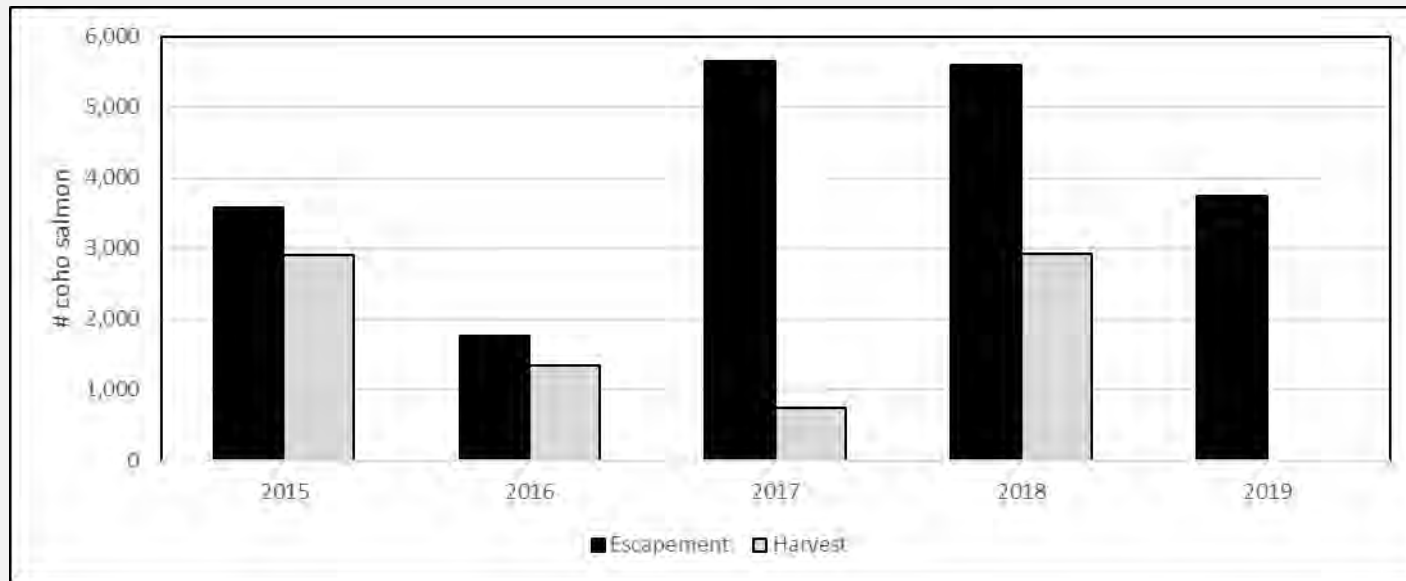


McRoberts Creek Foot Survey Index Counts of Coho Salmon, 2003-2023



Dotted line = escapement goal range

Jim Creek Coho Salmon Weir Counts and Sport Harvest (Proposal 243)

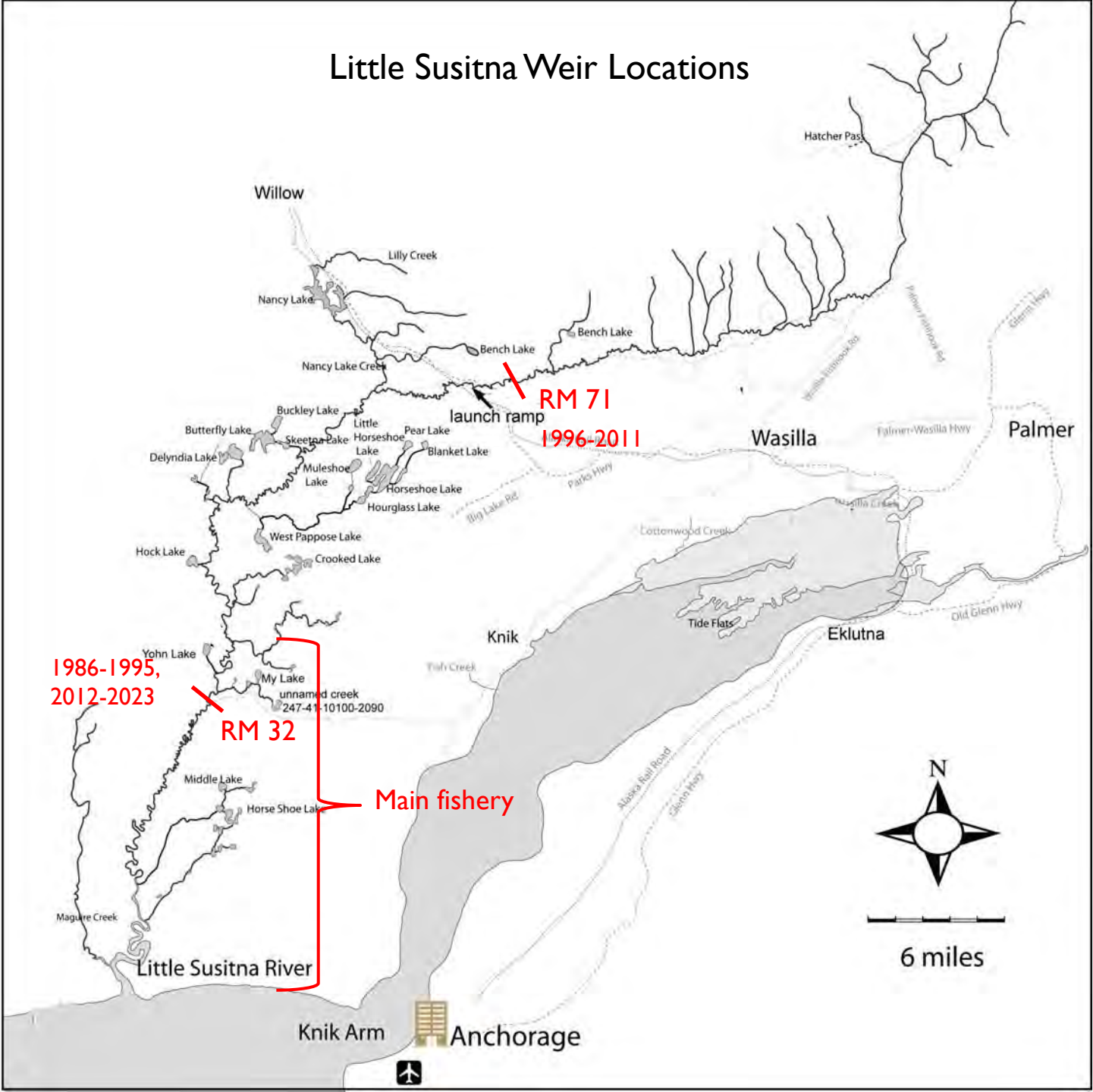


GSI Estimates of Jim Creek Coho Harvest Rates in Sport and Commercial Fisheries.

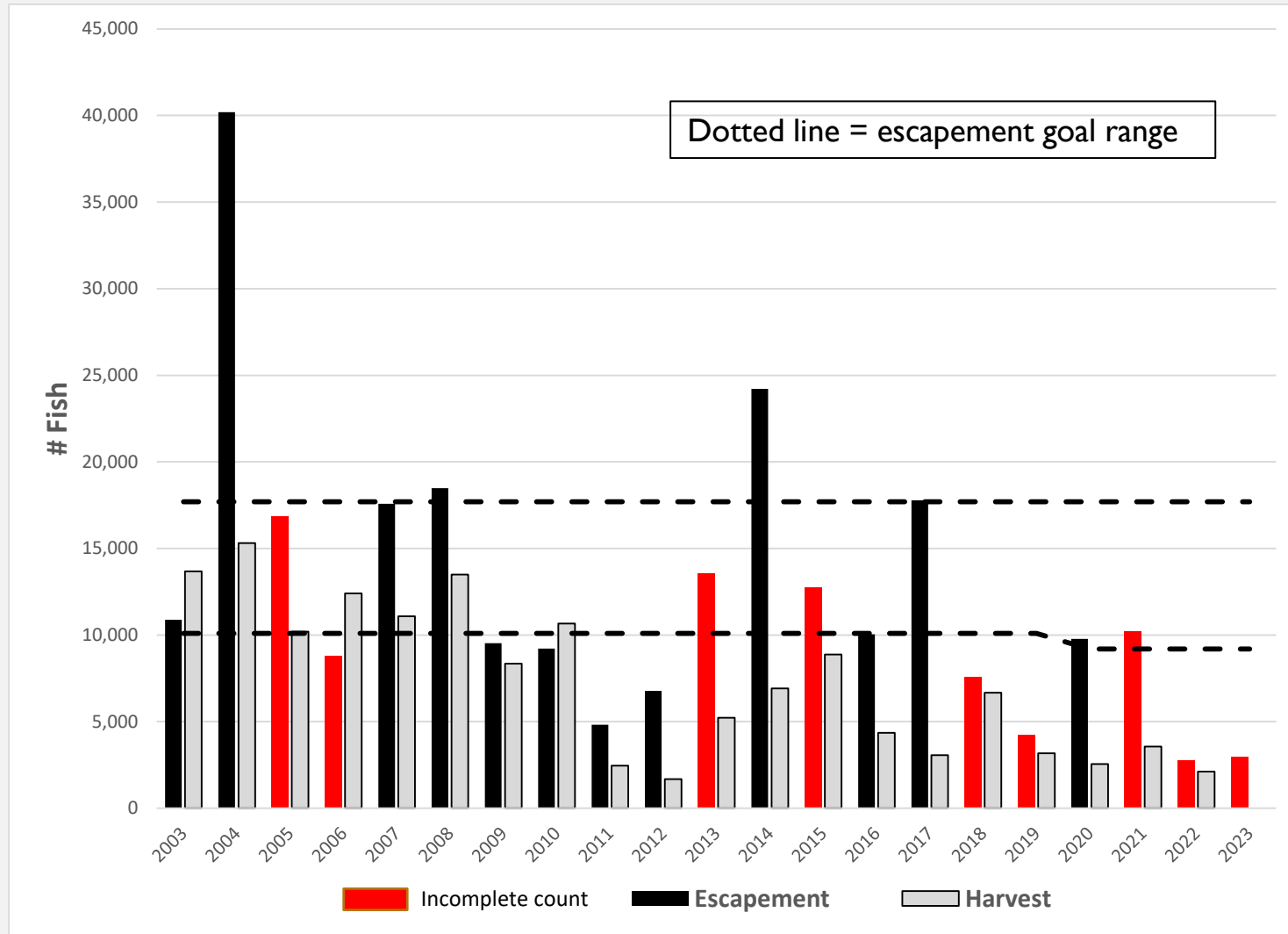
	Escapement	Commercial harvest ^a	Sport harvest	Total run	Commercial harvest rate	Sport harvest rate	Total harvest rate
2015	3,572	3,318	2,910	9,800	34%	30%	64%
2016	1,764	1,446	1,343	4,553	32%	29%	61%

^a Marine harvest estimated by updated mixed stock analysis using current genetic baseline.

Little Susitna Weir Locations



Little Susitna Coho Salmon Escapement and Harvest (Proposals 238, 240-243)



Sport fishery restricted or closed:

- 2016, 2019, 2020, 2023

Sport fishery liberalized:

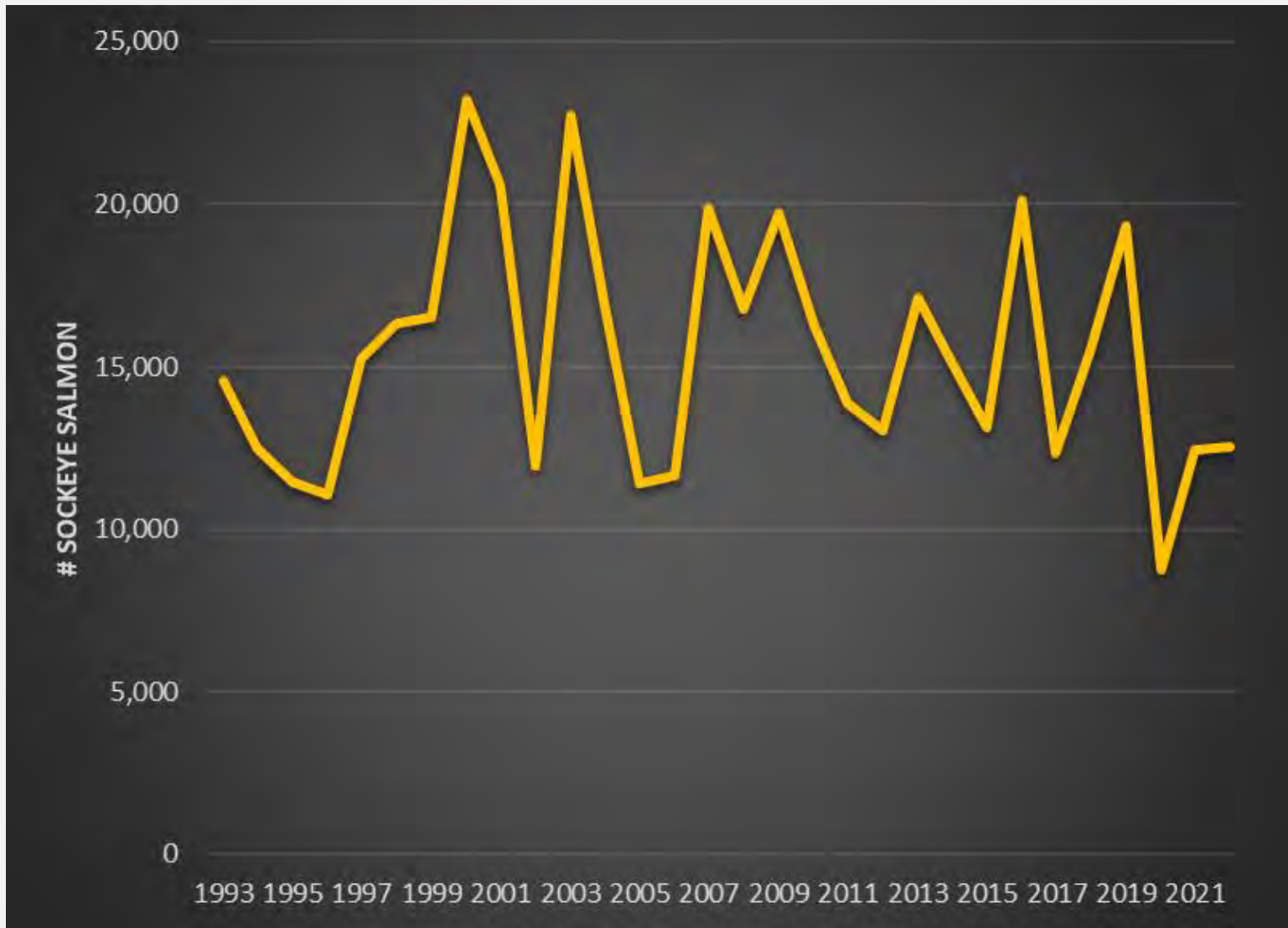
- 2014, 2015, 2017, 2018



NCI Sockeye Salmon Sport Fisheries



NCI Sockeye Salmon Sport Harvest, 1989-2018



Fish Creek Personal Use Dipnet Fishery (Knik Arm)

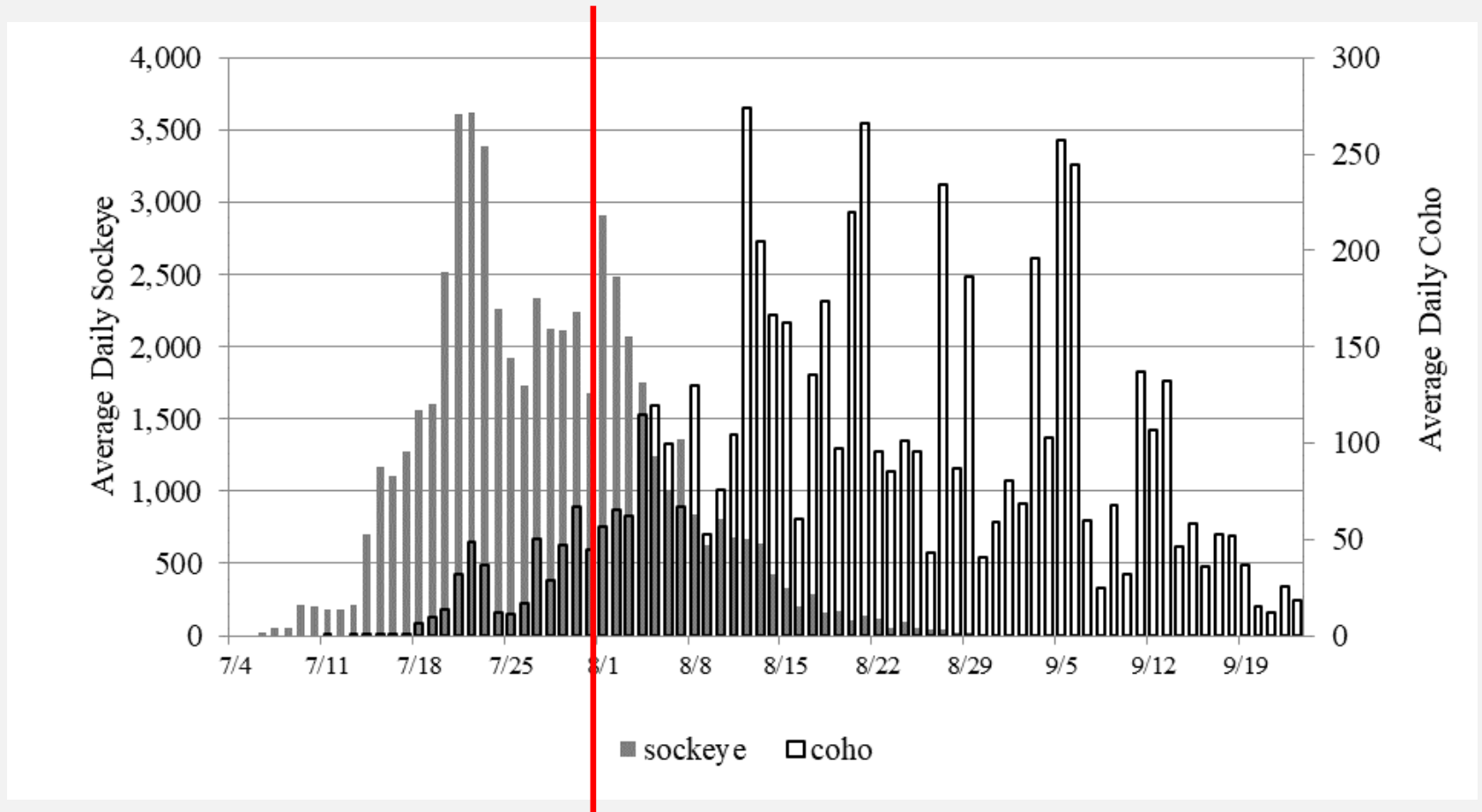
PU fishery targets sockeye:

- opened by EO if projected escapement >35,000 sockeye July 15-July 31

Sport fishery targets coho:

- youth only- first weekend August
- all ages- starts second weekend August

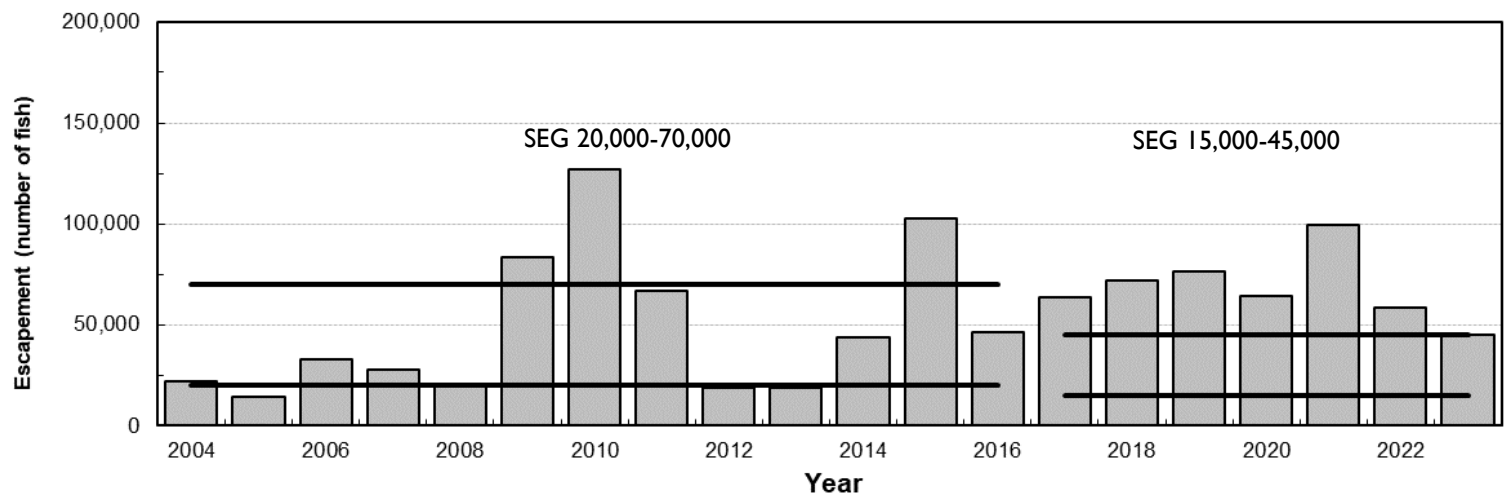
Fish Creek Sockeye and Coho Salmon Run Timing



Fish Creek PU Salmon Harvest

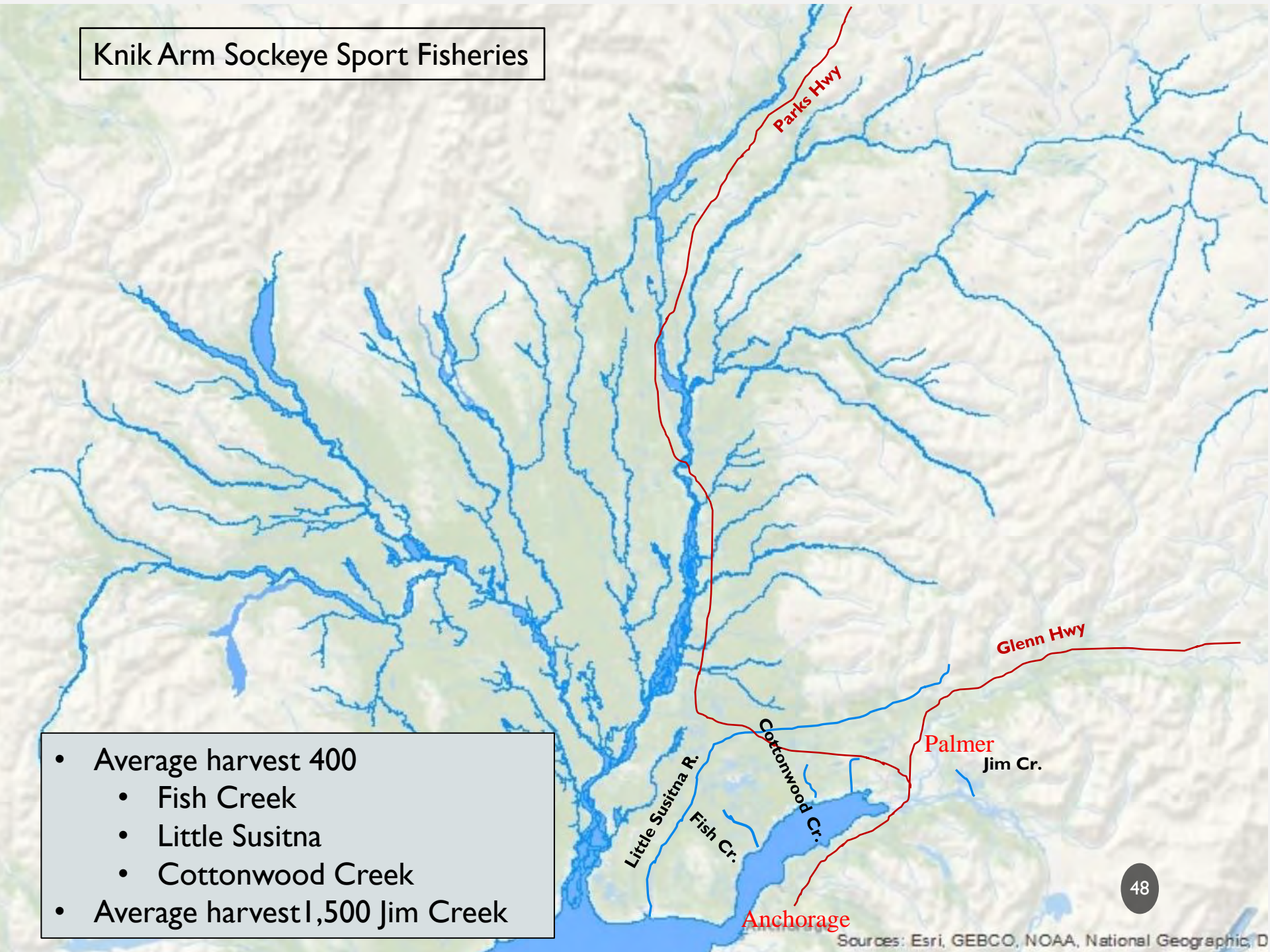
Year	Harvest (dip net)						Escapement	
	Sockeye	Coho	Chum	Pink	Chinook	Total	Sockeye	SEG
2013	No fishery						18,912	20,000-70,000
2014	5,829	1,895	227	4,218	0	12,169	43,915	20,000-70,000
2015	19,260	3,321	329	1,329	0	24,239	102,367	20,000-70,000
2016	No fishery						46,202	20,000-70,000
2017	4,894	281	54	273	1	5,503	63,882	15,000-45,000
2018	18,659	1,779	208	880	5	21,531	72,157	15,000-45,000
2019	15,886	1,508	195	1,110	2	18,701	76,264	15,000-45,000
2020	28,109	1,736	337	1,369	7	31,558	64,234	15,000-45,000
2021	14,558	1,029	63	604	3	16,257	99,324	15,000-45,000
2022	35,656	650	261	1,067	0	37,634	58,330	15,000-45,000
Average	17,856	1,525	209	1,356	2	20,949	64,559	

Fish Creek Sockeye Salmon Escapement



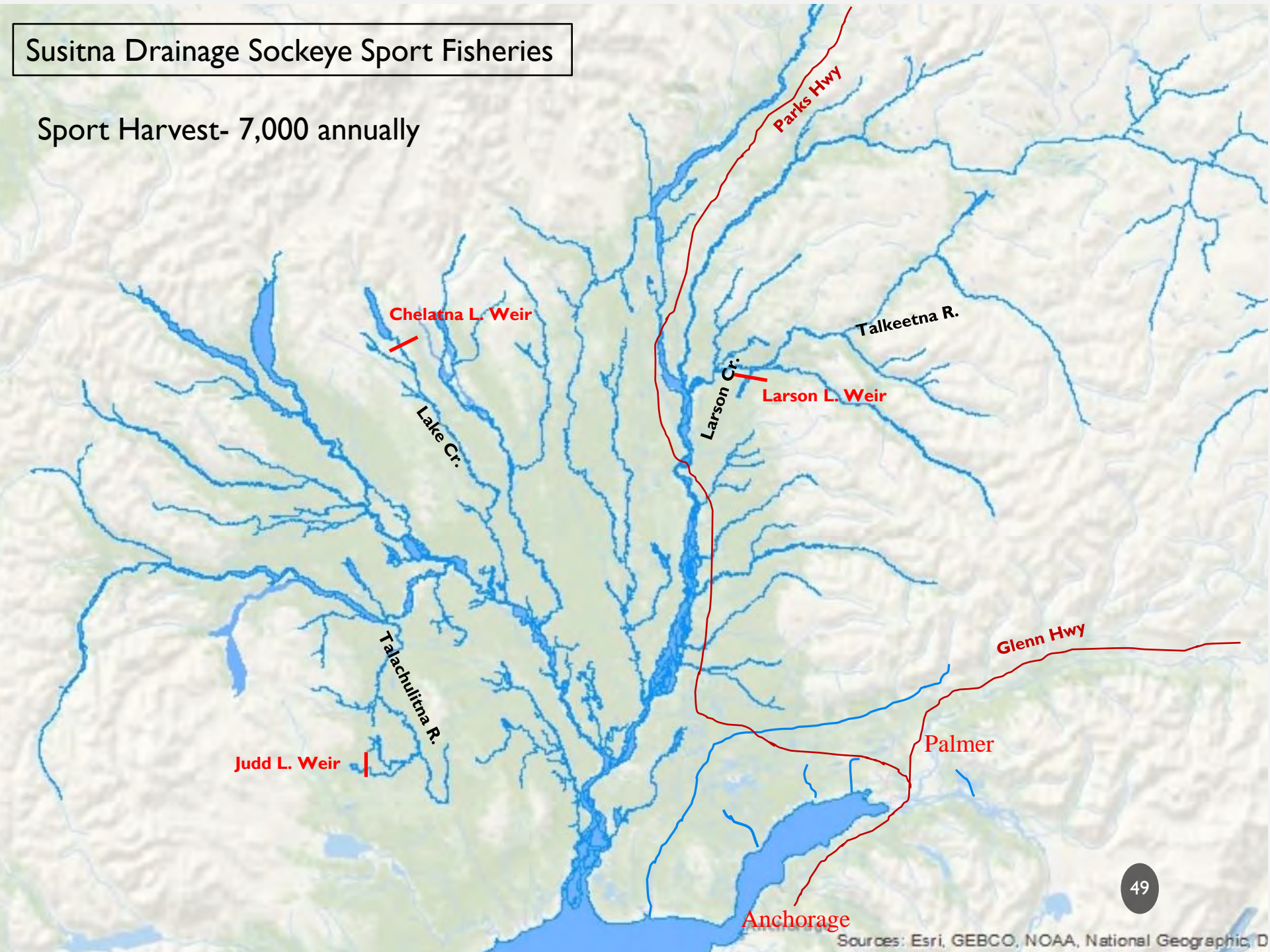
Knik Arm Sockeye Sport Fisheries

- Average harvest 400
 - Fish Creek
 - Little Susitna
 - Cottonwood Creek
- Average harvest 1,500 Jim Creek

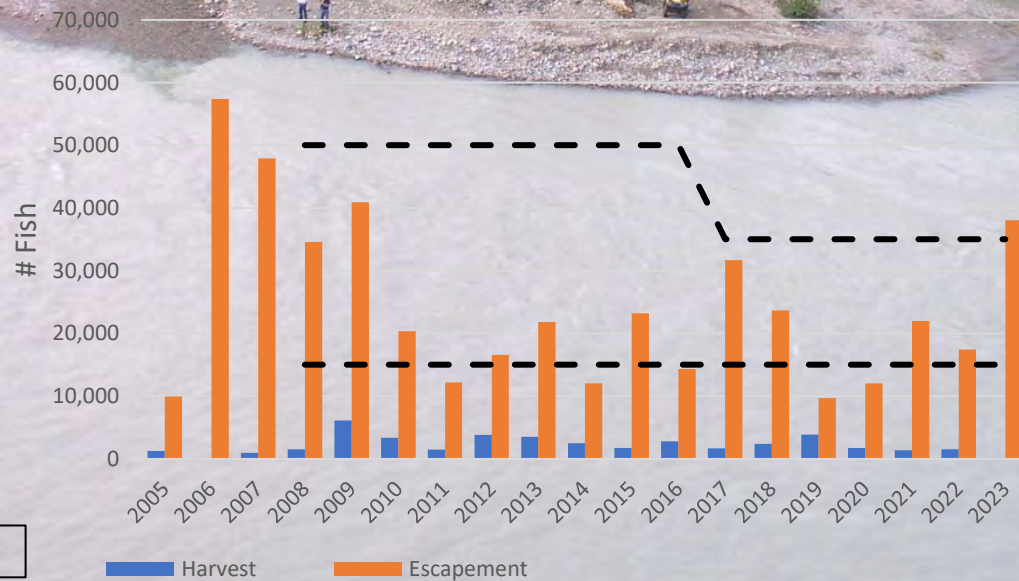


Susitna Drainage Sockeye Sport Fisheries

Sport Harvest- 7,000 annually



Larson Creek (Proposals 229-231)



Dotted line = escapement goal range

West Cook Inlet Sockeye Salmon Fisheries

Year	Kustatan River	Big River Lakes	Susitna R.- N. Foreland	South of N. Foreland	Other	Total
2003	397	3,642	94	372	354	4,859
2004	89	2,793	294	23	124	3,323
2005	95	3,401	121	139	269	4,025
2006	95	3,980	306	458	154	4,993
2007	102	7,058	252	568	237	8,217
2008	429	4,436	238	393	156	5,652
2009	157	3746	120	238	0	4,261
2010	176	3,666	57	1,247	106	5,252
2011	0	3,966	307	156	17	4,446
2012	0	4,474	144	80	268	4,966
2013	228	4,025	162	569	19	5,003
2014	232	4,939	0	1,709	69	6,949
2015	123	3,893	231	1,278	0	5,525
2016	153	3,681	1,304	811	299	6,248
2017	179	4,498	207	321	756	5,961
2018	0	3,558	403	1,015	937	5,913
2019	0	2,762	634	1,564	179	5,139
2020	221	1,314	339	277	529	2,680
2021	311	4,710	380	593	338	6,332
2022	32	3,010	302	1,341	146	4,831
03-12 mean	154	4,116	193	367	169	4,999
13-22 mean	148	3,639	396	948	327	5,458



SUSITNA PU FISHERY



Willow

Doshka Landing

Yentna River

Susitna River

Houston

6.25 miles

Big Lake

Point MacKenzie

Knik Arm

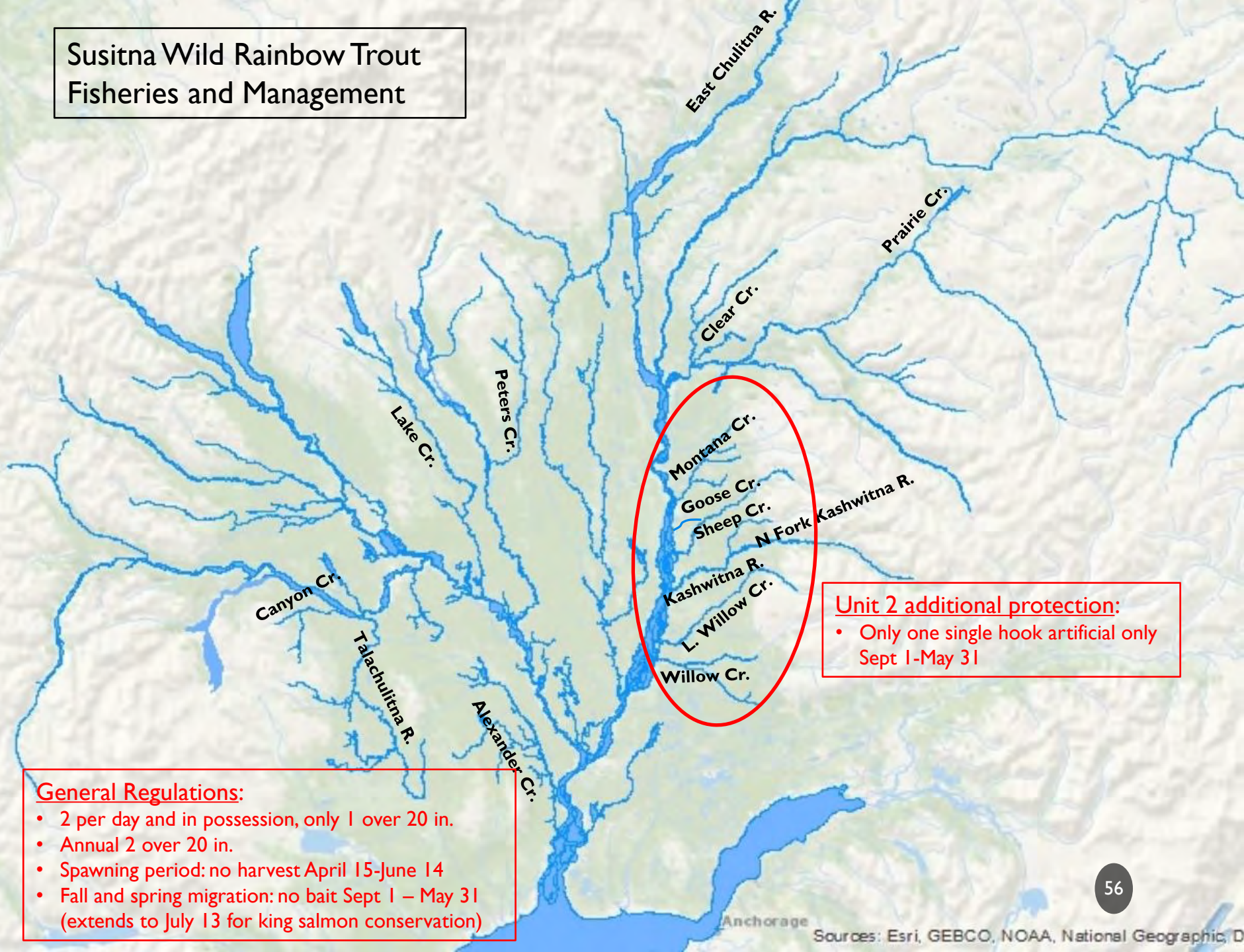
Susitna Personal Use Fishery (Proposals 229-231)

	Days Open	Days Fished	Sockeye	%	Coho	%	Pink	%	Chum	%	Total
2020	6	377	2,296	63%	538	15%	747	20%	68	2%	3,671
2021	7	210	1,385	49%	902	32%	426	15%	111	4%	2,824
2022	6	236	2,201	66%	727	22%	233	7%	172	5%	3,334
2023	6	264	3,722	72%	929	18%	230	4%	257	5%	5,138
Avg	6	272	2,401	73%	774	24%	409	12%	152	5%	3,276

Rainbow Trout Sport Fisheries



Susitna Wild Rainbow Trout Fisheries and Management



Unit 2 additional protection:

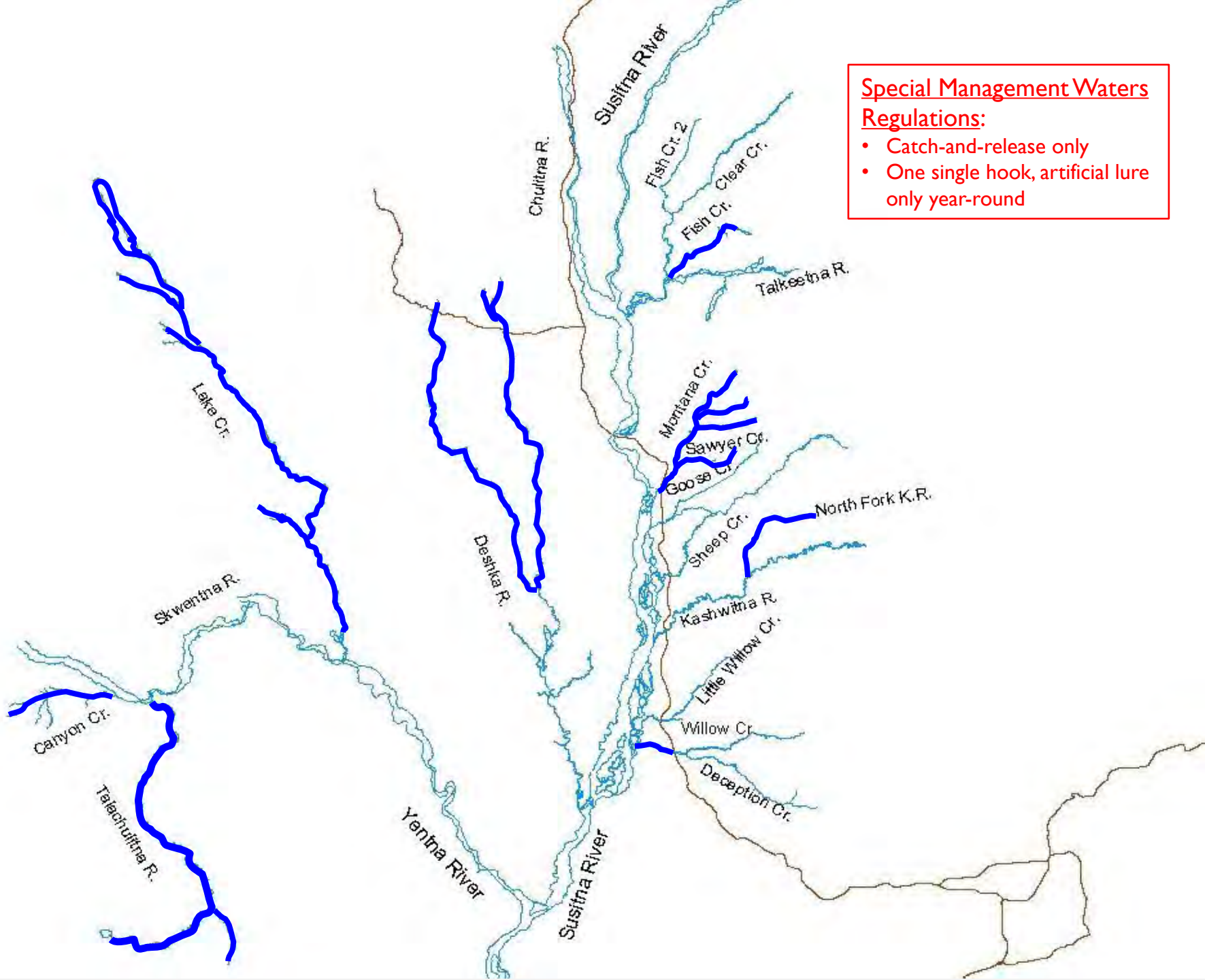
- Only one single hook artificial only Sept 1-May 31

General Regulations:

- 2 per day and in possession, only 1 over 20 in.
- Annual 2 over 20 in.
- Spawning period: no harvest April 15-June 14
- Fall and spring migration: no bait Sept 1 – May 31 (extends to July 13 for king salmon conservation)

**Special Management Waters
Regulations:**

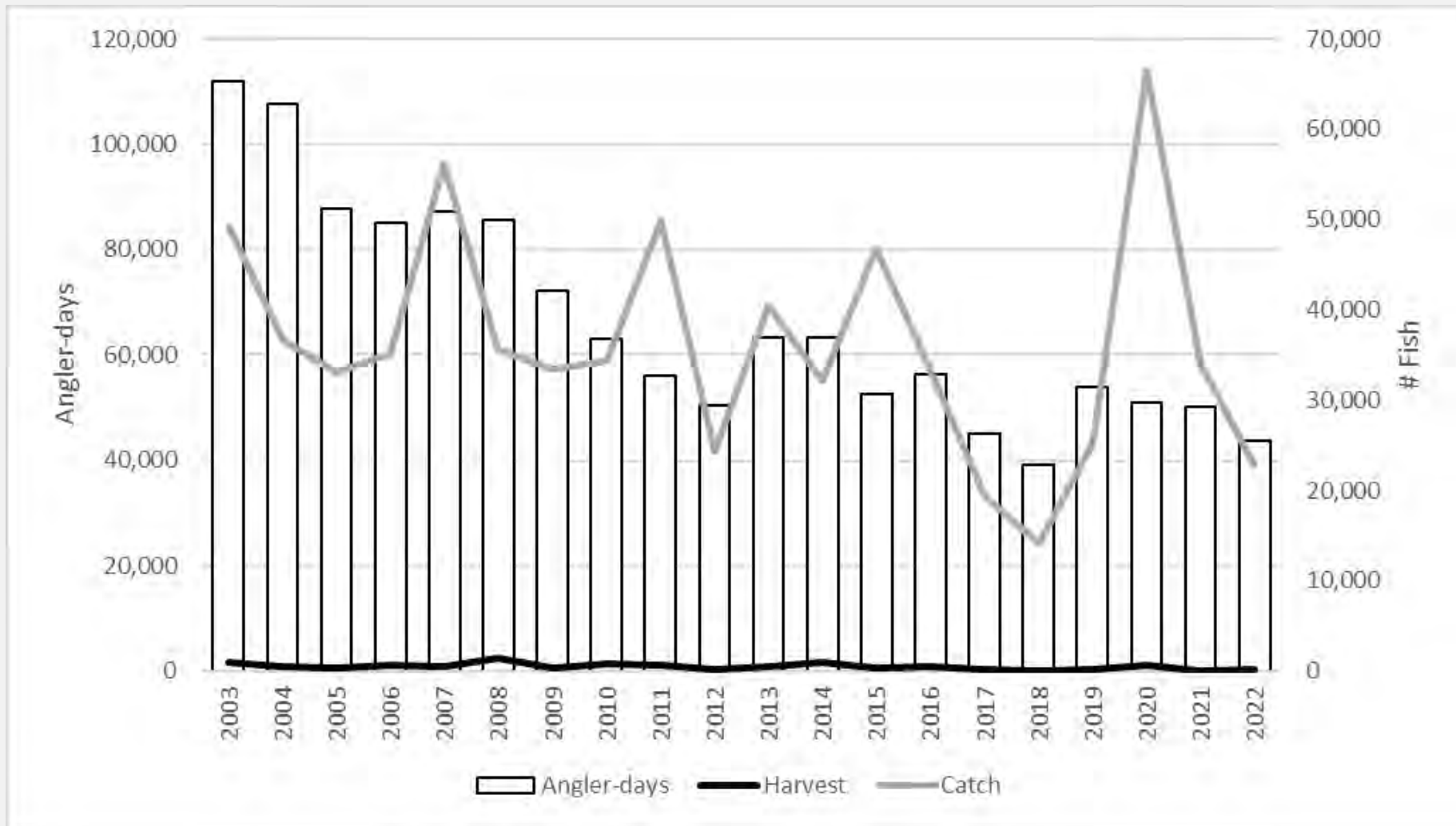
- Catch-and-release only
- One single hook, artificial lure only year-round



Rainbow Trout Catch and Harvest in Major Fisheries of the Yentna Drainage Designated in Whole or in Part Special Management Waters for Rainbow Trout (Proposal 225)

	Lake Creek			Talachulitna River			Other streams			Total		
	Catch	Harvest	% Harvest	Catch	Harvest	% Harvest	Catch	Harvest	% Harvest	Catch	Harvest	% Harvest
2013	9,015	174	2%	5,433	0	0%	3,703	191	5%	18,151	365	7%
2014	23,717	568	2%	11,032	0	0%	3,061	275	9%	37,810	843	11%
2015	13,955	200	1%	12,798	0	0%	9,137	128	1%	35,890	328	3%
2016	10,052	175	2%	3,914	0	0%	4,248	147	3%	18,214	322	5%
2017	2,525	40	2%	737	0	0%	1,471	81	6%	4,733	121	7%
2018	4,102	35	1%	1,646	0	0%	1,464	207	14%	7,212	242	15%
2019	6,204	57	1%	1,465	0	0%	2,136	86	4%	9,805	143	5%
2020	4,548	43	1%	2,385	0	0%	1,840	69	4%	8,773	112	5%
2021	5,669	287	5%	1,215	0	0%	5,993	85	1%	12,877	372	6%
2022	4,375	44	1%	7,583	0	0%	3,185	209	7%	15,143	253	8%
Mean	8,416	162	2%	4,821	0	0%	3,624	148	5%	16,861	310	7%

Rainbow Trout Catch and Effort in Tributaries of Mainstem Susitna River (Proposals 223, 224, 226)

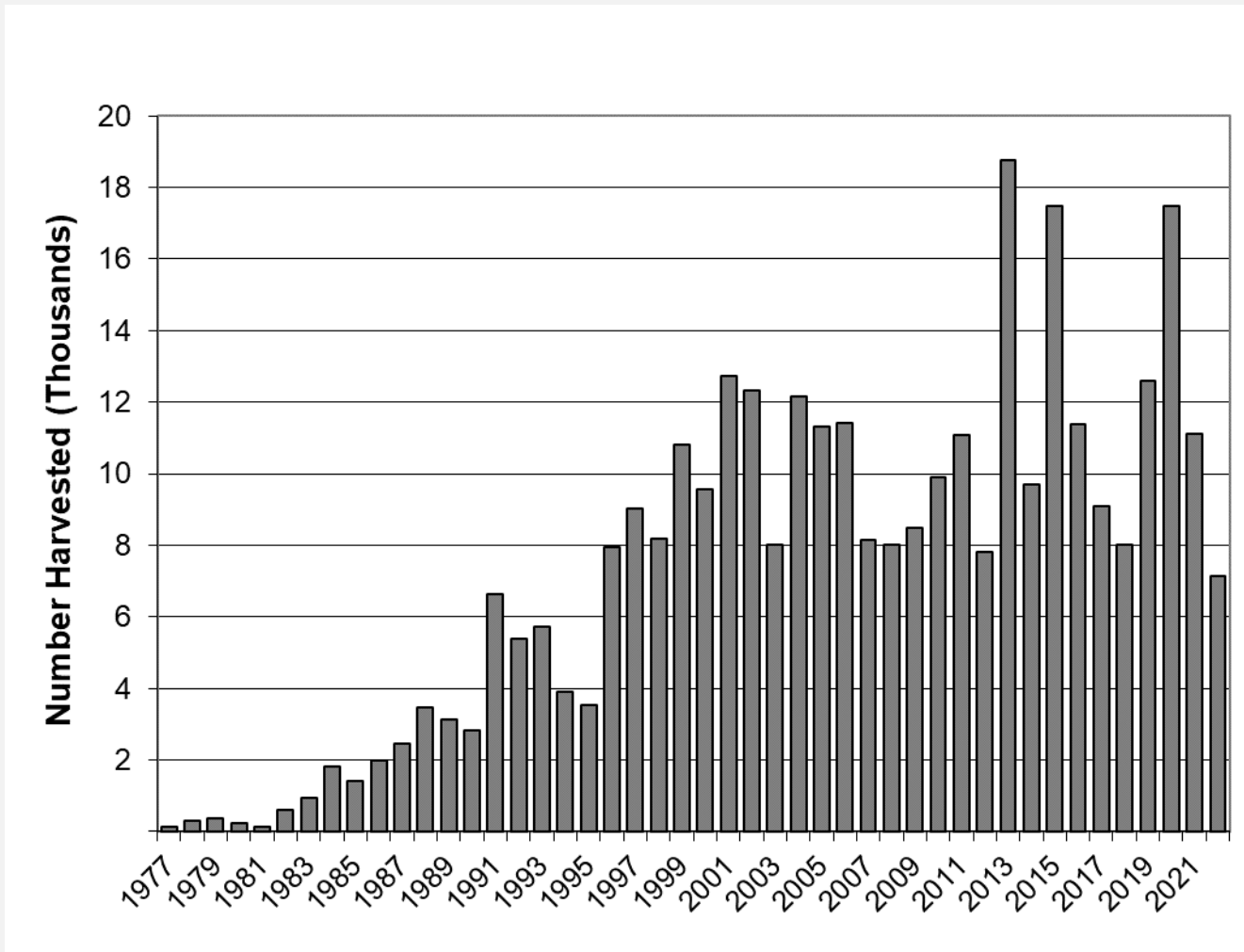




Northern Pike Sport Fisheries



NCI Northern Pike Harvest



Northern Pike Sport Fishery (Proposals 246 and 237)

BOF Past Actions:

- 1996- no bag limit; 5 lines allowed in select lakes containing nearly only pike
- 1998- bow and arrow and spearing allowed
- 2002, 2008, 2011, 2020- additional 5-line lakes identified
- 2011- Prohibit release live pike in Susitna drainage and West Cook Inlet.
- 2020- Prohibit release live pike in Knik Arm area.



Questions?