

Overview of Kuskokwim Area Subsistence and Commercial Fisheries

By Nicholas Smith

AYK Board of Fisheries Meeting

January 2023



Oral Report: RC 3; Tab 14

Written Report: RC 3; Tab 3

Topics to be covered:

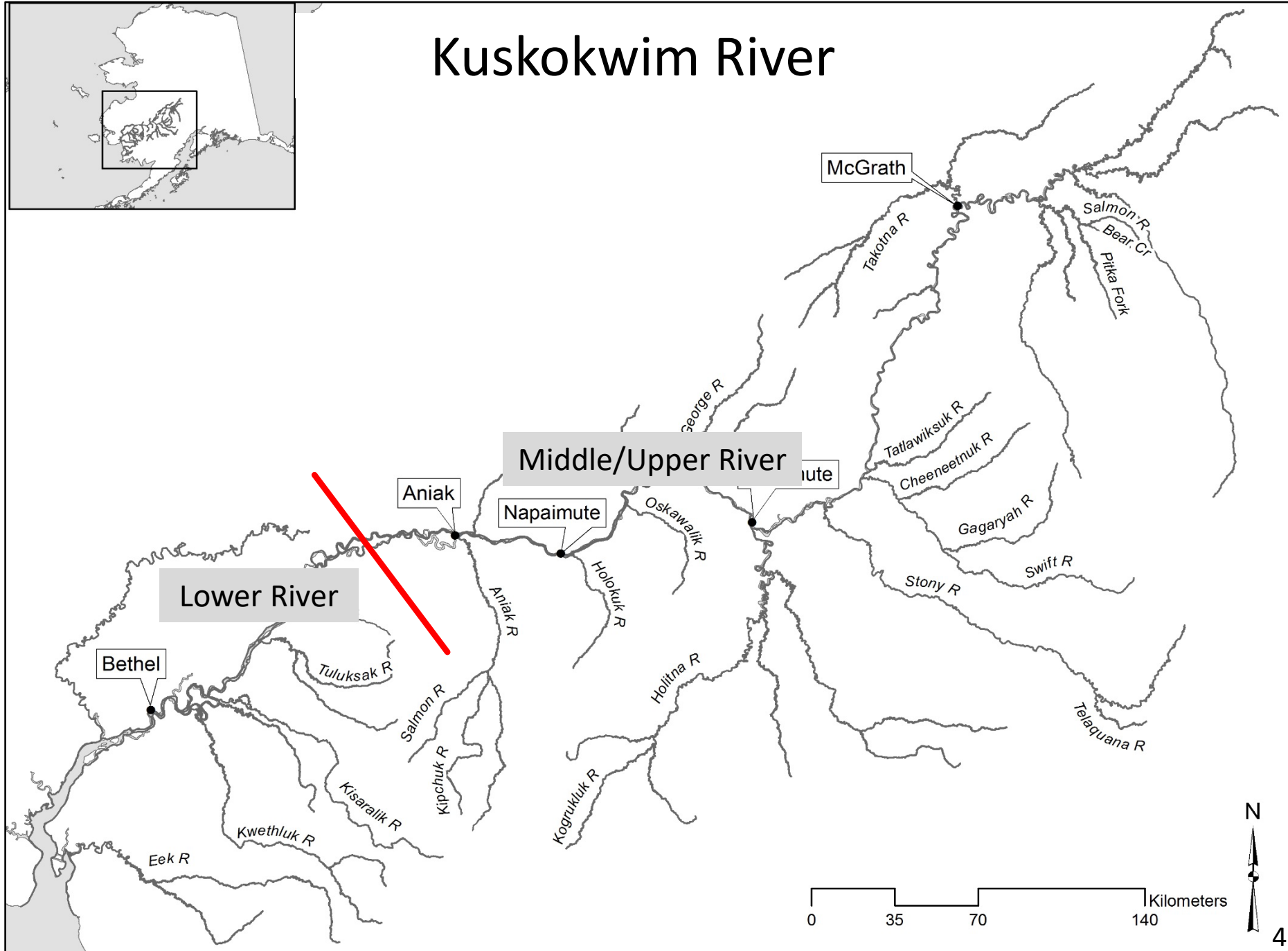
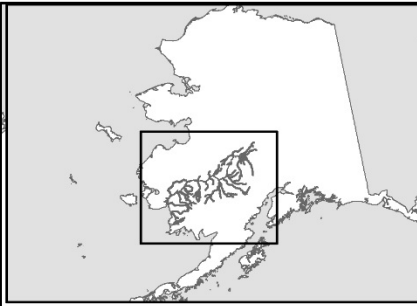
1. Area background
2. Stock status and recent fishery performance
3. Overview of proposals



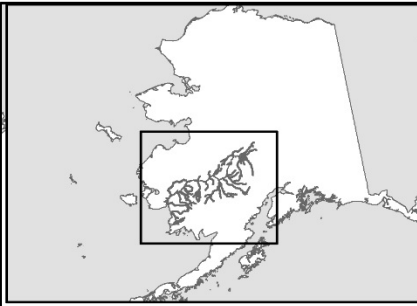
Kuskokwim Area



Kuskokwim River



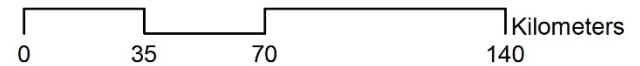
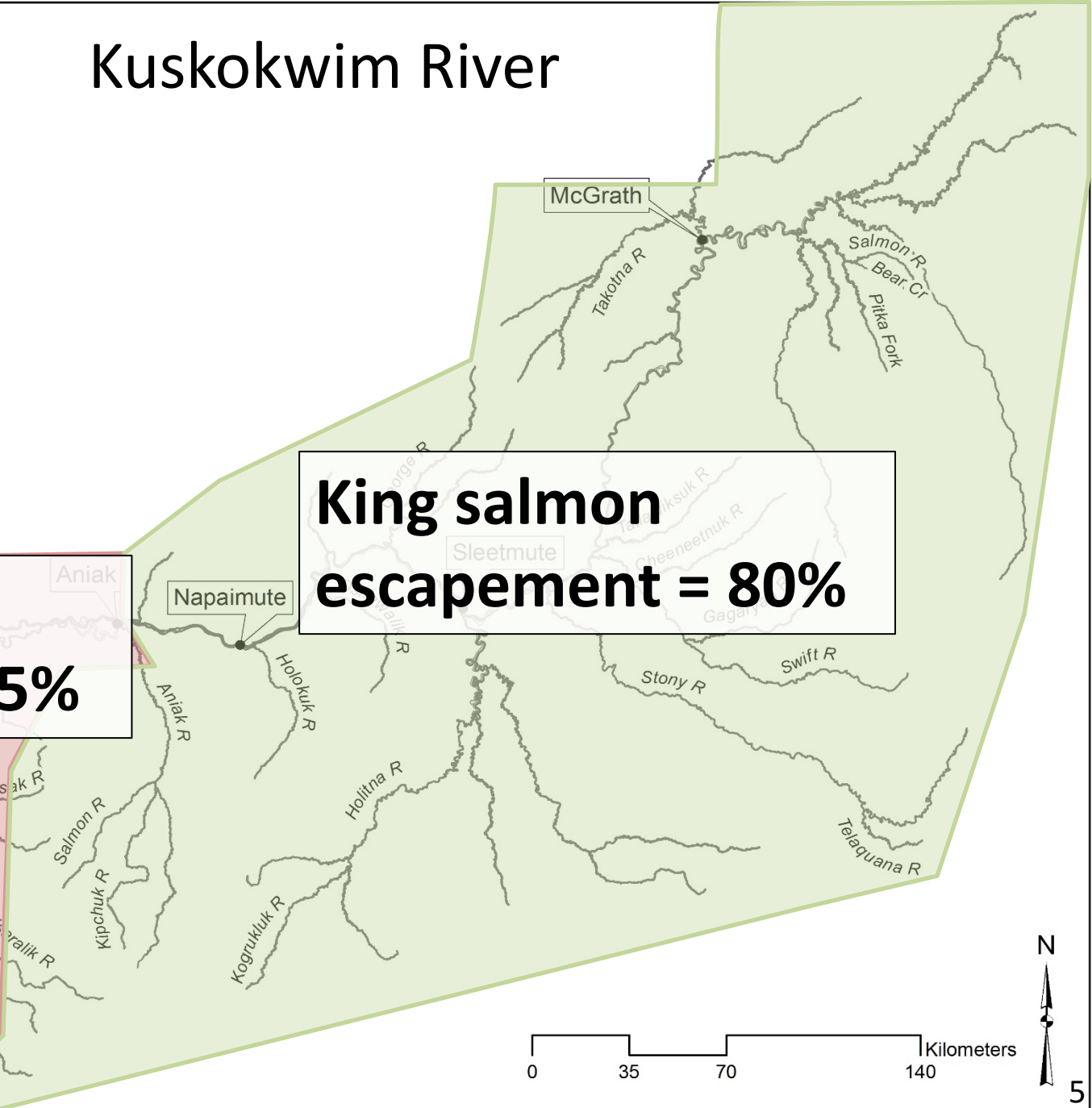
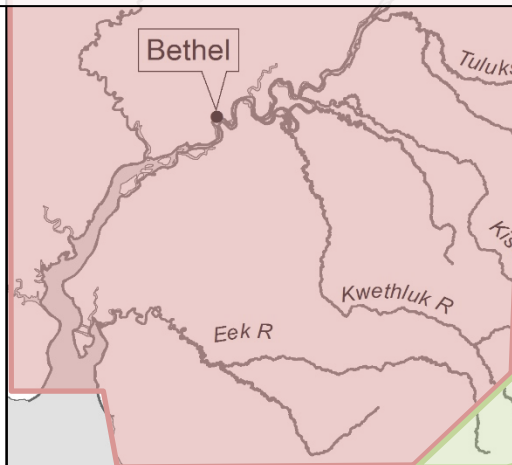
Kuskokwim River



Yukon Delta National
Wildlife Refuge

**King salmon
harvest = 90-95%**

**King salmon
escapement = 80%**

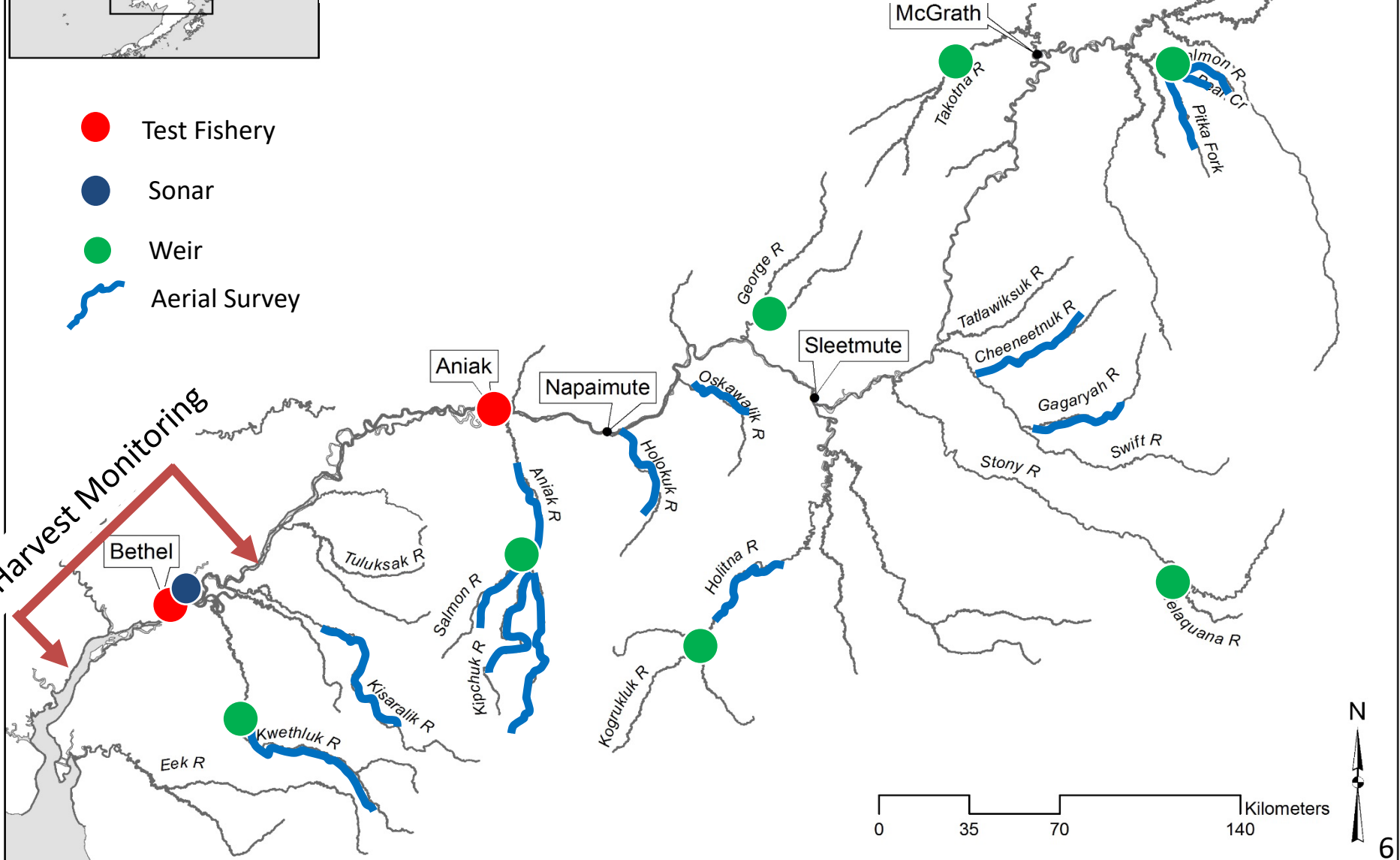


Kuskokwim River Assessment Projects



- Test Fishery
- Sonar
- Weir
- ~ Aerial Survey

Harvest Monitoring

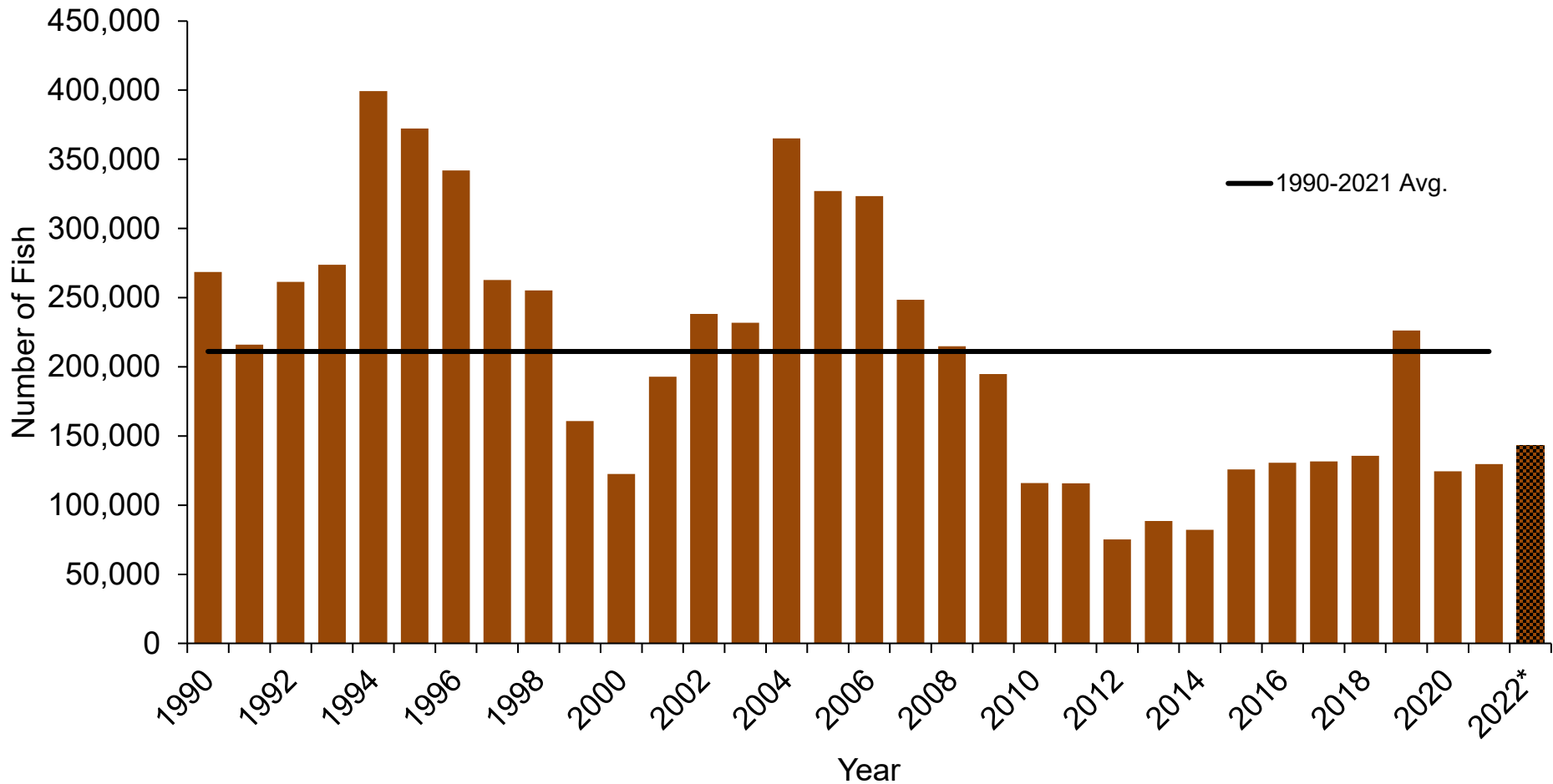


Kuskokwim River Fisheries King Salmon Management

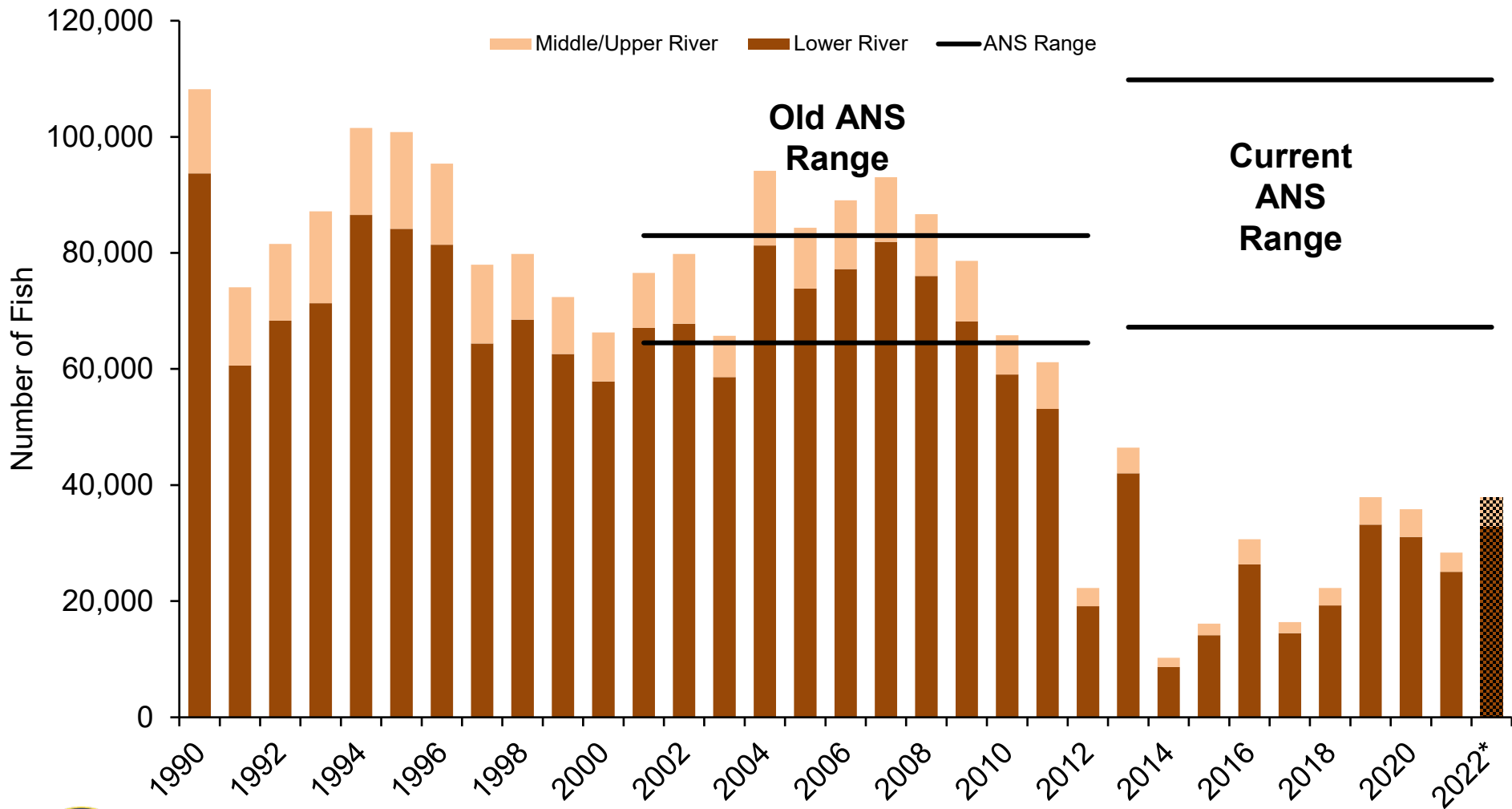
- Early season closure through June 11
- Tributary gillnet closures
- Gillnet restrictions
- Limited time and area openings
- Live release gear types
- Federal Special Actions (within Federal Refuge)
- State waters subsistence permit (Middle/Upper River)
- Sport fishing closure



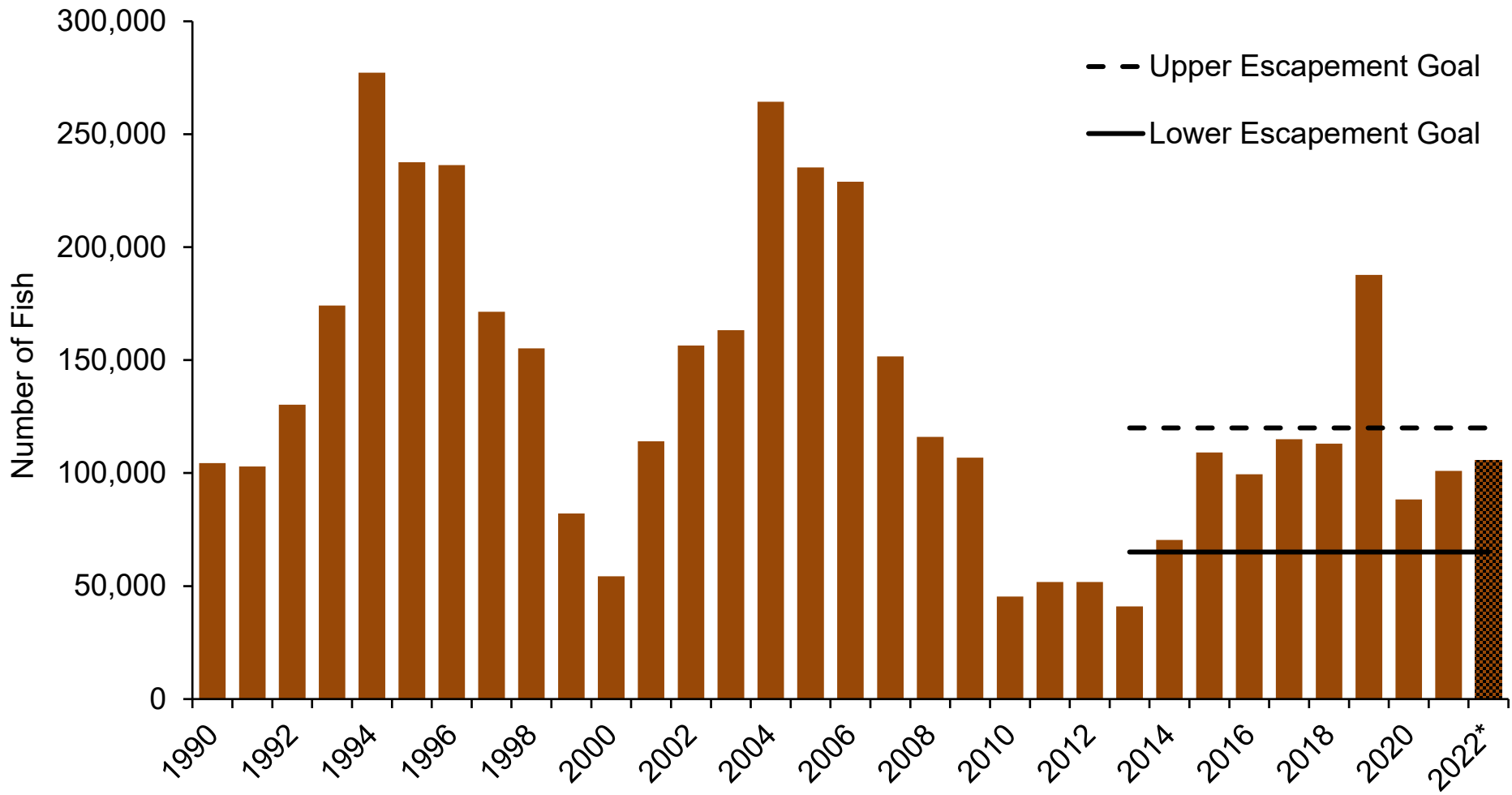
Total Run of Kuskokwim River King Salmon, 1990–2022 (*2022 is preliminary)



Kuskokwim River King Salmon Subsistence Harvest, 1990–2022 (*2022 is preliminary)



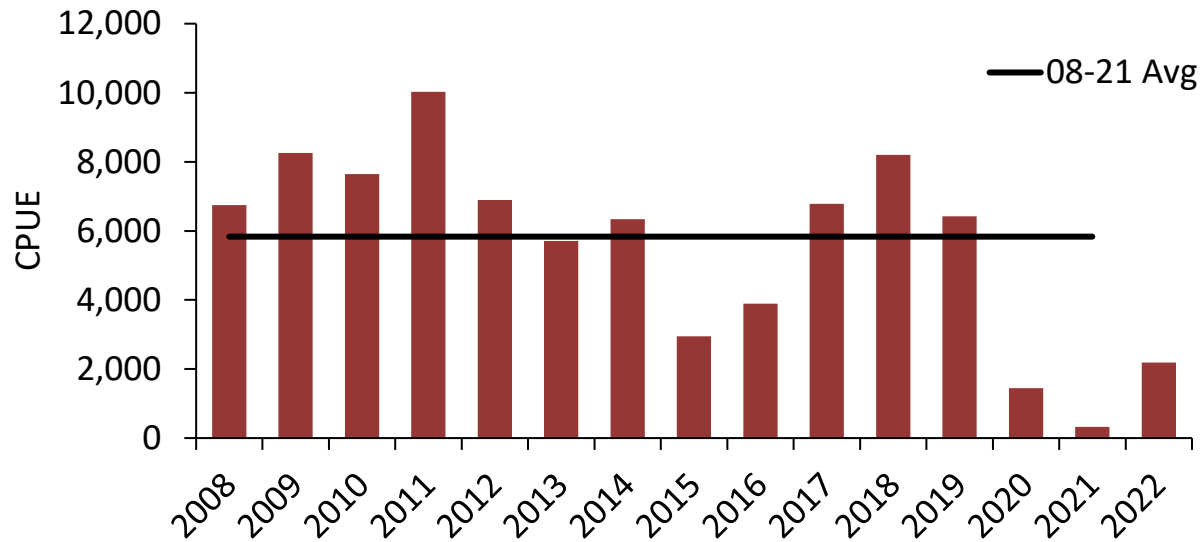
Kuskokwim River King Salmon Escapement, 1990–2022 (*2022 is preliminary)



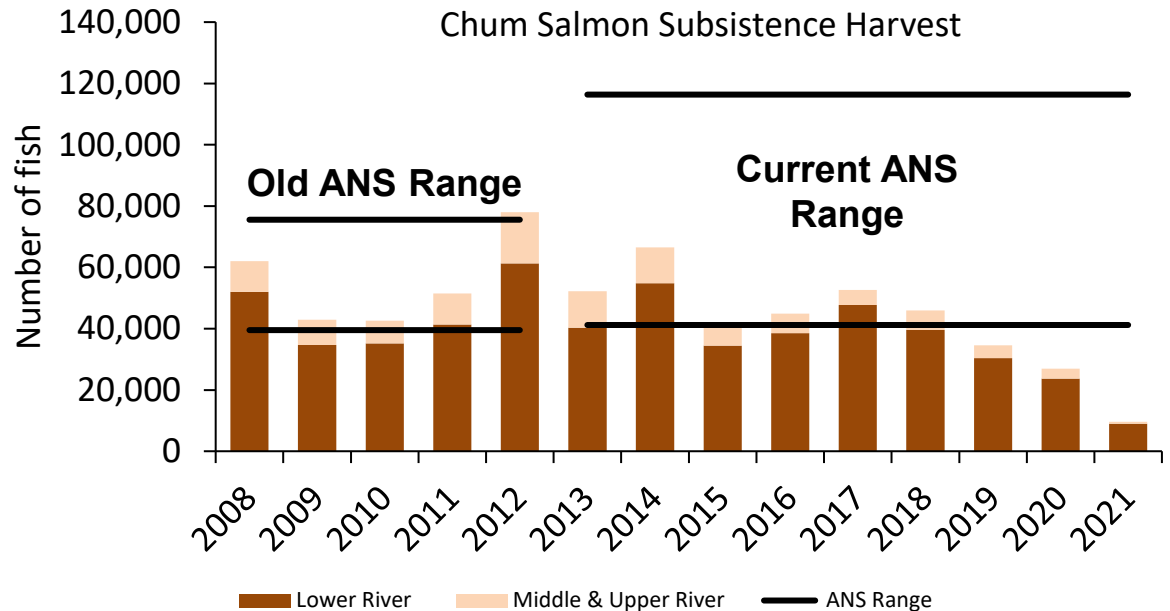
Kuskokwim River Chum Salmon

- Dramatic decline in run size beginning 2020
 - 2021 was lowest on record
- The single escapement goal was not met in 2021 or 2022
- July subsistence fishing restrictions
 - Mainstem and tributary gillnet closures
 - Gillnet restrictions
 - Limited time and area openings
- ANS has not been achieved since 2018
- No commercial processor since 2015
 - Catcher/Seller

Chum salmon CPUE at Bethel Test Fishery



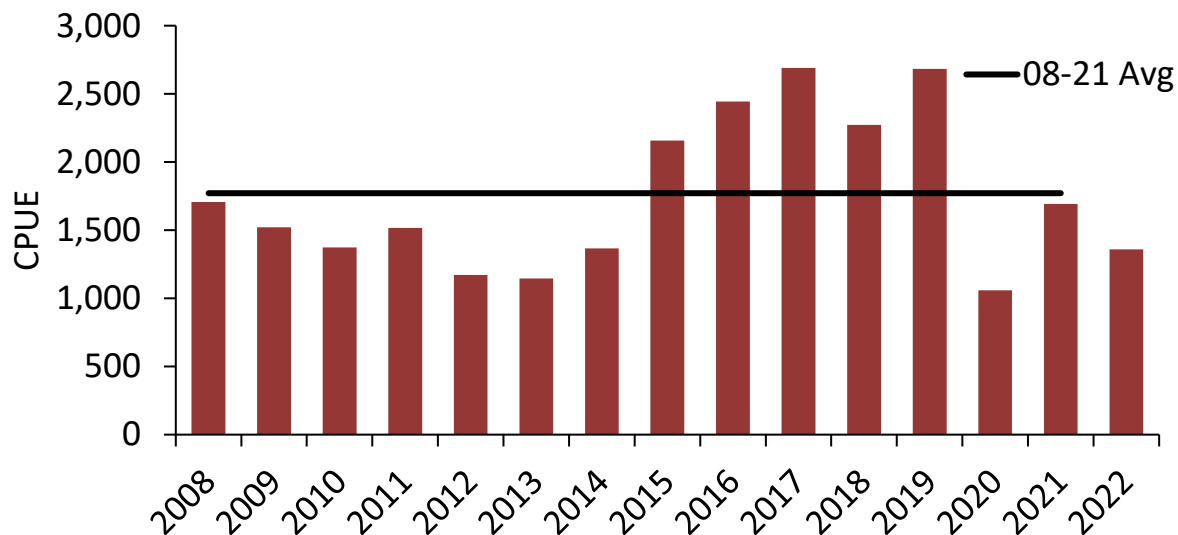
Chum Salmon Subsistence Harvest



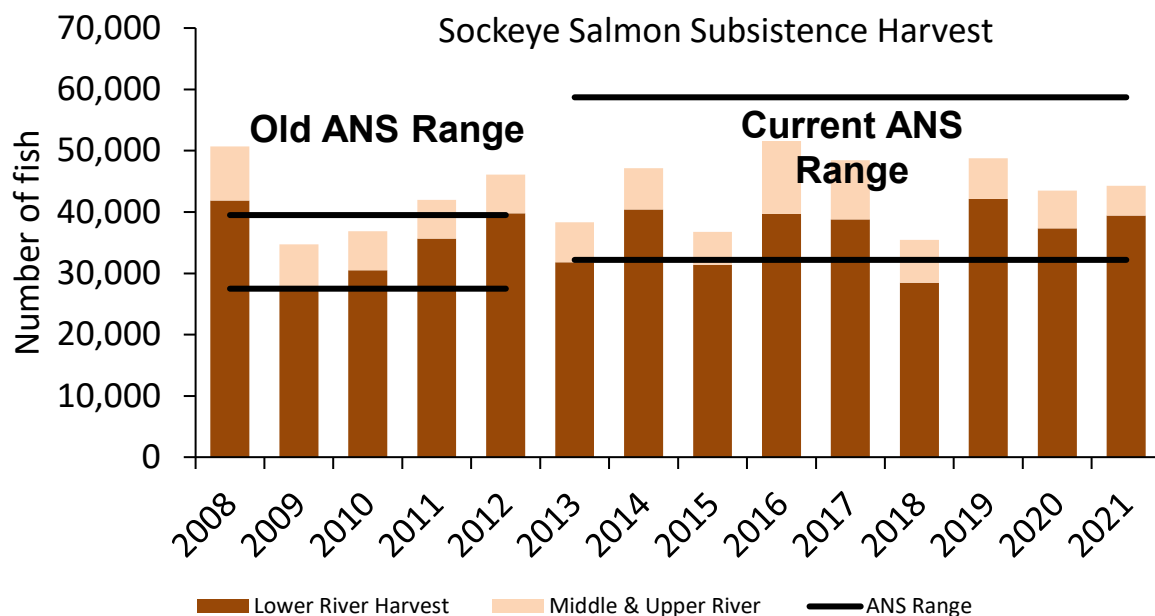
Kuskokwim River Sockeye Salmon

- Continued consistent run sizes.
 - Lake type have been the dominate component since 2020.
- The single escapement goal has been met or exceeded annually
- ANS has been achieved since 2013

Sockeye salmon CPUE at Bethel Test Fishery



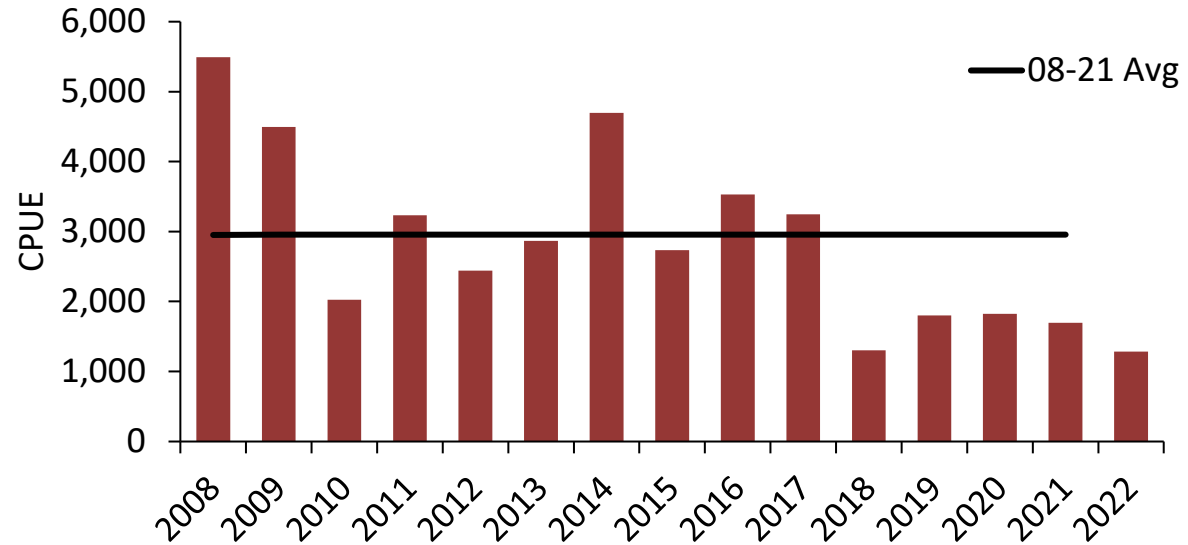
Sockeye Salmon Subsistence Harvest



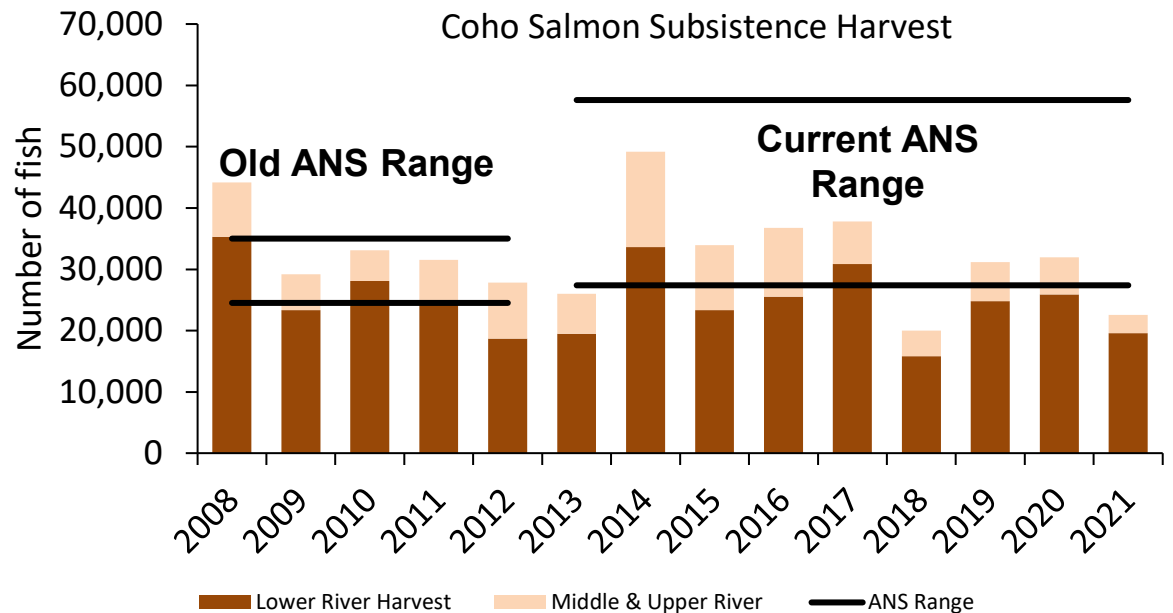
Kuskokwim River Coho Salmon

- Below average runs since 2018
- Subsistence fishing restrictions in 2022
 - Kuskokwim River subsistence fishery closed August 17 - September 15.
- Escapement goals achieved annually since 2013, except 2018 and 2022
- 2013-2021: ANS achieved 6 of 9 years
 - Unlikely to be achieved in 2022

Coho salmon CPUE at Bethel Test Fishery



Coho Salmon Subsistence Harvest



Kuskokwim Management Area



Stock Status and Recent Fishery Performance

- Kuskokwim Bay
 - Below average king salmon runs
 - Sockeye salmon runs above average
 - Poor chum and coho salmon runs
 - Salmon ANS met or exceeded annually
 - Large-scale commercial buyer/processor in 2020 and 2021



Districts 4 and 5 management

- Subsistence

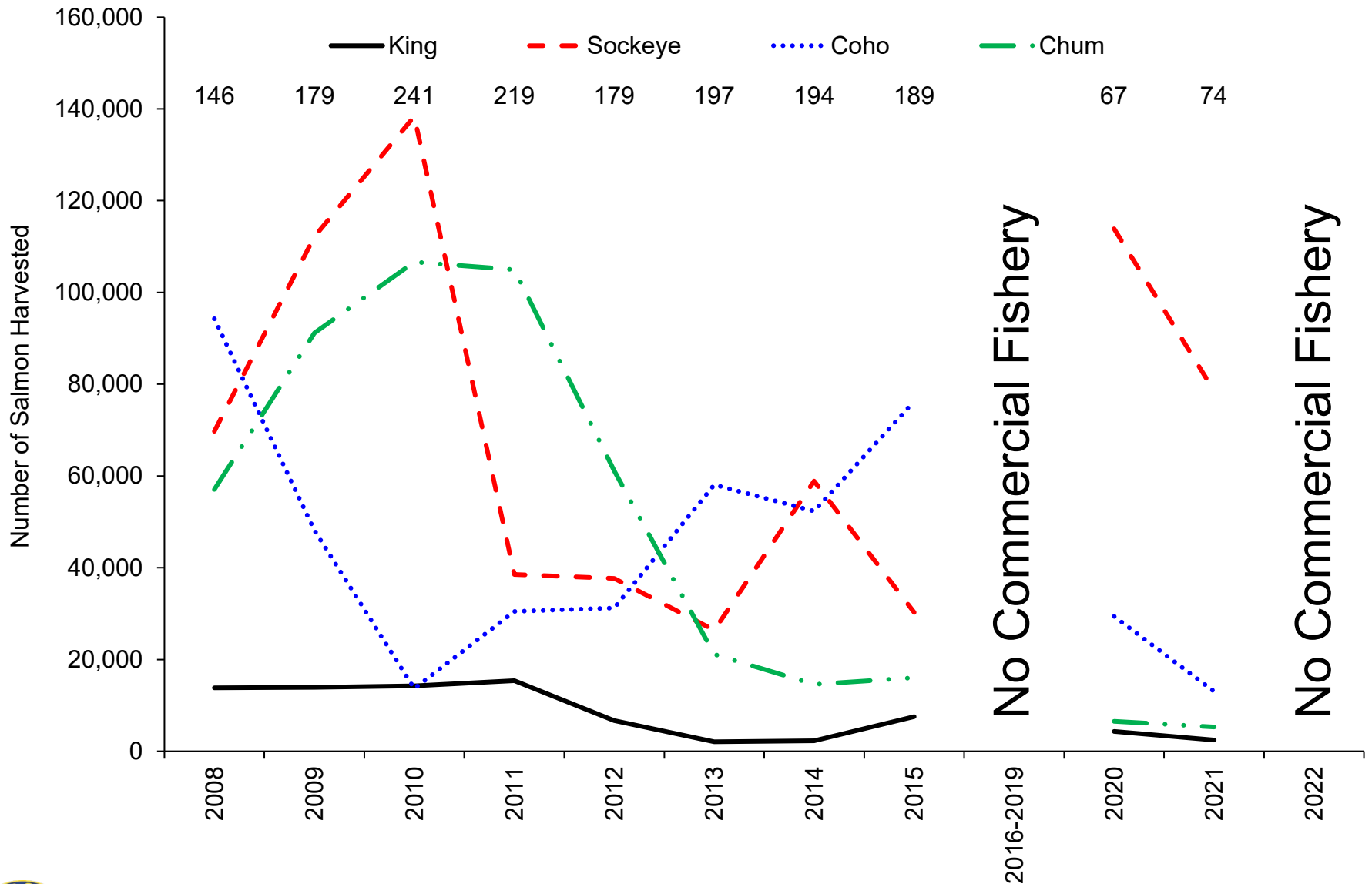
- Subsistence fishing restrictions implemented in District 4
 - Fishing closed one day a week in June through mid-July
 - Gillnets restricted to 6-inch or less
- Subsistence closed during commercial periods

- Commercial

- District 4 and 5 Salmon Management Plan
- Delayed first opening until late June in 2020 and early July in 2021
- Partial district closure around Kanektok River in W4
- Commercial fishery restricted to 6-inch or less gillnet mesh
- Assessment using catch statistics and aerial surveys



District 4 Commercial Salmon Harvests, 2008–2022

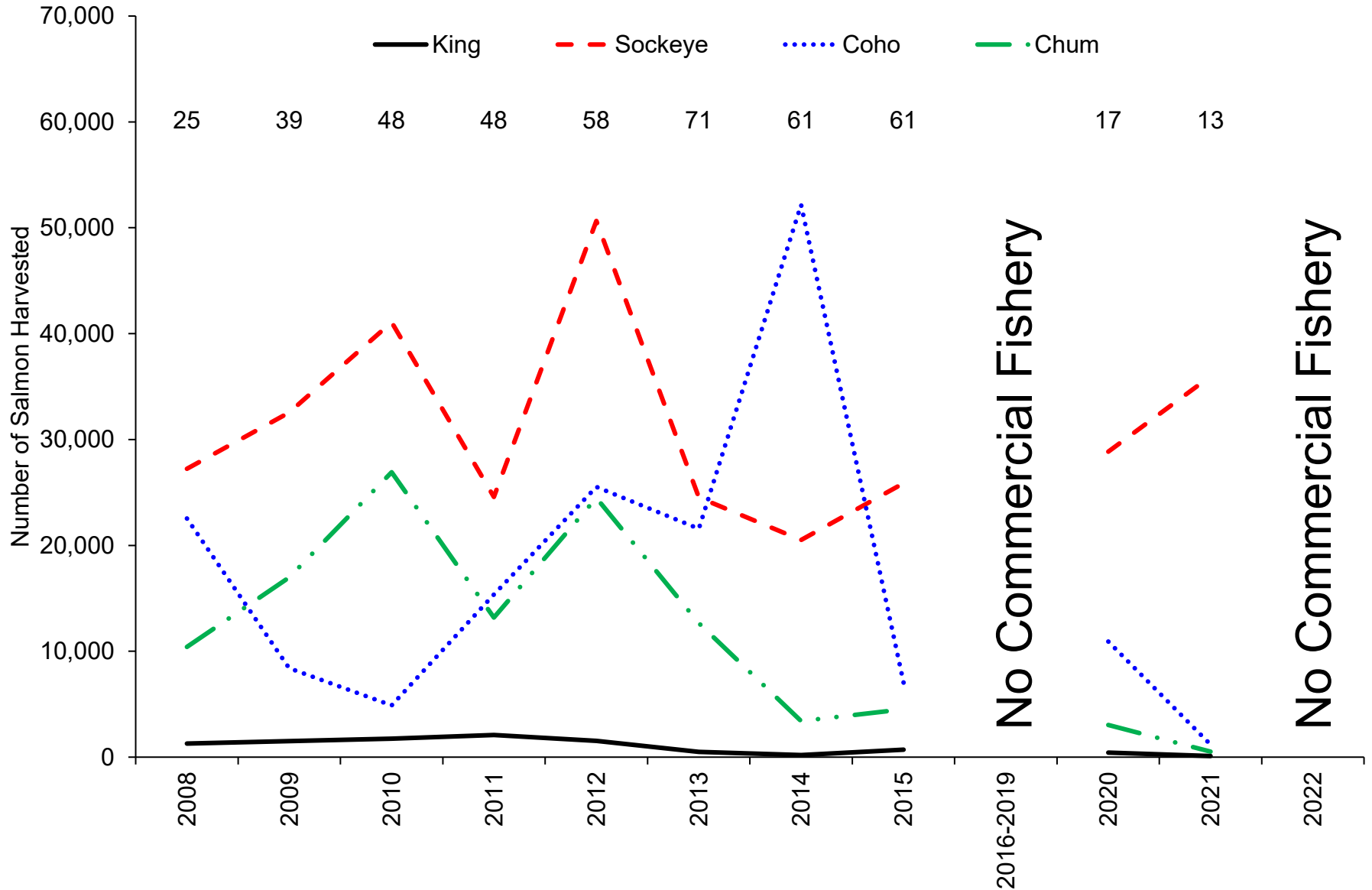


Kanektok River Aerial Survey Escapements, 2004–2022

Year	King	Sockeye
2004	28,375	77,780
2005	12,780	95,900
2006		
2007		
2008	3,659	
2009		
2010	1,208	16,180
2011		
2012		
2013	2,277	53,002
2014	1,840	136,400
2015	4,919	39,970
2016	5,631	80,160
2017		
2018	4,246	326,200
2019	7,212	349,073
2020	4,405	
2021	4,115	53,960
2022		
SEG	3,900–12,000	15,300–41,000



District 5 Commercial Salmon Harvests, 2008–2022



Goodnews Bay Aerial Survey Escapements, 2004–2022

Year	King Salmon		Sockeye Salmon	
	North Fork	Middle Fork	North Fork	Middle Fork
2004	7,462	2,617	31,695	33,670
2005				
2006				
2007				
2008	2,155	2,190	32,500	13,935
2009				
2010				
2011	853		14,140	
2012	378	355	16,710	
2013				
2014	630	612		12,262
2015	991	515	38,390	24,780
2016	1,120	1,301	90,060	68,978
2017				
2018				
2019	2,462		162,930	
2020	1,098	1,402	55,110	18,390
2021	2,273	607	95,020	21,410
2022				
SEG	640-3,300		9,600-18,000	



Kuskokwim Area proposals

Gear

- Proposals 91– Alternative gear types for salmon conservation

Area

- Proposal 90 – Kuskokwim River Tier II king salmon fishery
- Proposal 92 – Close subsistence fishing before, during, and after commercial fishing periods in Kuskokwim Bay
- Proposal 93 – Close the Buckstock River between June 14 and September 1

Management Plan

- Proposals 95 and 96 – ADF&G Management authority during Federal Special Actions
- Proposal 97 – Commercial dipnet and dipnet specification and operation



Questions

