

Alaska Peninsula Area M Fishery Overview and Relevance to Yukon River Stocks

U.S. / CANADA YUKON RIVER PANEL MEETING
Public Session

April 5, 2023

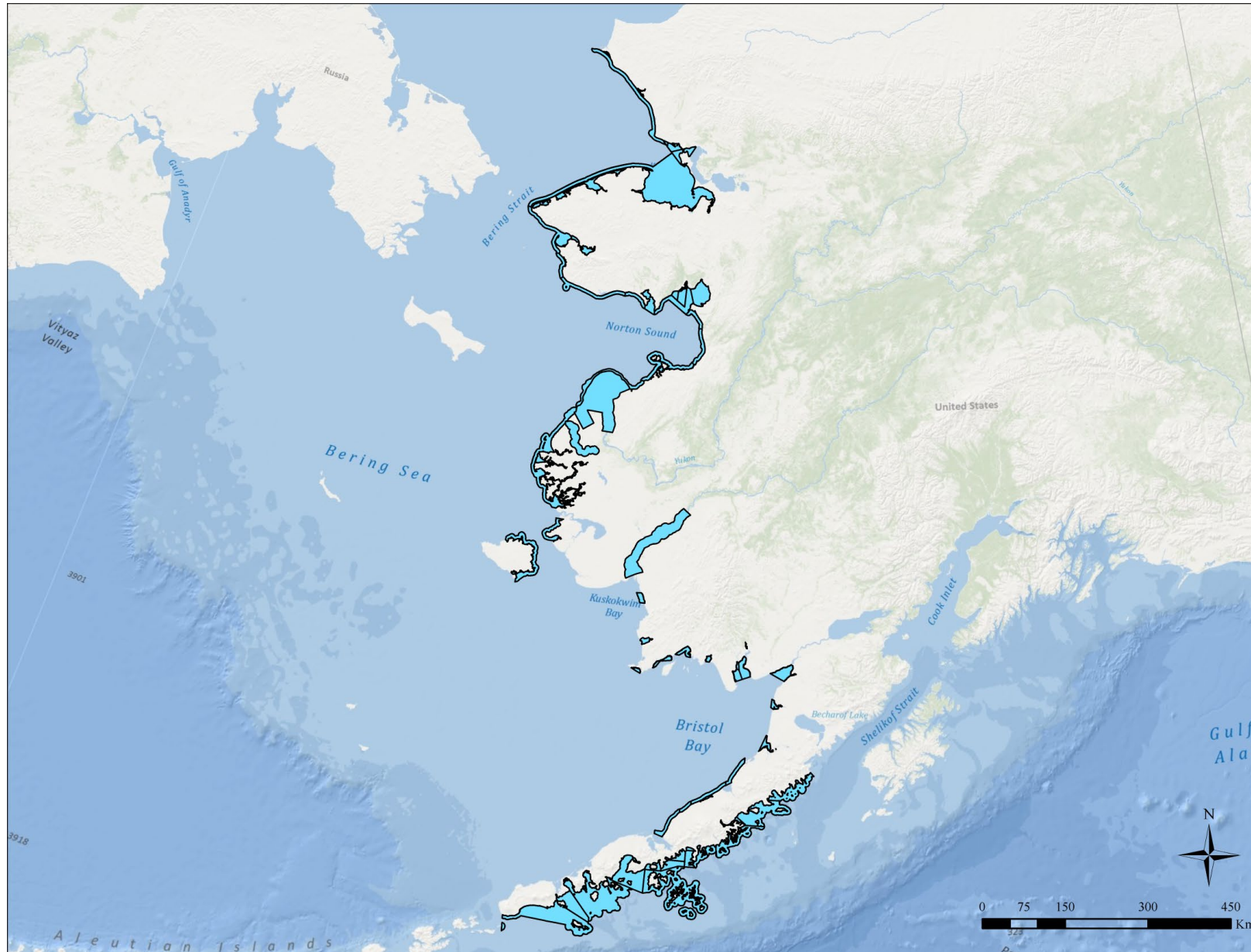
Bill Templin
Alaska Department of Fish and Game
Division of Commercial Fisheries



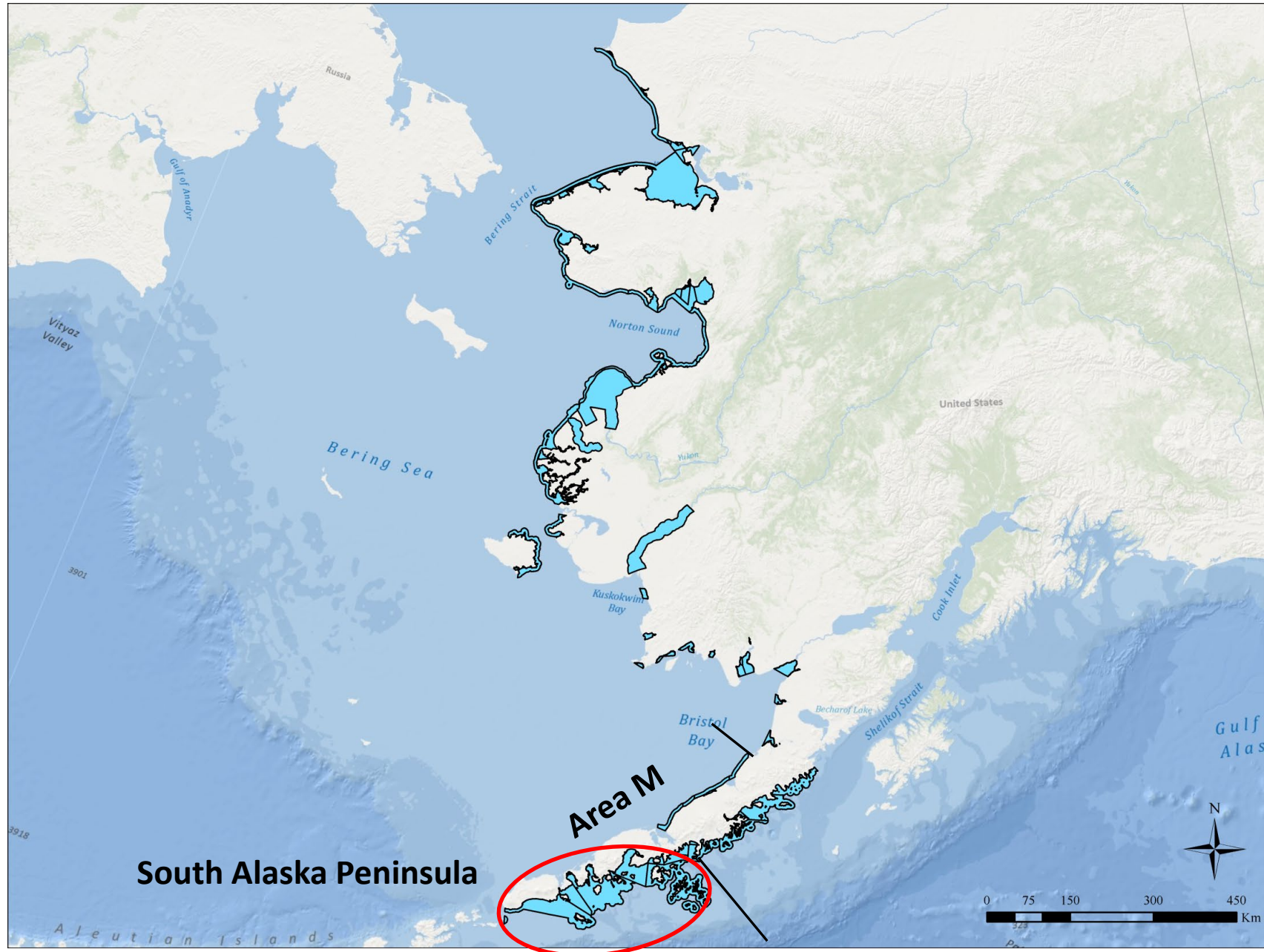
Overview

- Location of Area M
- Fishery Management
- Chum Stock Composition Studies
 - Western Alaska Salmon Stock Identification Program (WASSIP)
 - South Alaska Peninsula 2022
- Chinook Information – 2014

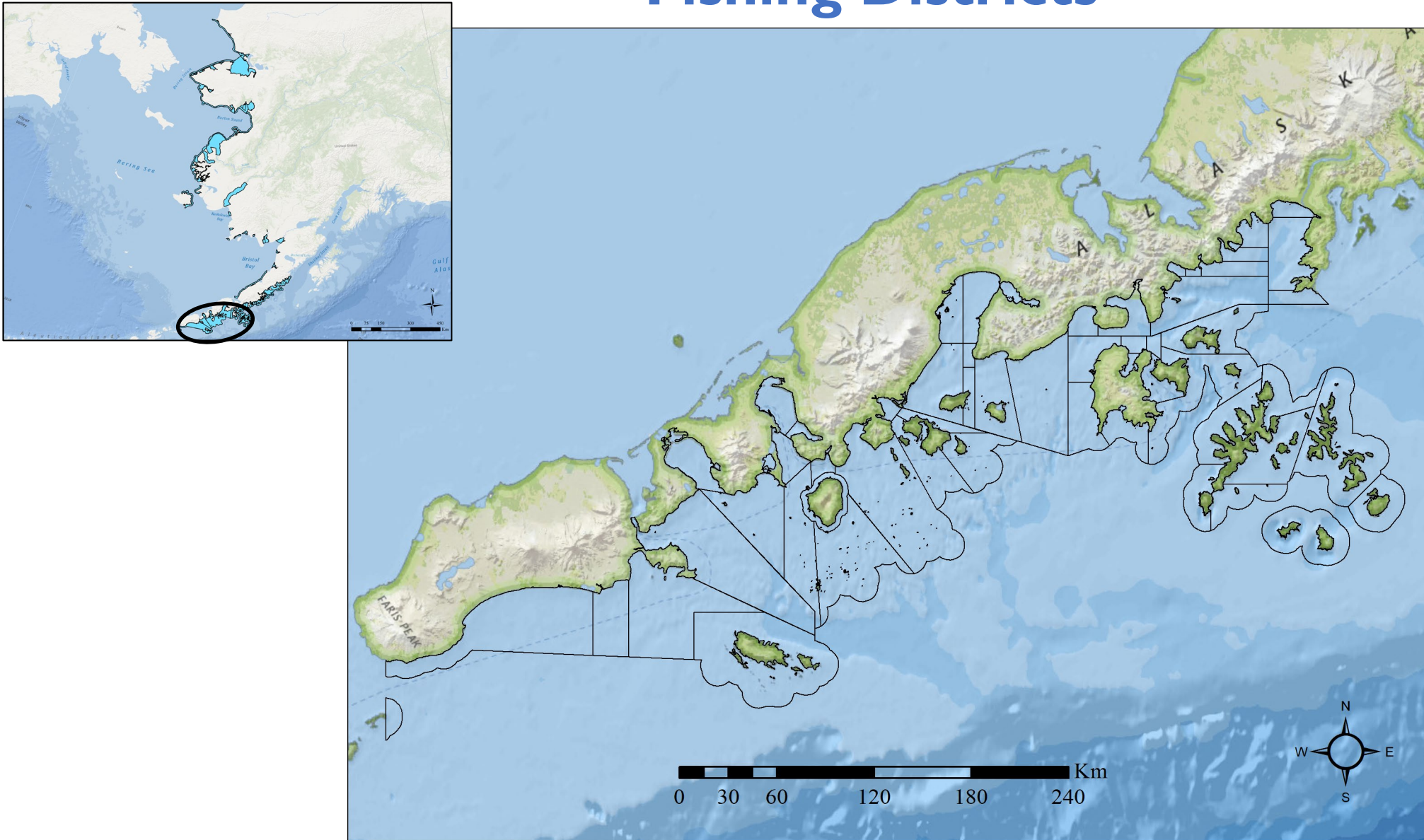
Western Alaska Fishing Districts



Area M Fisheries



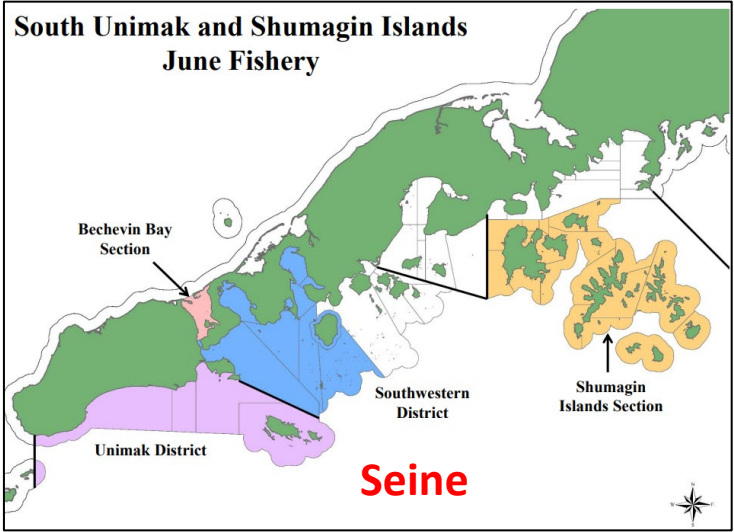
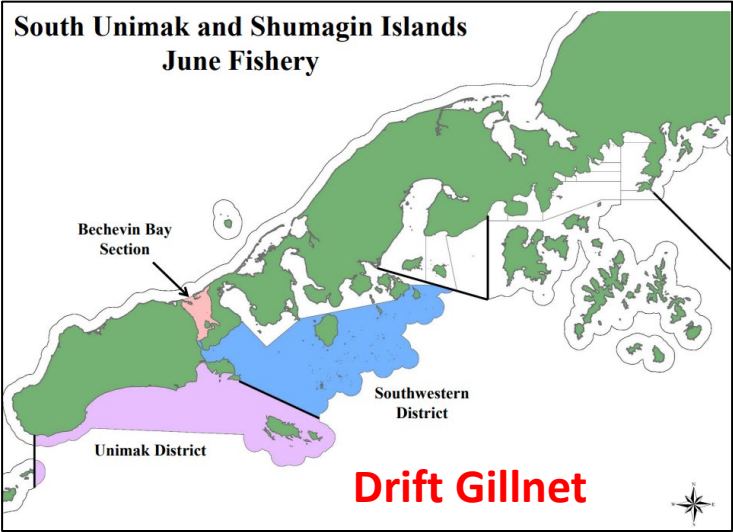
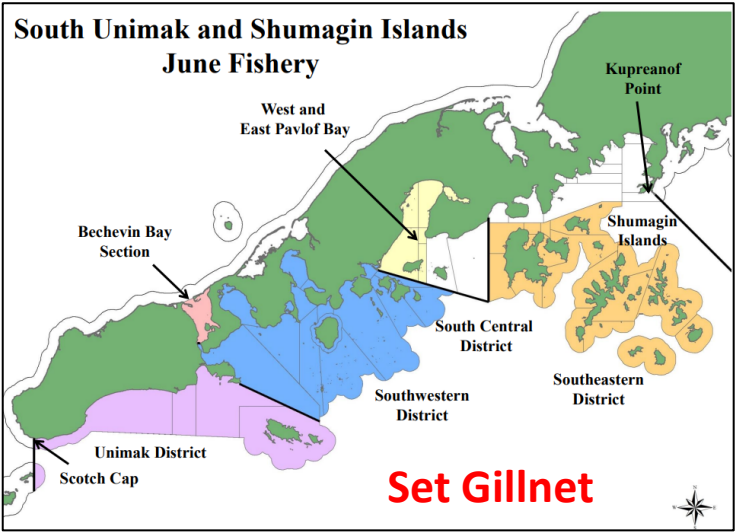
South Peninsula Fisheries Fishing Districts



South Peninsula Fisheries

- Commercial harvests began as early as 1888, documentation began in 1908
- Timing, means and methods have changed
- Legal gear includes purse seine, drift gillnet, and set gillnet
- Management by time and area; 2 periods (June and Post-June)
 - June
 - Primarily a sockeye fishery that harvests chum salmon
 - Scheduled fishing with predefined weekly open periods
 - South Unimak and Shumagin Islands; Open June 6 – June 28

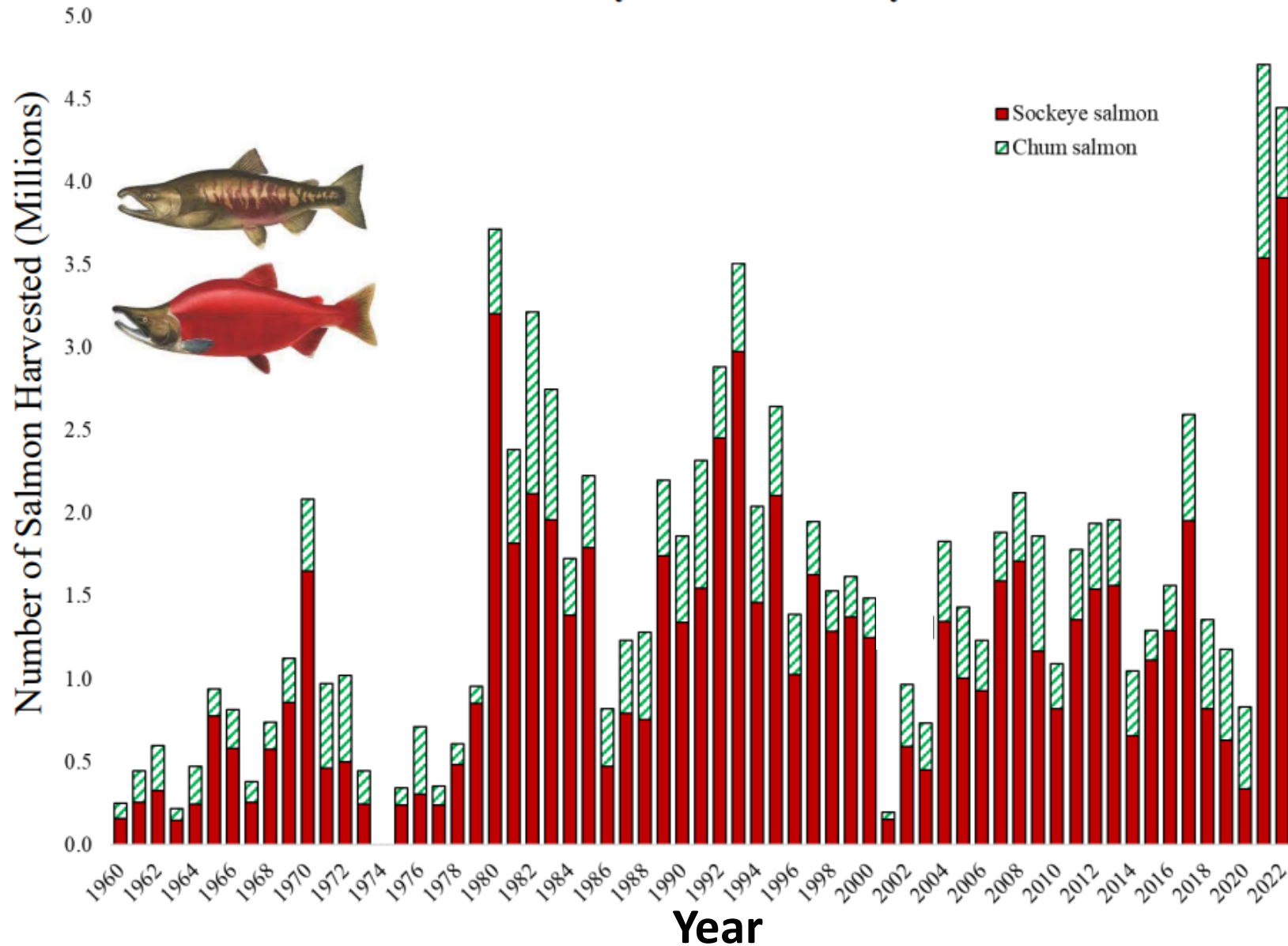
South Peninsula Fishery - June



All Gear Types Schedule							
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
			1	2	3	4	
Notes: All fishing periods start at 6:00 AM and end at 10:00 PM. Closures between periods are 32 hours. The first fishing period is 64 hours <u>for set gillnet gear only</u> . The remaining fishing periods are 88 hours for all gear types.							
5	6	7	8	9	10	11	
	6:00 AM	Open 64 hours (Set Gillnet Gear Only)		10:00 PM	6:00 AM	Open 88 hours	
12	13	14	15	16	17	18	
10:00 PM			6:00 AM	Open 88 Hours			10:00 PM
19	20	21	22	23	24	25	
	6:00 AM	Open 88 Hours			10:00 PM	6:00 AM	
26	27	28	29	30			
Open 88 hours			10:00 PM				

South Peninsula Fishery - June

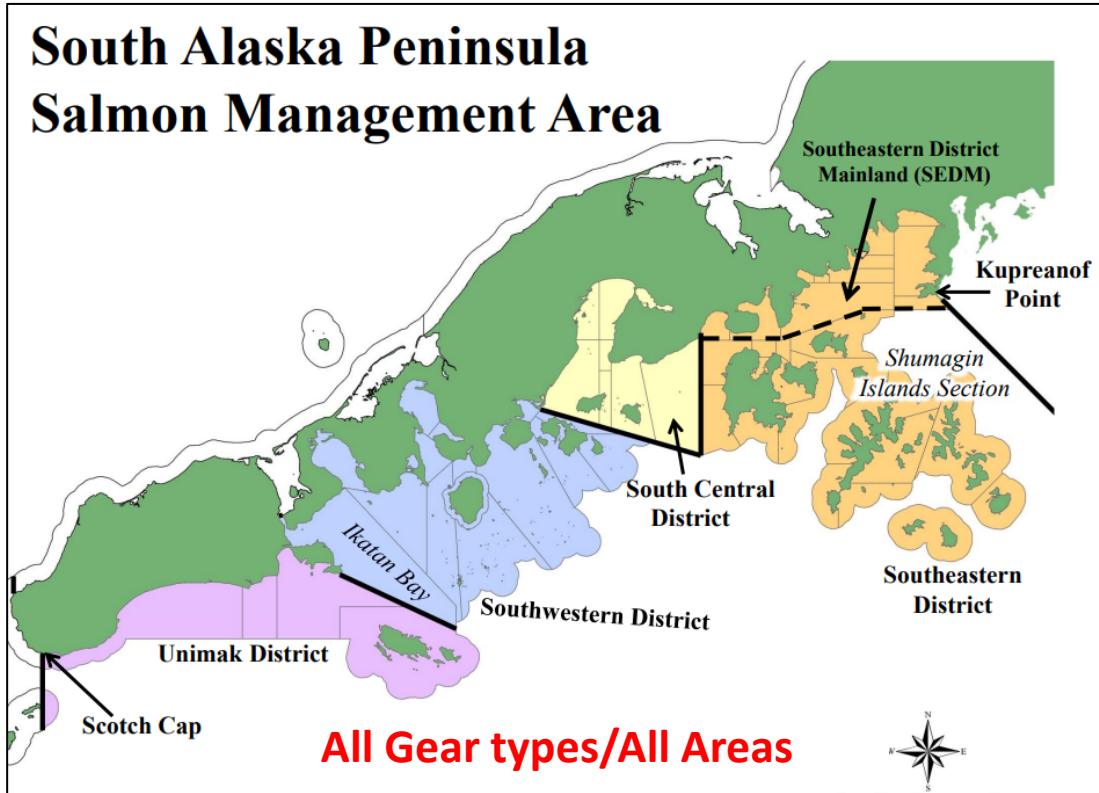
1960–2022 June Fishery Chum and Sockeye Salmon Harvest



South Peninsula Fisheries

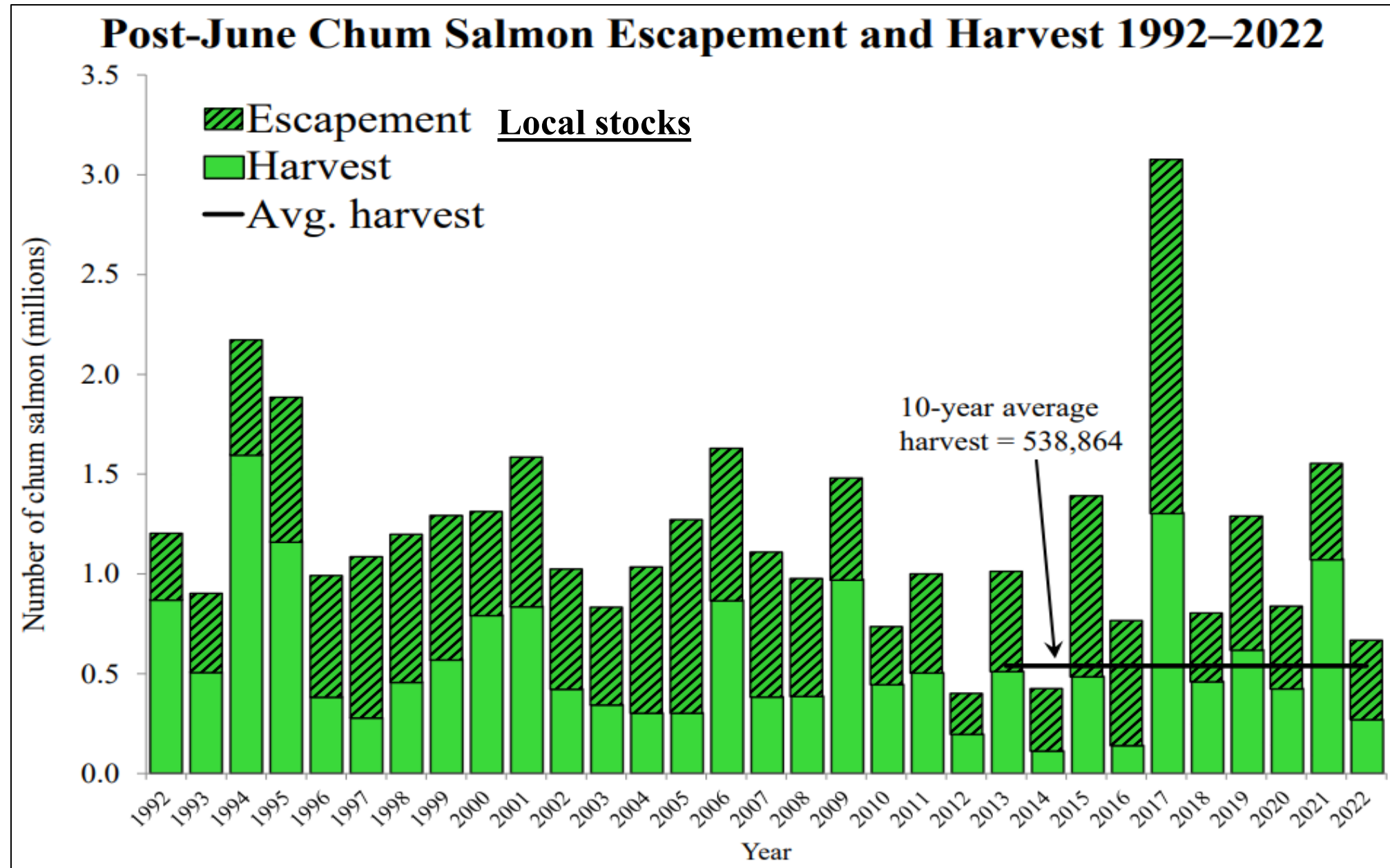
- Commercial harvests began as early as 1888, documentation began in 1908
- Timing, means and methods have changed
- Legal gear includes purse seine, drift gillnet, and set gillnet
- Management by time and area; divided into 2 periods
 - June
 - Primarily a sockeye fishery that harvests chum salmon
 - Scheduled fishing with predefined weekly open periods
 - Open June 6 – June 28
 - Post-June
 - Generally a local pink, sockeye, chum and coho fishery
 - Managed by fishing time based upon local pink and chum escapement

South Peninsula Fishery – Post-June

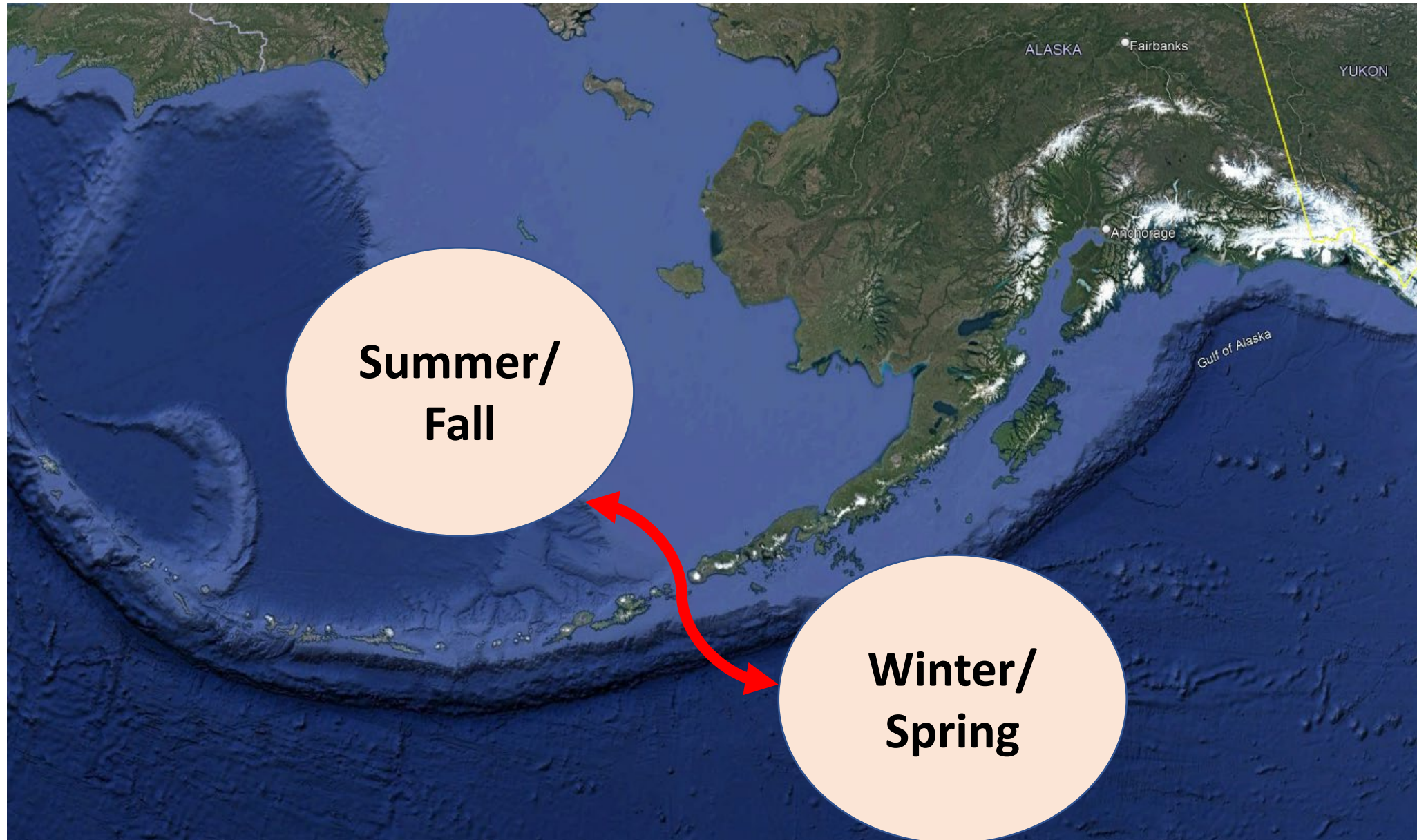


July 2022 All Gear Types Schedule						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
Note: All fishing periods start at 6:00 AM. All fishing periods are for all gear types.						
3	4	5	6	7	8	9
			6:00 AM 33 Hours 3:00 PM			
10	11	12	13	14	15	16
6:00 AM 36 Hours 6:00 PM				6:00 AM 36 hours 6:00 PM		
17	18	19	20	21	22	23
	6:00 AM 36 hours 6:00 PM				6:00 AM 36 hours 6:00 PM	
24	25	26	27	28	29	30
		6:00 AM 36 hours 6:00 PM				6:00 AM 36 Hours
31						
6:00 PM						

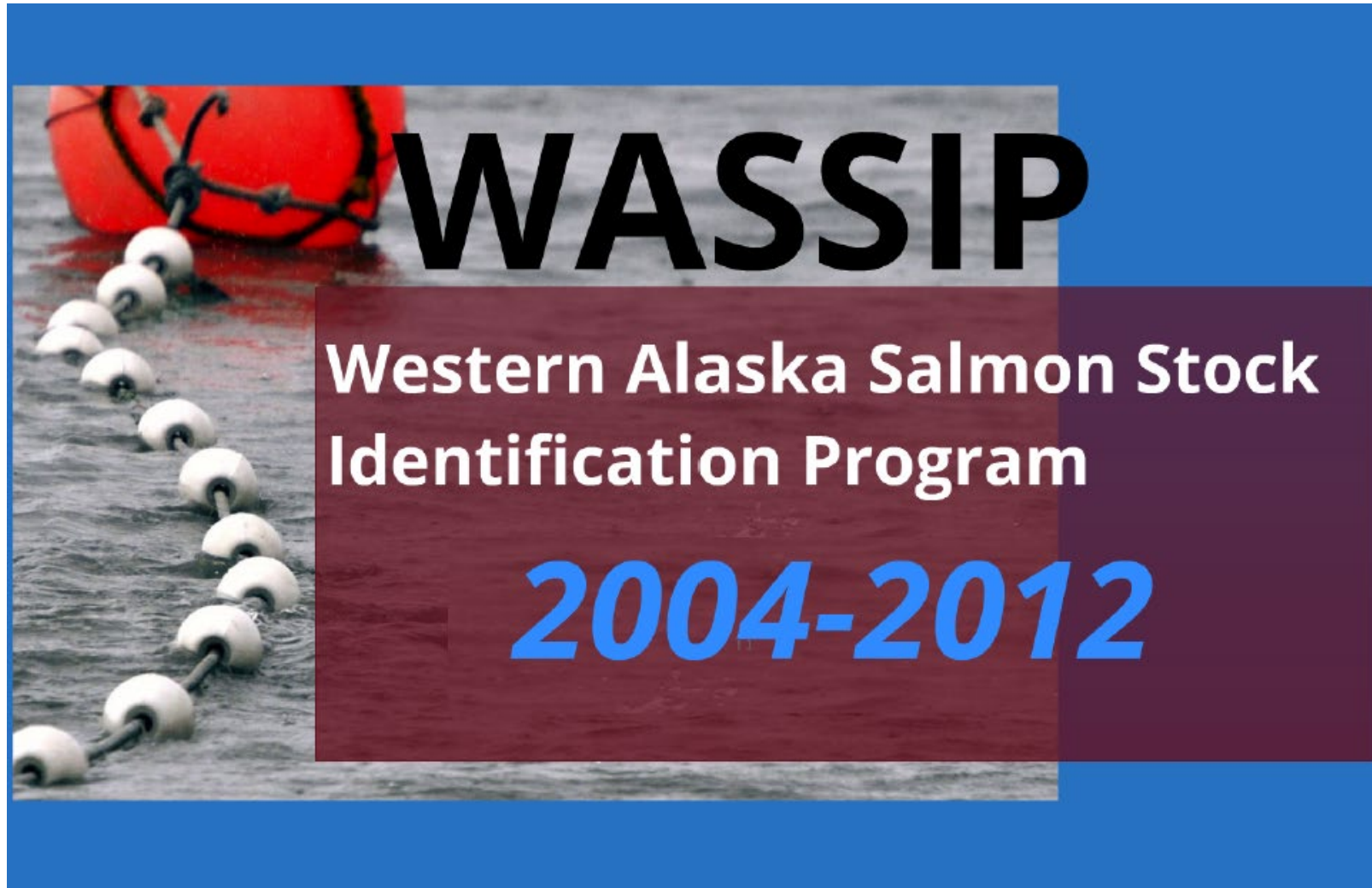
South Peninsula Fishery – Post-June



Chum Seasonal Rearing Areas



Stock Identification of Fishery Harvests



<http://www.adfg.alaska.gov/index.cfm?adfg=wassip.main>

WASSIP – Stakeholder Driven

WASSIP Advisory Panel

Alaska Fish and Game

Aleut Corp

Aleutians East Borough

Assoc. Village Council Presidents

Bering Sea Fishermen's Association

Bristol Bay Native Association

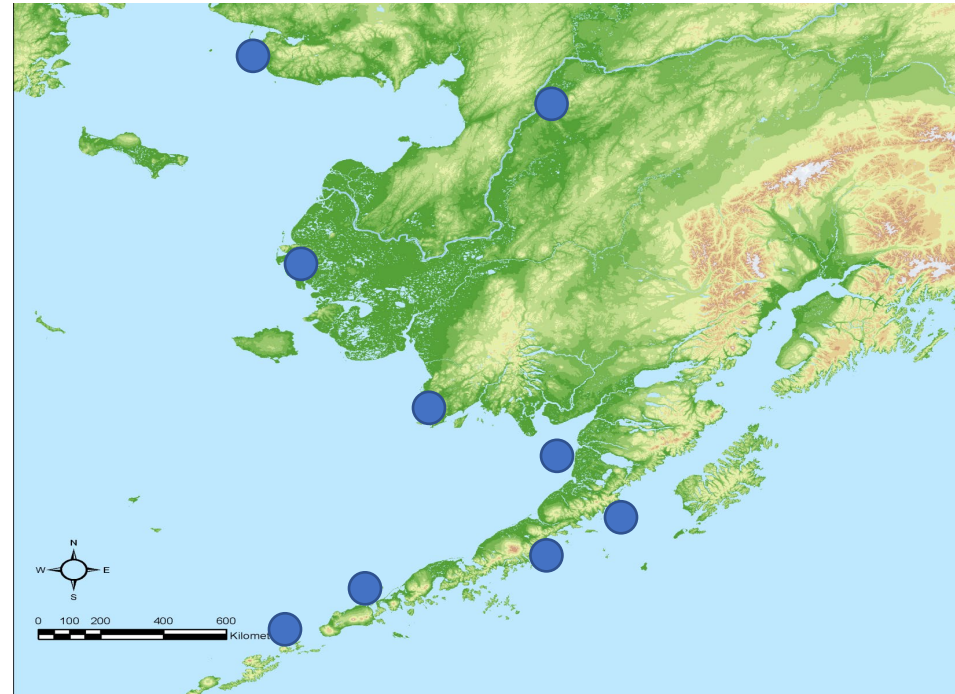
Concerned Area M Fishermen

Kawerak Inc.

Lake and Peninsula Borough

Tanana Chiefs Conference

Yukon River Drainage Fisheries Assoc.



WASSIP Stock ID Project

2007-2009

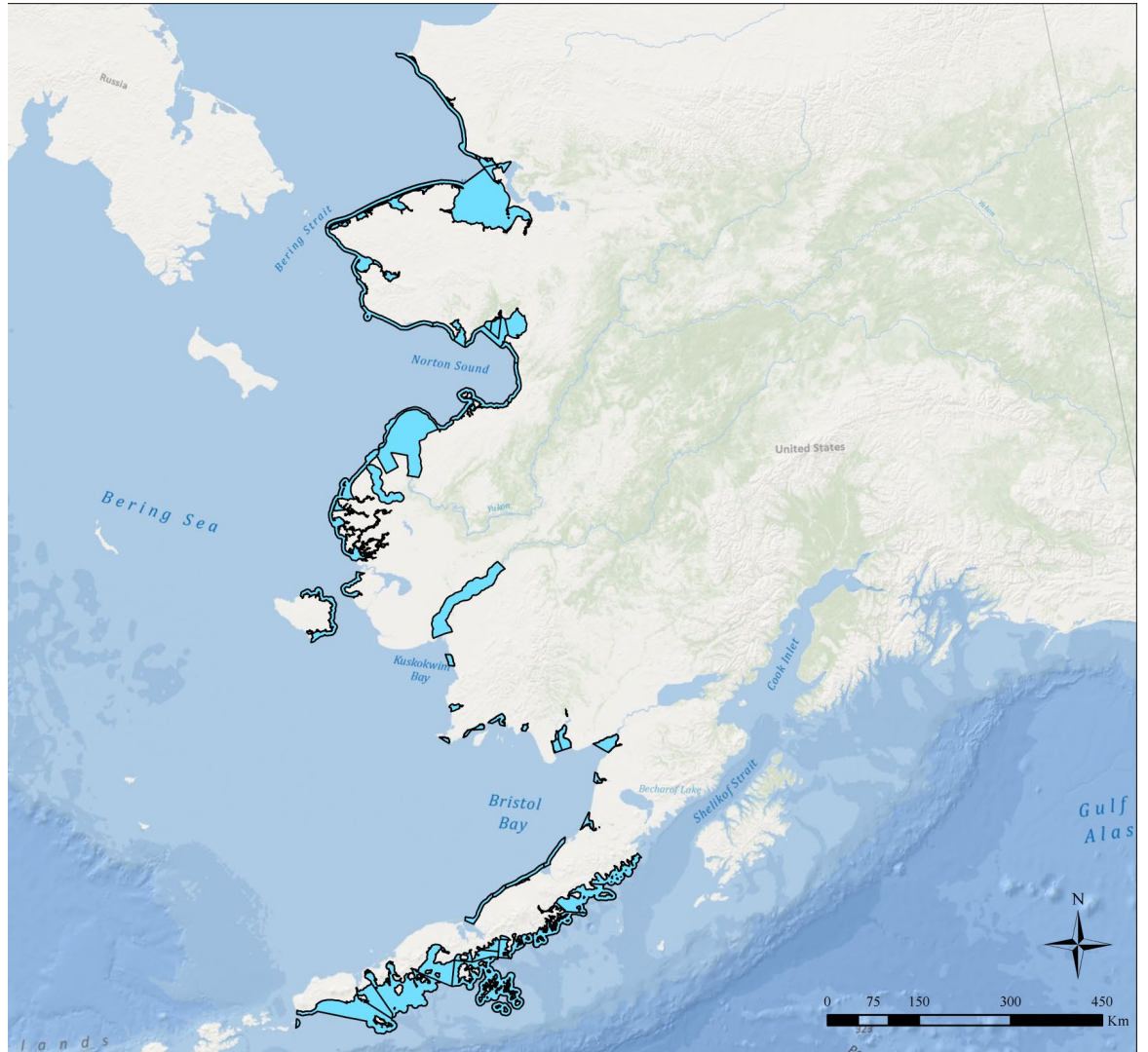
Account for all harvests

- Subsistence
- Commercial

Sample fishery harvests

- Systematic sampling
- Subsample representatively

Stock composition using genetics



South Peninsula Stock ID Project 2022-2025

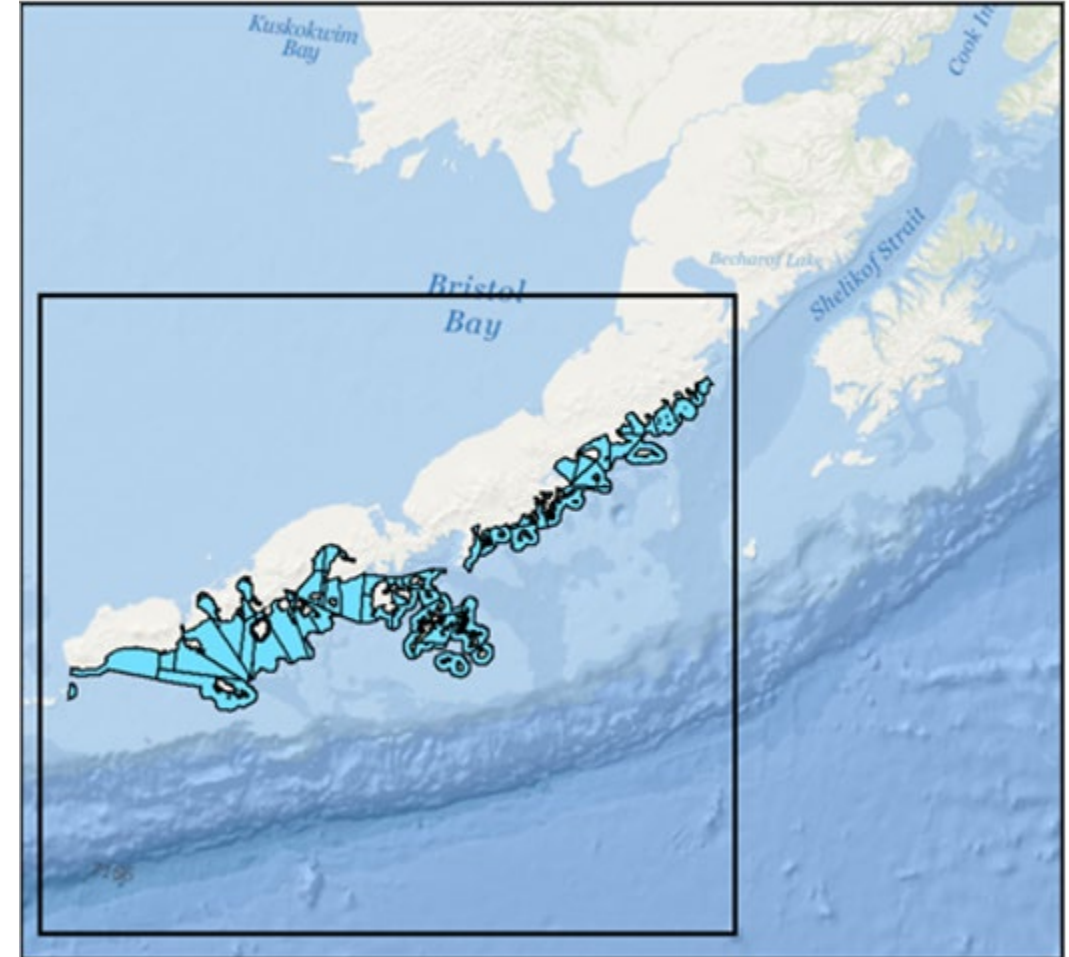
Account for all harvests

- Subsistence
- Commercial

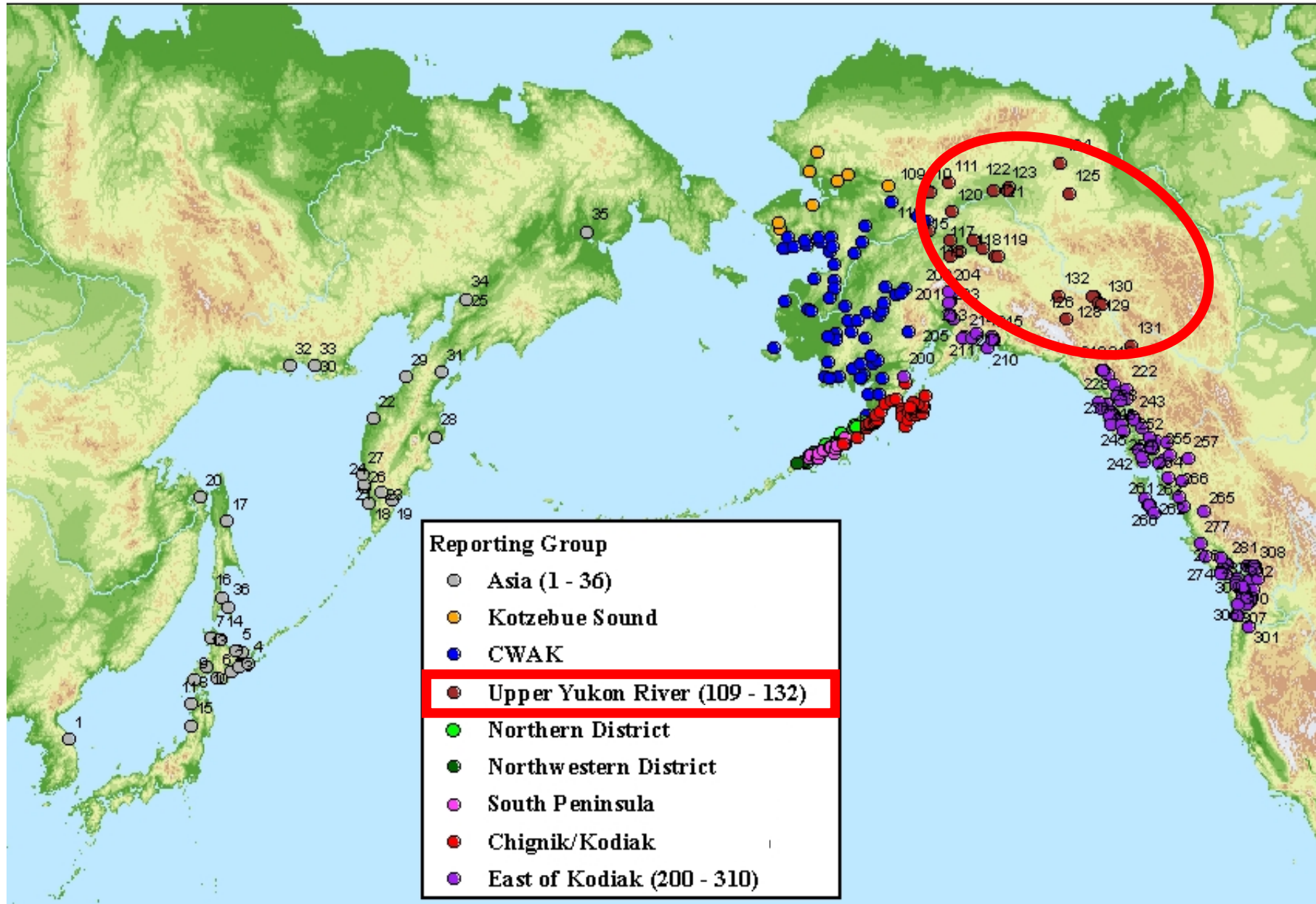
Sample fishery harvests

- Systematic sampling
- Subsample representatively

Stock composition using
genetics



Range-wide Chum Baseline



- Populations from Korea to Pacific Northwest U.S.
- 9 genetically identifiable broad-scale stock groups
 - Management needs
 - Stock presence
 - Statistical sampling
 - Genetic identifiability
- Did not distinguish U.S. from Canada stocks in Upper Yukon River

South Peninsula Harvest of Upper Yukon Chum WASSIP & 2022

	WASSIP Results			S. Pen. Project Results	
	2007	2008	2009		2022
Total Run	1,105,252	818,667	574,892	Estimated Total Run	243,038
S. Pen. Harvest	4,075	7,085	1,658	S. Pen. Harvest	1,693
Harvest Rate	0.4%	0.9%	0.3%	Harvest Rate	0.6%

Total run in 2022 estimated assuming that
2007-2009 patterns are representative of 2022

Dann, T. H., H. A. Hoyt, E. M. Lee, E. K. C. Fox, and M. B. Foster. 2023. Genetic stock composition of chum salmon harvested in commercial salmon fisheries of the South Alaska Peninsula, 2022. Alaska Department of Fish and Game, Special Publication No. 23-07, Anchorage.

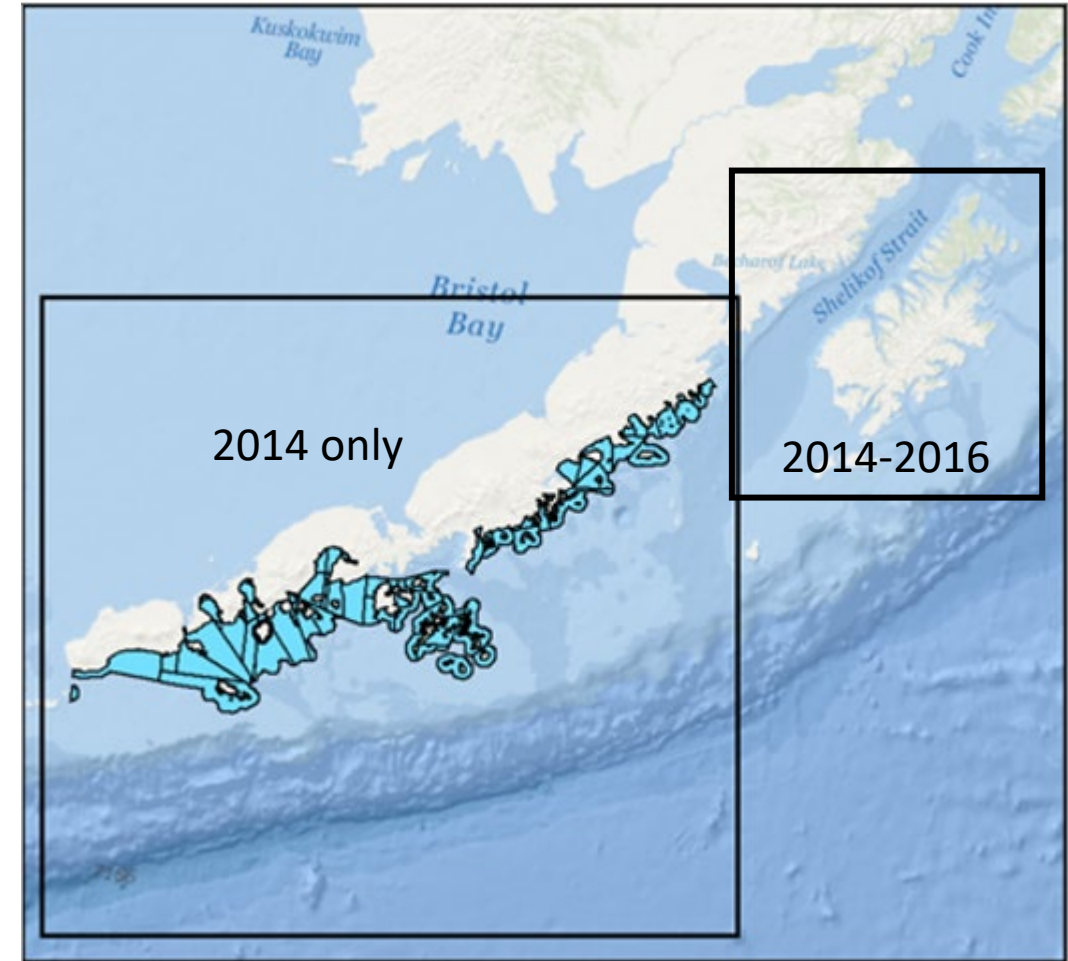
ADF&G (Alaska Department of Fish and Game). Preliminary harvest rates of western Alaska and Alaska Peninsula chum salmon stocks in South Alaska Peninsula fisheries, 2022. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report No. 5J23-02, Anchorage.

Chinook Salmon Stock Composition 2014

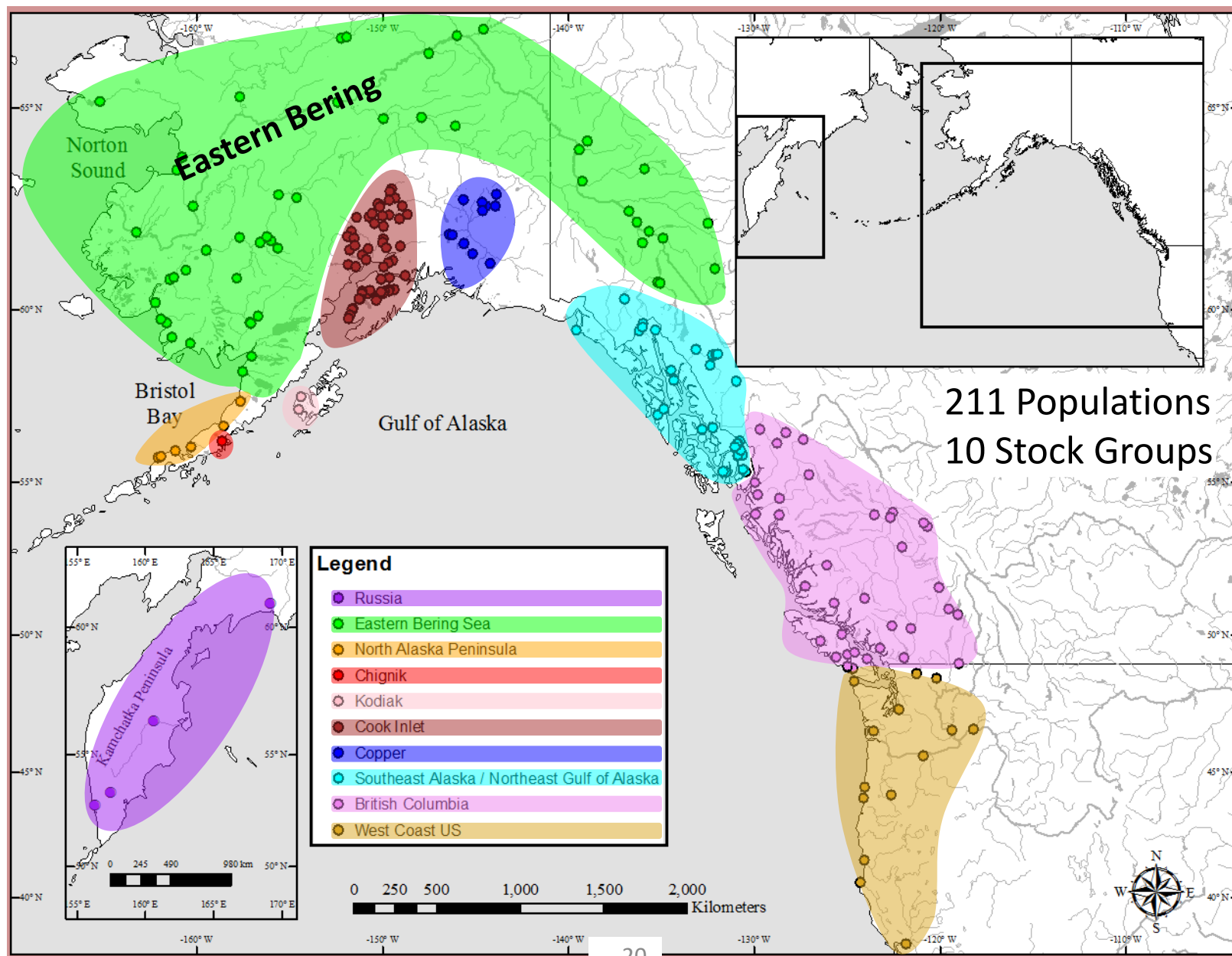
Chinook Salmon Research Initiative
Objective: Improve assessment of Alaska
Chinook salmon stocks

Stock composition of commercial and sport
harvest in Kodiak Management Area and
South Alaska Peninsula

- Funded only for 2014, project reduced to just Kodiak Area for 2015 – 2016



Range-wide Chinook Baseline



Eastern Bering Chinook Stock Group

Harvest 2014

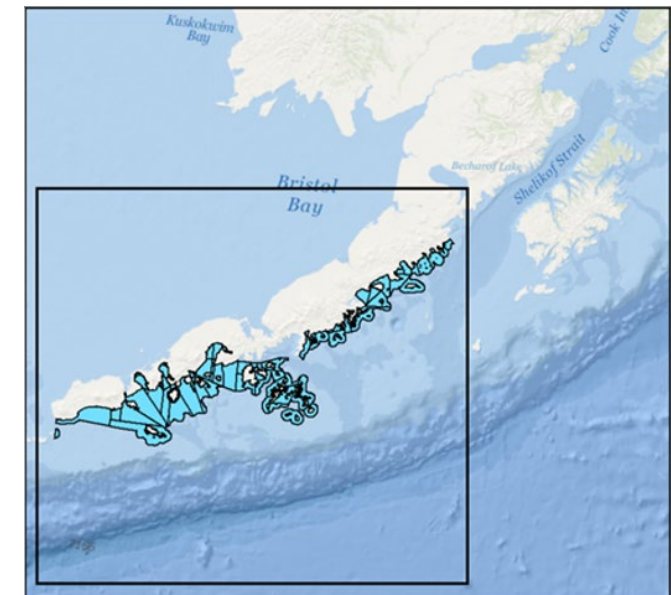
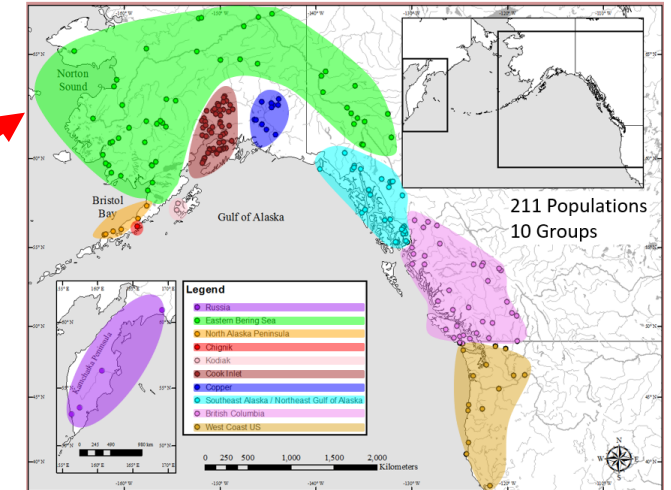
Combined all time and areas to represent
2014 harvest from Chignik to Unimak Island

	2014
Total Chinook Harvest	12,209
E. Bering reporting group Harvest	2,498 (20.5%)

Interpreting Results

- E. Bering Stock Group includes Nushagak, Kuskokwim, Yukon and other runs
- First and only genetic stock composition of the harvest
- Well-designed and implemented; represents harvest in 2014
- ADF&G policy and best practices require 3 years before reporting/using stock composition results
- Interannual variability cautions inference outside 2014
 - Stock abundance and movement
 - Ocean conditions
 - Fishing operations

Range-wide Chinook Baseline





Any Questions?