

Yukon River King Salmon Stock Status and Summer Chum Salmon Fishery



**AYK Board of Fisheries Meeting
January 2016
Fairbanks, Alaska**

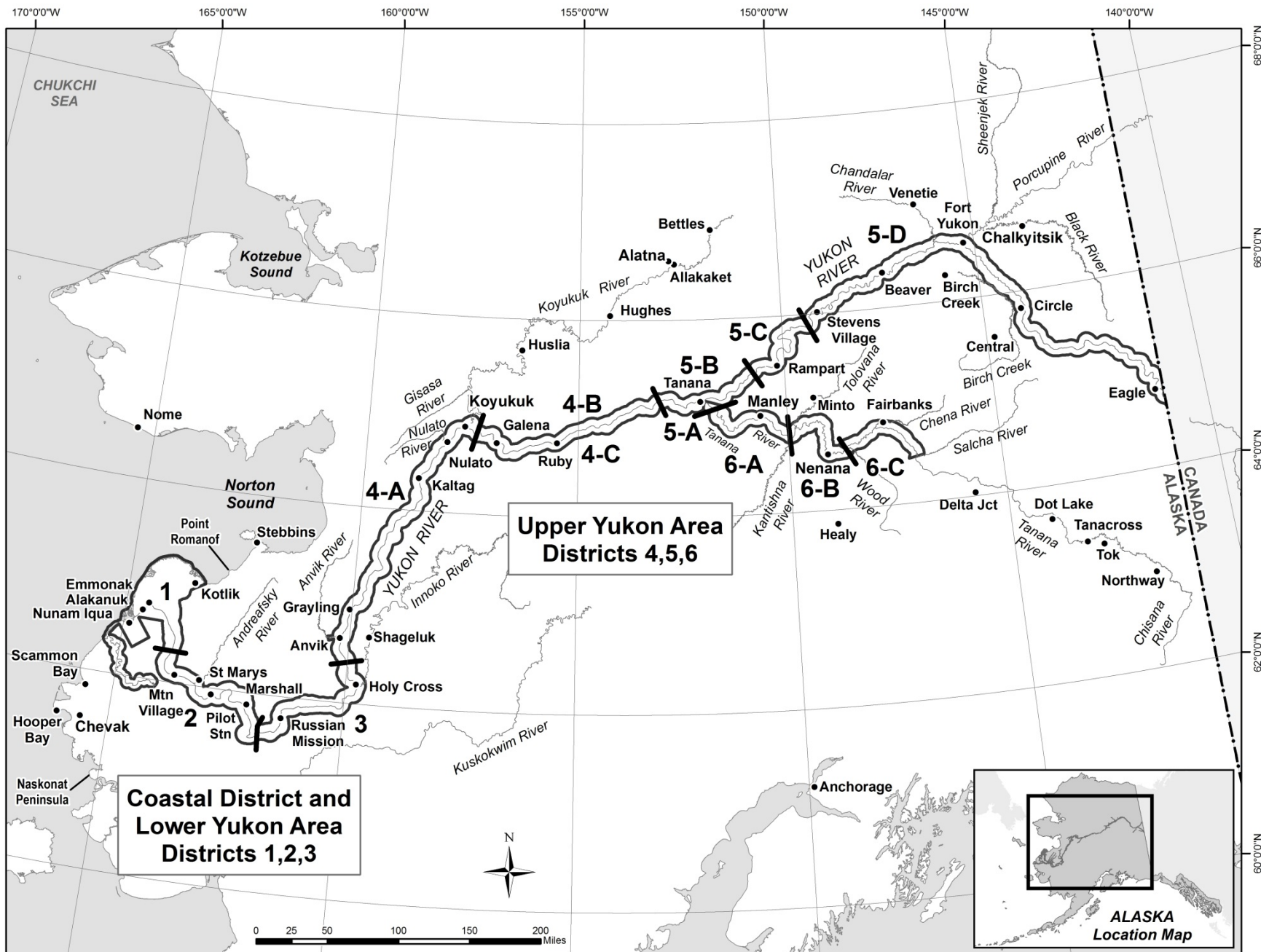
**Presented by:
Dr. Stephanie Schmidt**



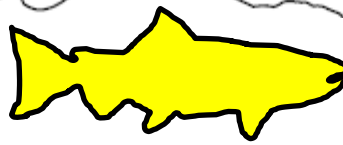
**Oral Report – RC 3, Black and White Tab 5
King and Summer Chum Written Report – RC 3, Colored Tab 5**

Outline

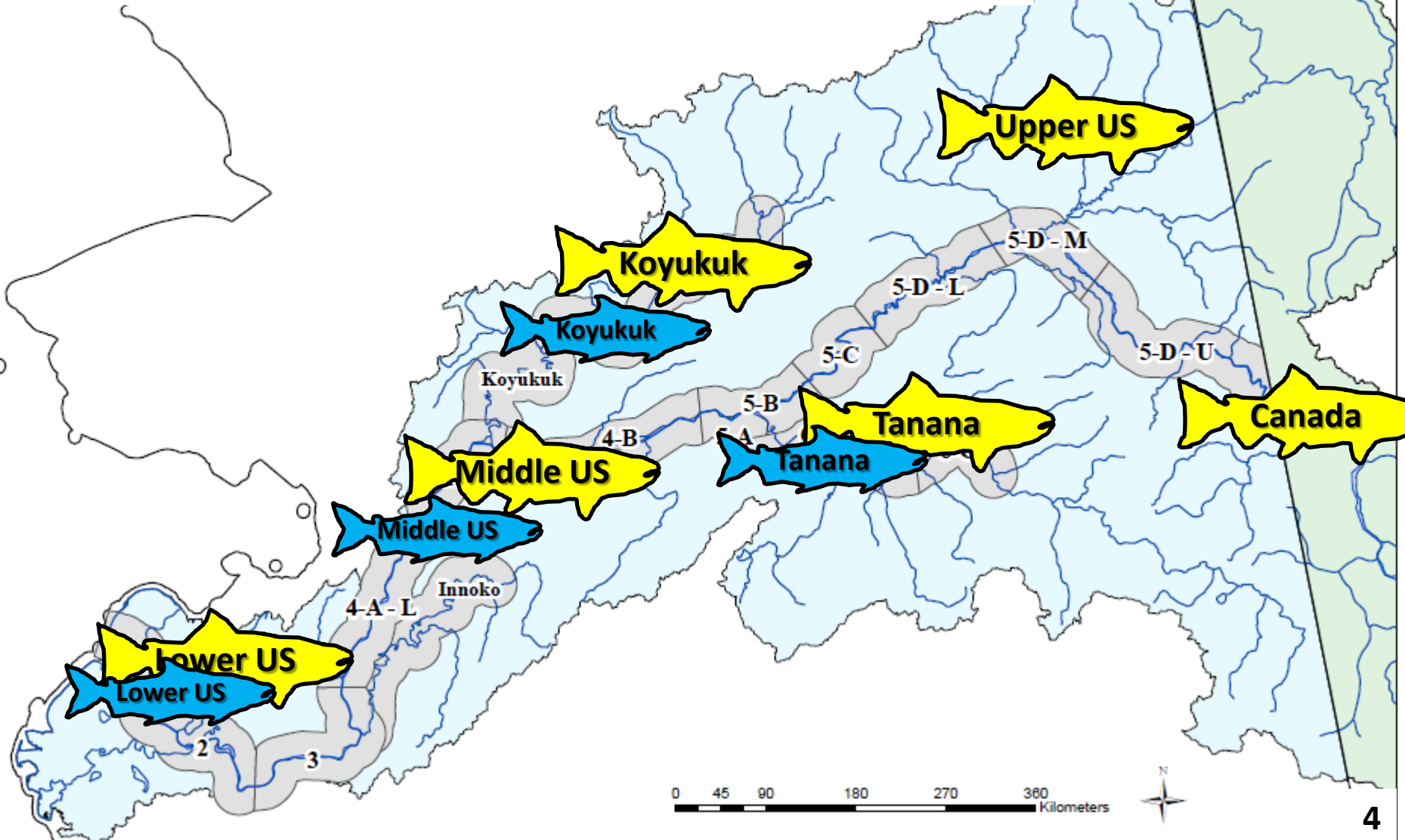
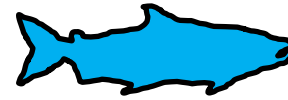
1. Yukon River salmon management overview
2. King salmon stock status
 - a) Historical run sizes
 - b) Harvest and escapement trends
3. Summer chum salmon fishery
4. Recent management tools and actions
5. 2016 Cycle Proposals
 - a) Summer chum salmon management plan
 - b) Selective gear to target summer chum salmon
 - c) General subsistence gear
 - d) Fishing opportunity in District 5
 - e) New commercial fishing areas and species



King salmon stocks



Summer chum salmon stocks

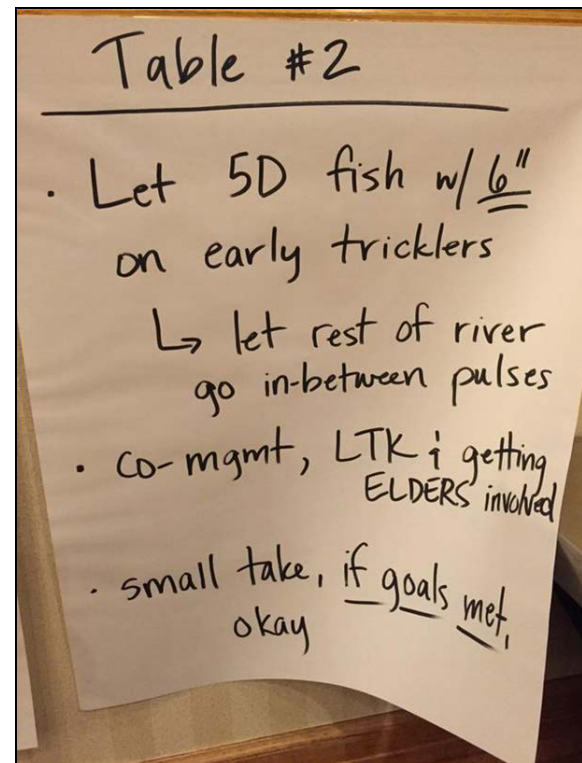


Preseason run size outlook and management planning

1. Outlook derived from a combination of population models

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2. Preseason management planning meetings
 - Involves the public to develop strategies to respond to low run sizes



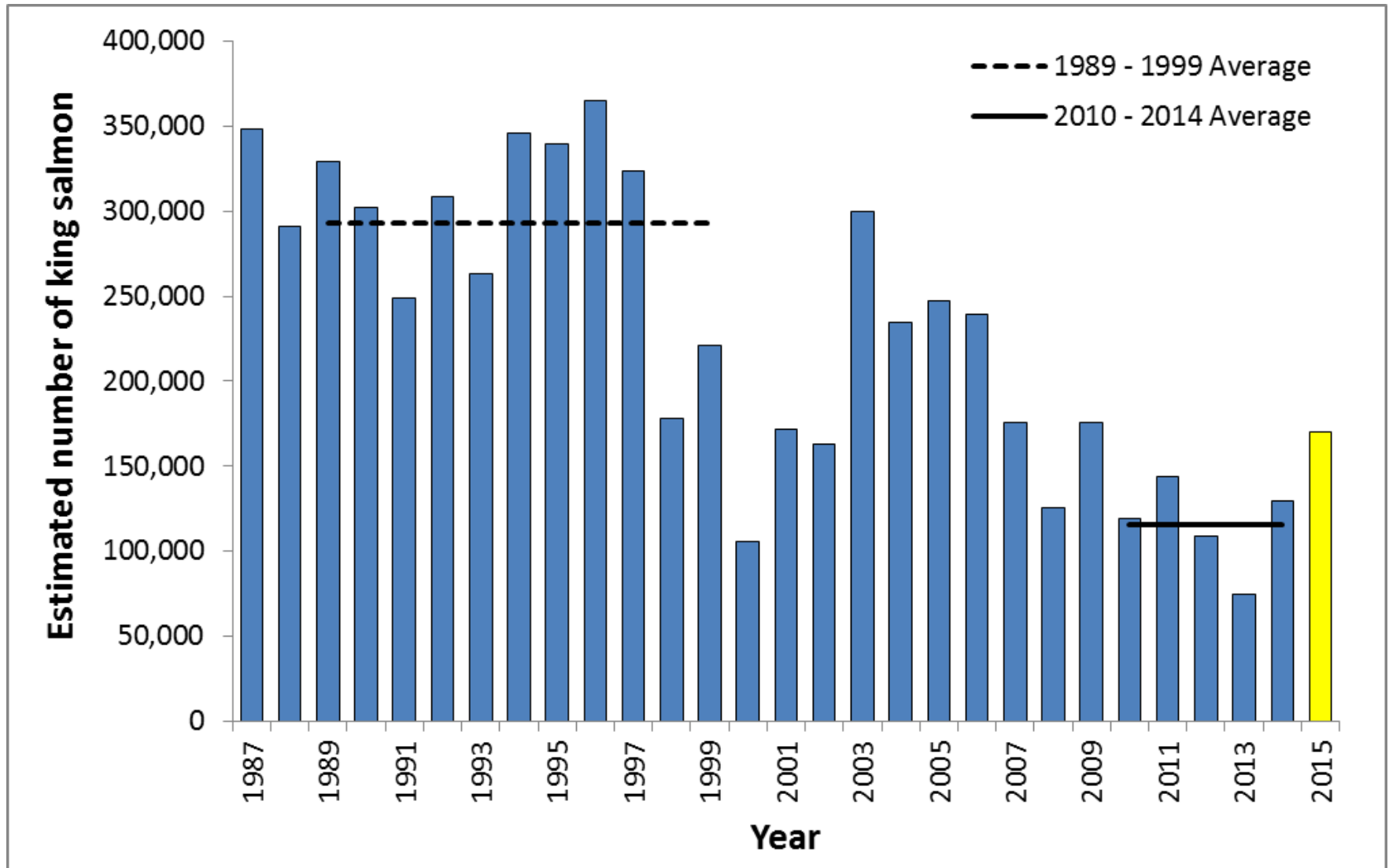
Preseason run size outlook and management planning

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3. Initial management based on preseason outlook and plan

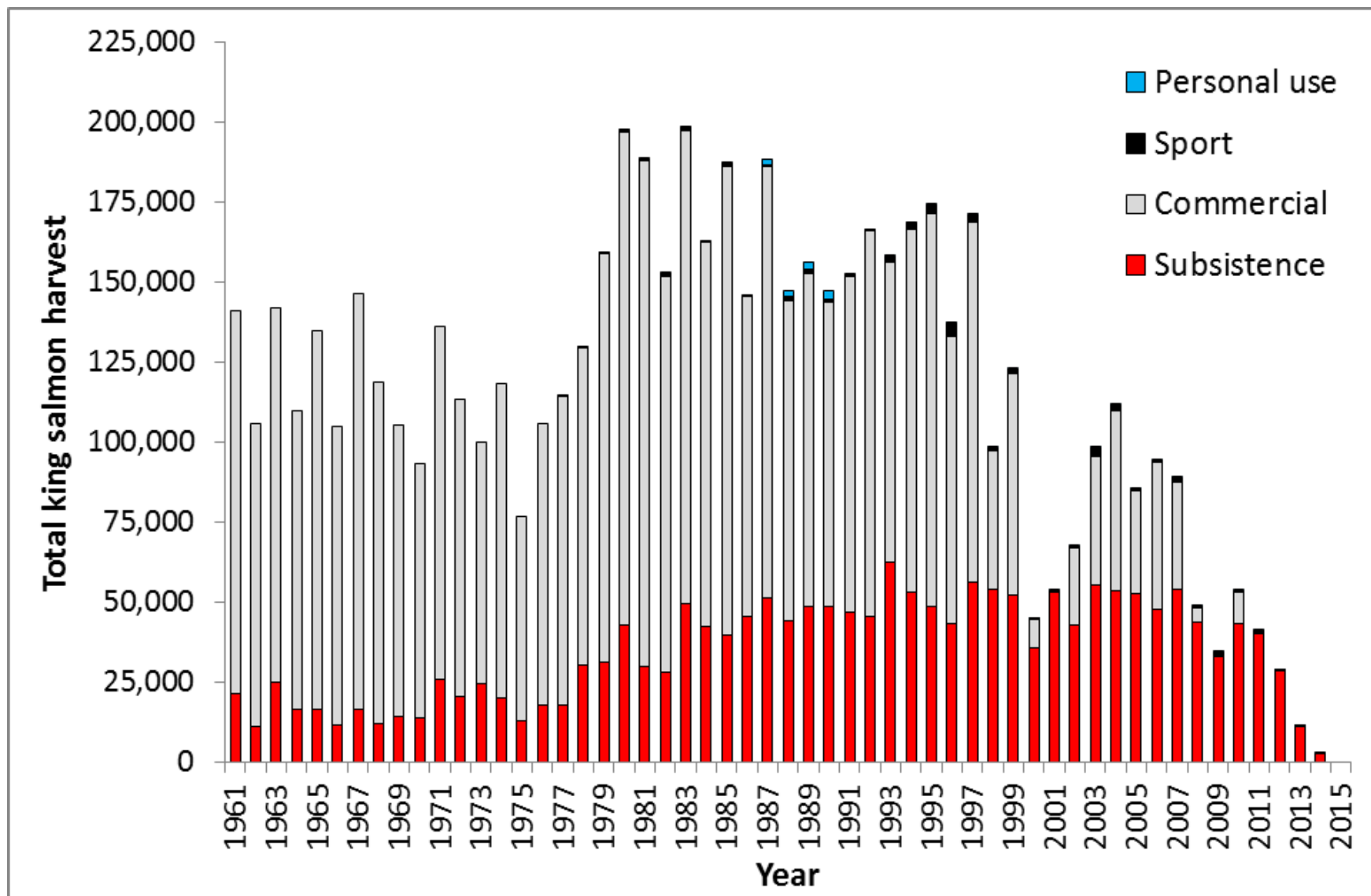
Preseason run size outlook and management planning

1. Outlook derived from a combination of population models
2. Preseason management planning meetings
 - Involves the public to develop strategies to respond to low run sizes
3. Initial management based on preseason outlook and plan
4. Management adjusted inseason based on run assessment indicators

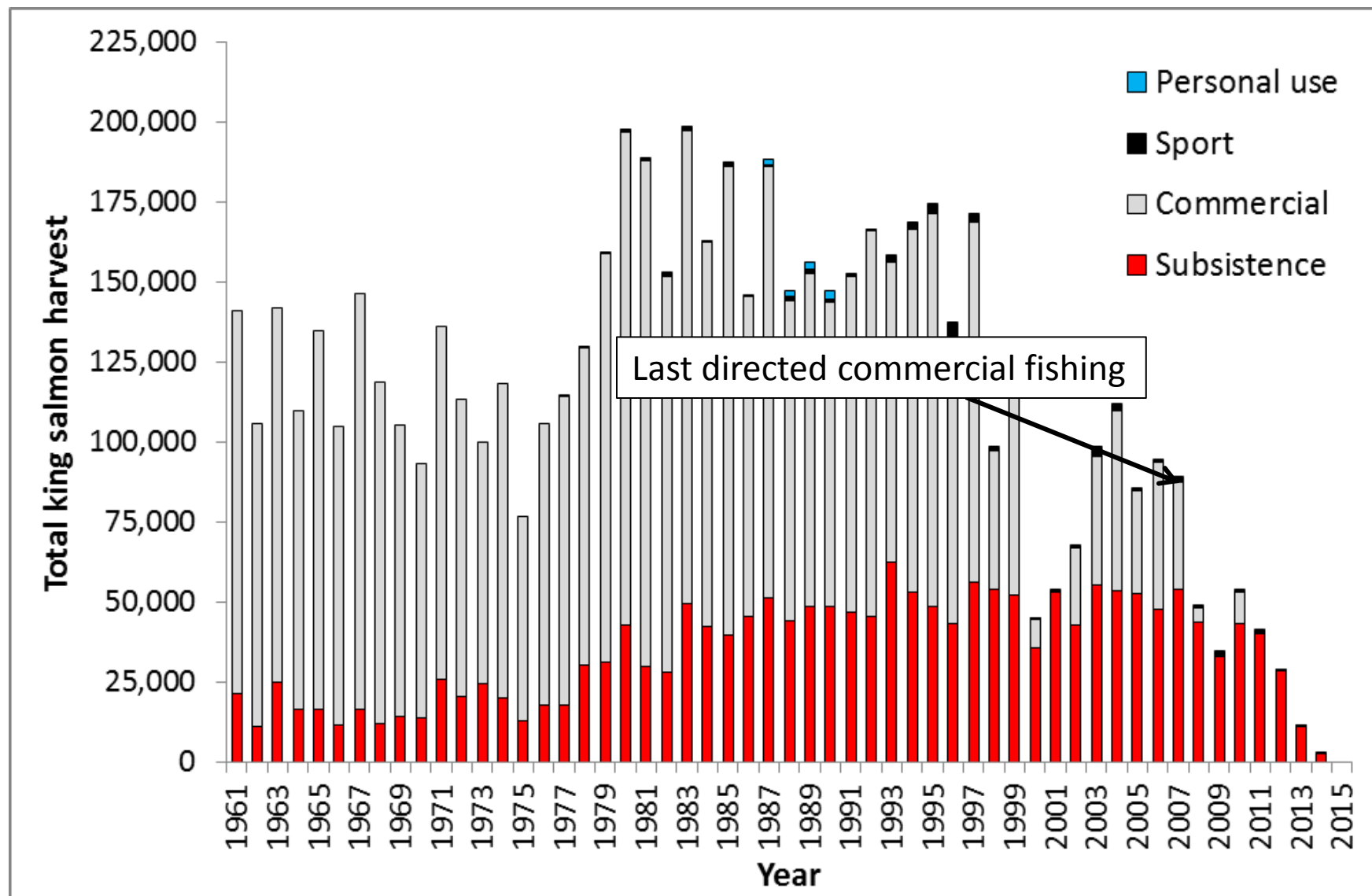
King salmon run sizes on the Yukon River



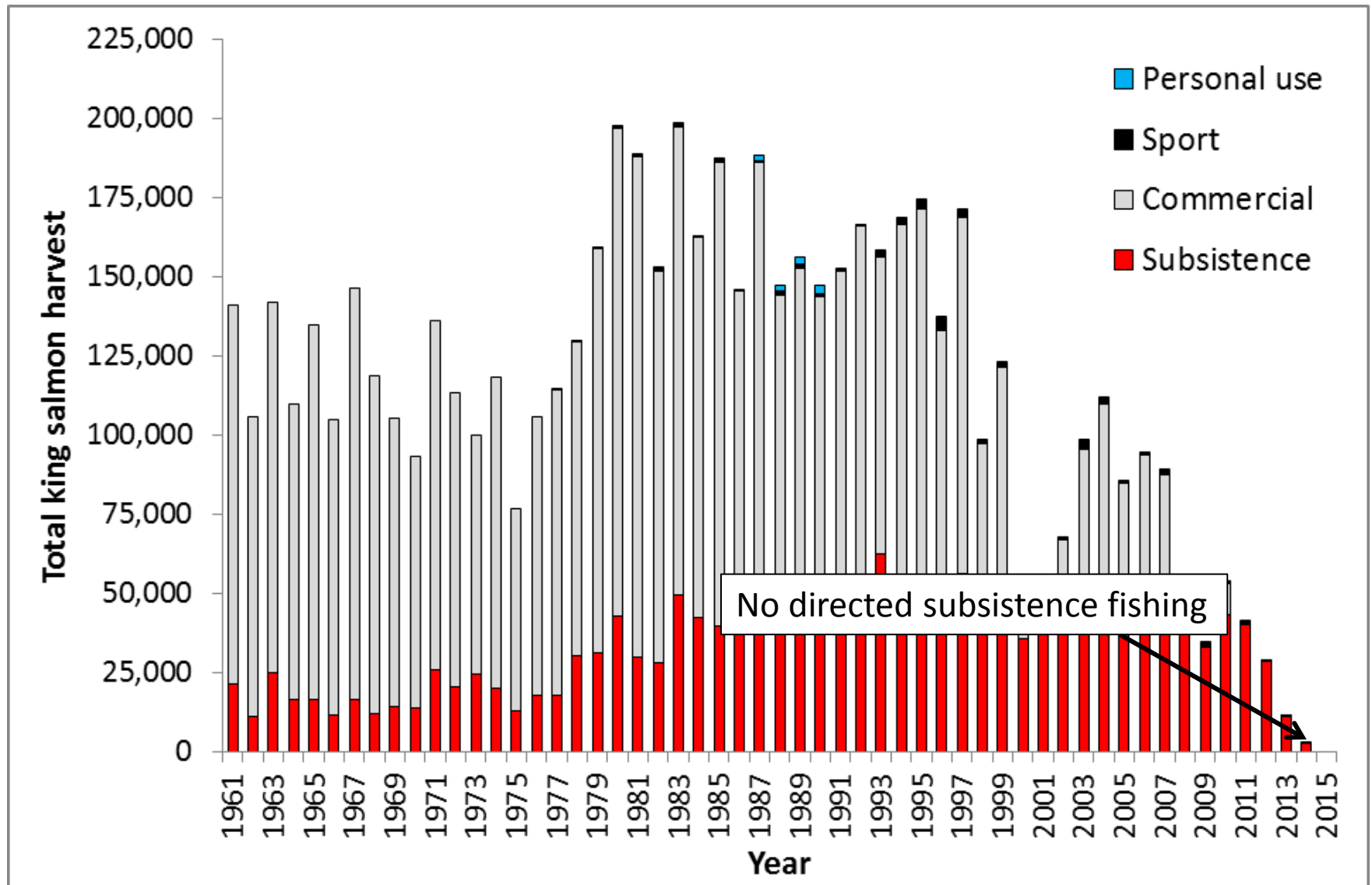
Yukon River king salmon harvests - Alaska



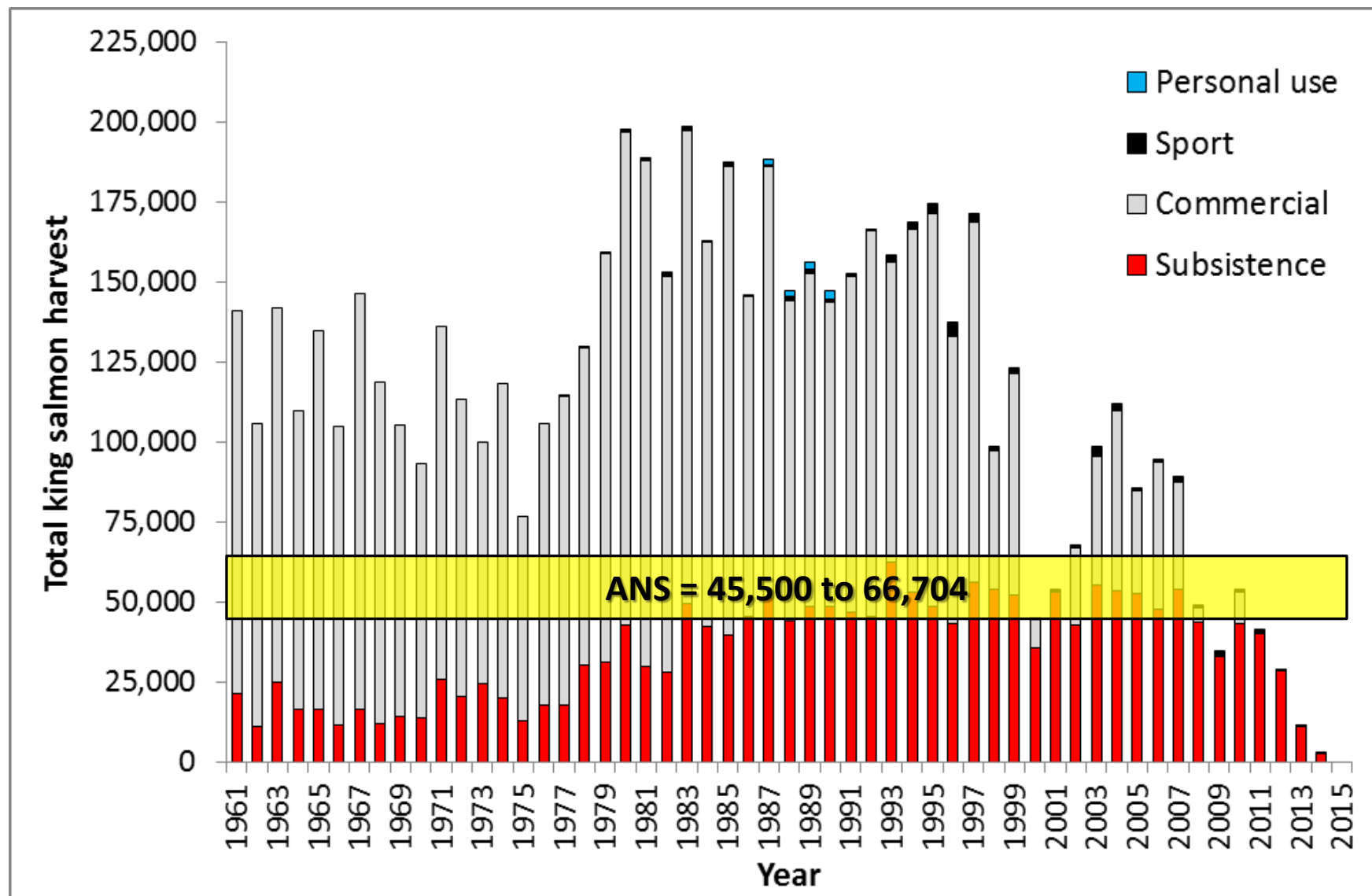
Yukon River king salmon harvests - Alaska



Yukon River king salmon harvests - Alaska



Yukon River king salmon harvests - Alaska



Yukon River king salmon escapement trends

Goal met

Goal exceeded

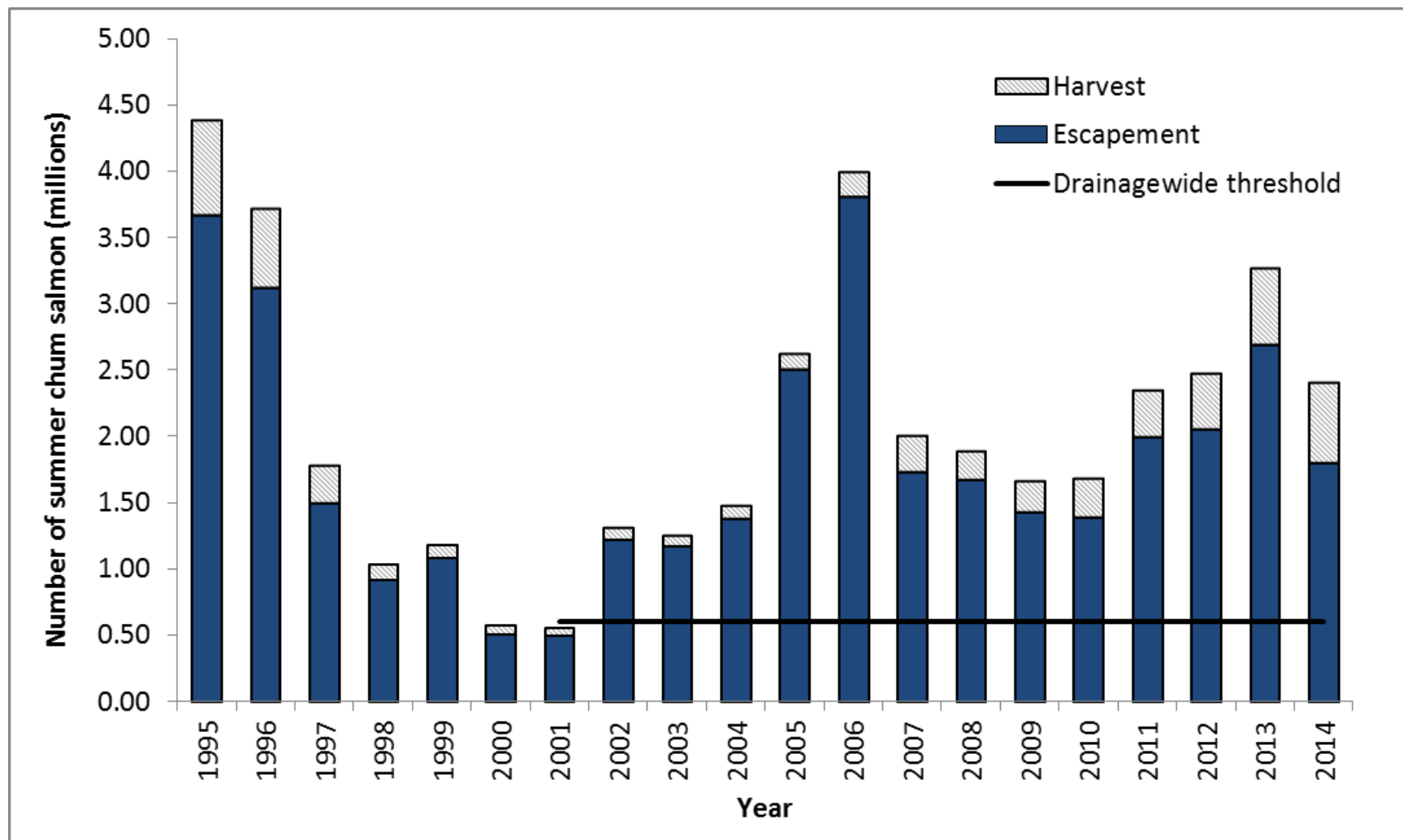
	<i>Goal</i>	2011	2012	2013	2014	2015
Chena R. (tower)	<i>2,800-5,700</i>		2,220	1,859	7,192	4,067
Salcha R. (tower)	<i>3,300-6,500</i>	7,200	7,165	5,465		4,558
E.F. Andreafsky (weir)	<i>2,100-4,900</i>	5,213	2,517	1,998	5,949	5,474
W.F. Andreafsky (aerial)	<i>640-1,600</i>	1,173	227	1,090	1,695	1,356
Anvik R. (aerial)	<i>1,100-1,700</i>	642	722	940	1,584	2,809
Nulato R. (aerial)	<i>940-1,900</i>	1,401	1,374	1,118		1,505
Canada border (sonar)	<i>45,500- 55,000</i>	46,307	32,656	28,669	63,331	82,615

Yukon River king salmon harvest and escapement summary

- Low yields of king salmon persisted from 2011-2013
- Yield and run sizes have improved in 2014 and 2015, with a surplus of king salmon that could have been available for harvest
- Escapement goals generally met in the Alaska portion of the drainage from 2011-2015
- Data from juvenile surveys in the Bering Sea indicate improved productivity and are forecasting better returns

Continue as a “Stock of Yield Concern”

Yukon River summer chum salmon fishery



Recent management tools/actions

How to balance conservation of king salmon with overlapping abundant summer chum salmon run?



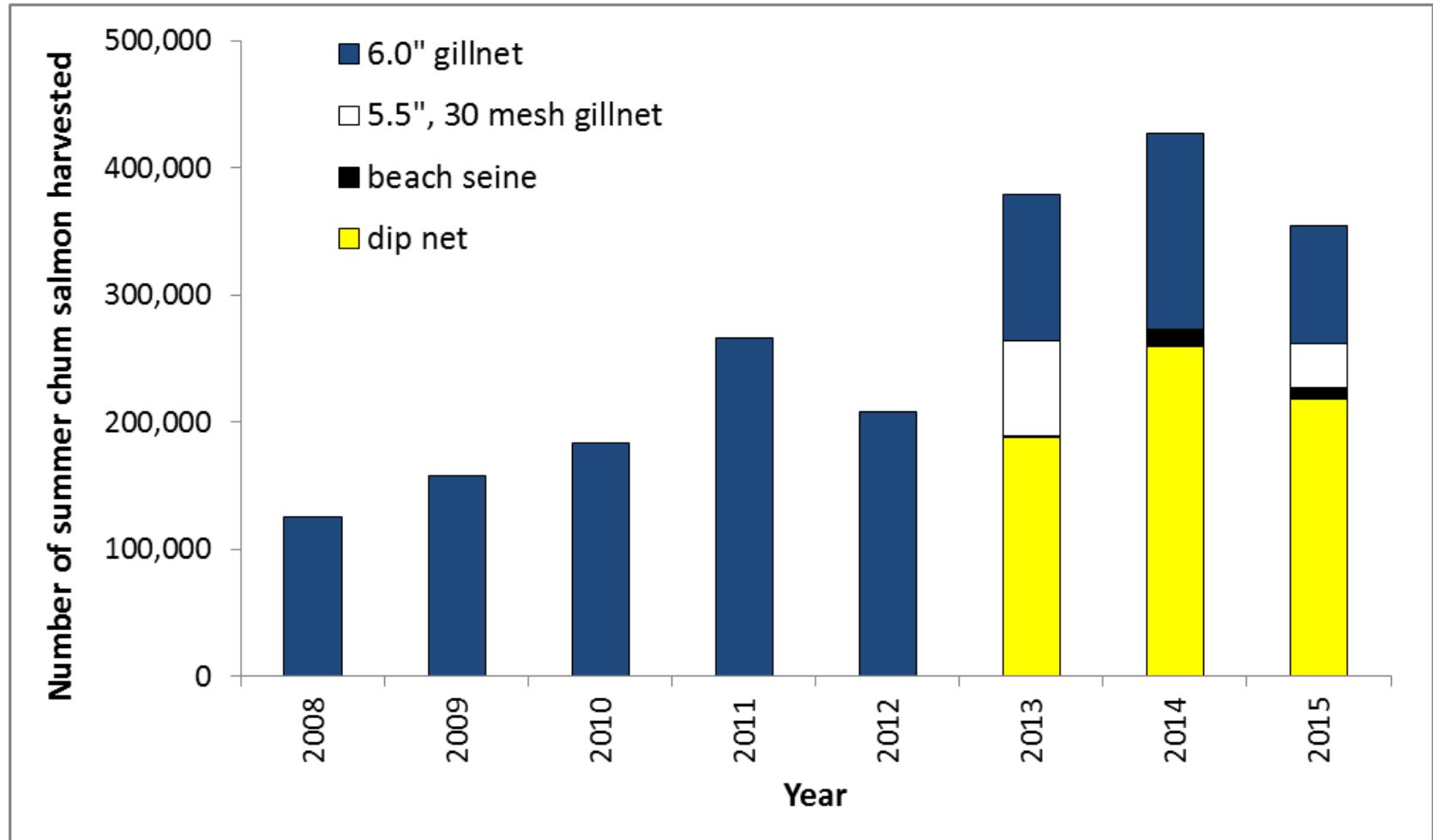
Recent management tools/actions

- Selective gear to harvest summer chum salmon and release king salmon:
 - Dip nets
 - Beach seines
 - Live-release fish wheels



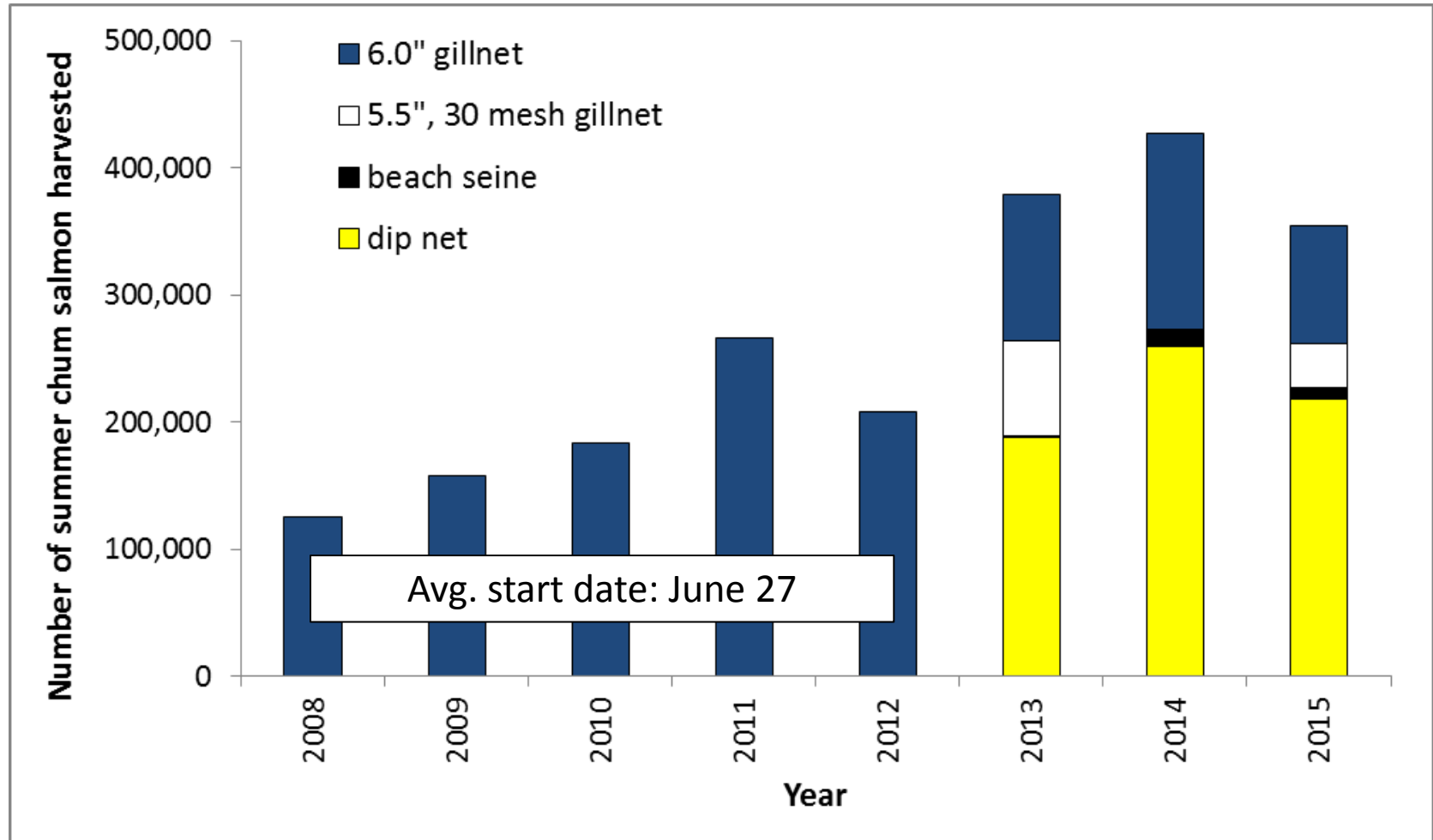
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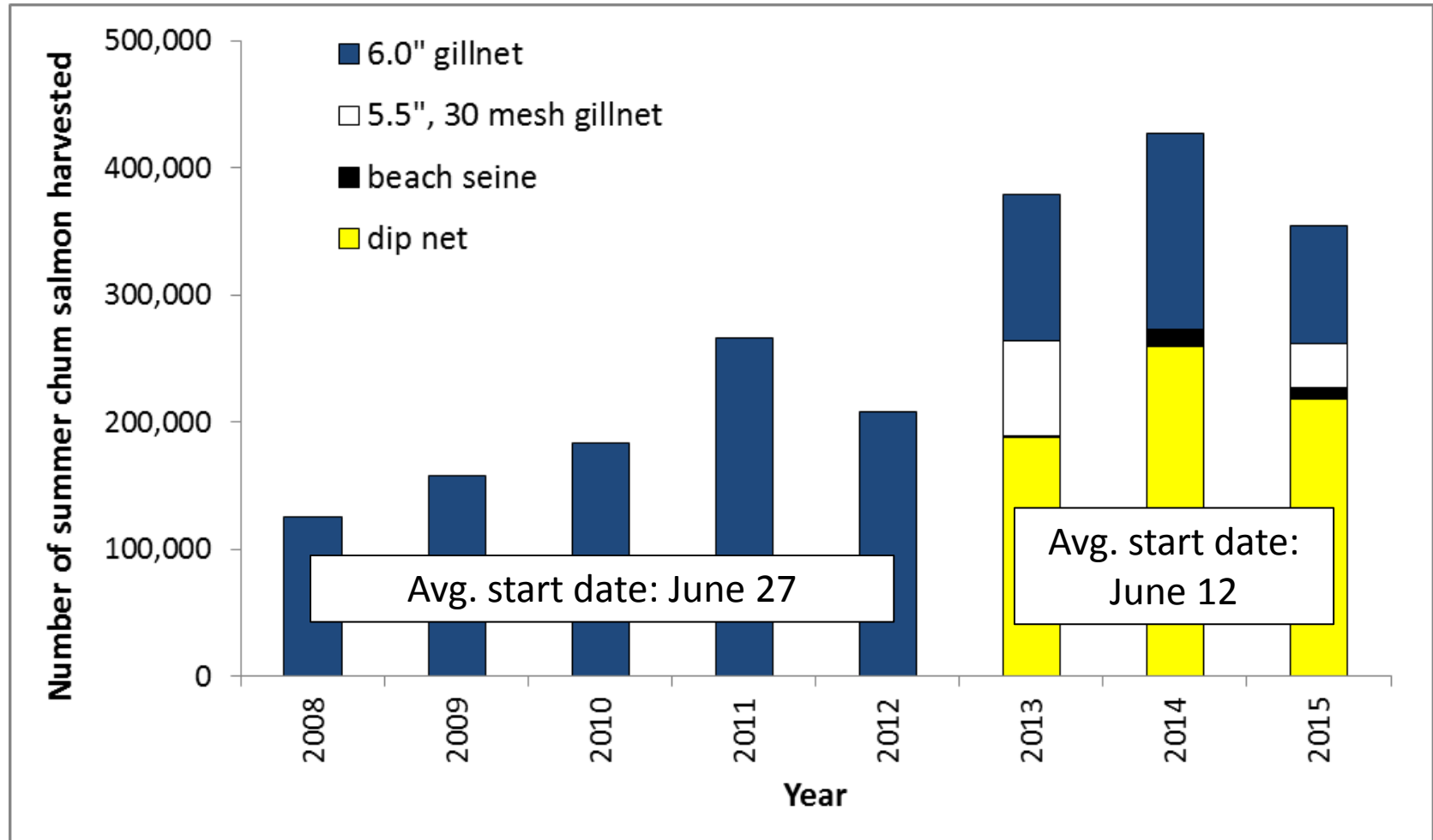
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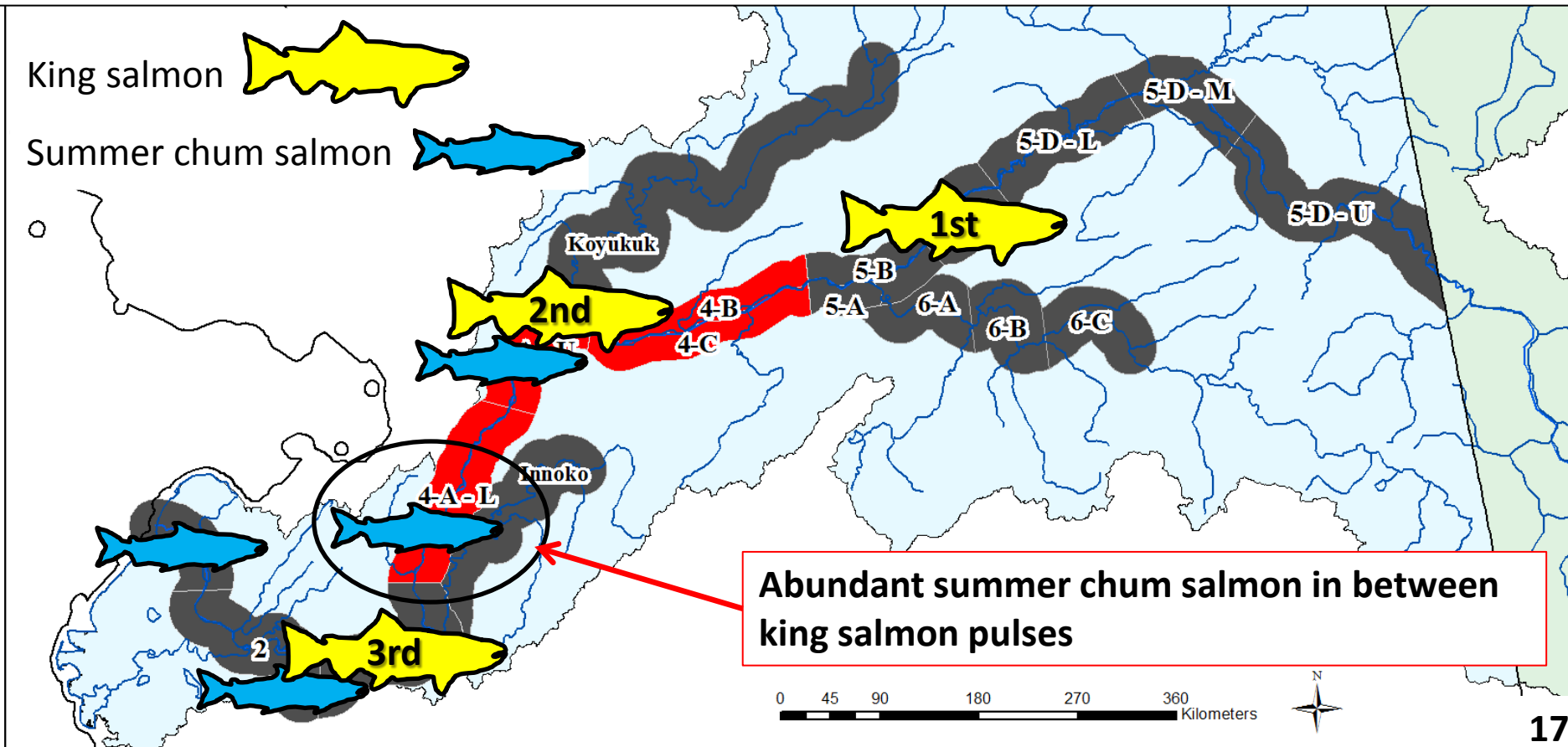
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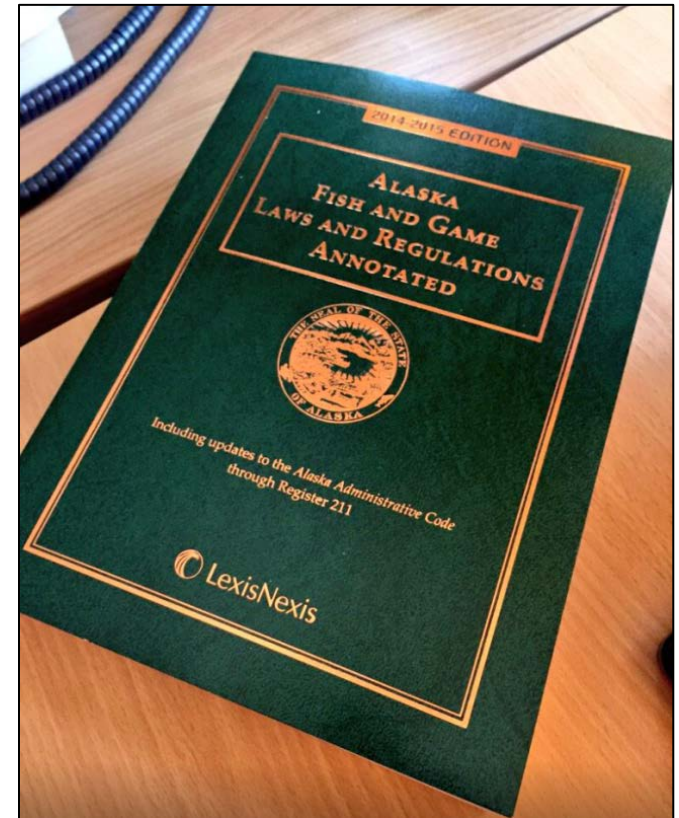


Recent management tools/actions

- Time and area management: “surgical” openings
 - Pulse closures (1st pulse by regulation)
 - Short 6” or smaller mesh size gillnet openings in between king salmon pulses



2016 Yukon Area proposals before the board



2016 proposals: Summer chum salmon management plan

- **Proposal 107**: Close the Yukon River summer chum salmon commercial fishery to protect king salmon
- **Proposals 108 and 109**: Modify the Yukon River Summer Chum Salmon Management Plan triggers



2016 proposals: Selective gear

- **Proposal 117:** Prohibit the use of beach seines
- **Proposals 118 and 123:** Further define beach seine specifications
- **Proposal 119:** Require live-release of king salmon from subsistence beach seines



2016 proposals: Selective gear

- **Proposal 126:** Add purse seine gear as a selective gear type allowed in the summer chum salmon commercial fishery



2016 proposals: General subsistence gear

- **Proposal 112:** Allow all gear used in Yukon Area commercial fisheries to be allowed in Yukon Area subsistence fisheries
- **Proposal 116:** Require fish wheels with live boxes to be manned at all times during times of salmon conservation and specified salmon released immediately



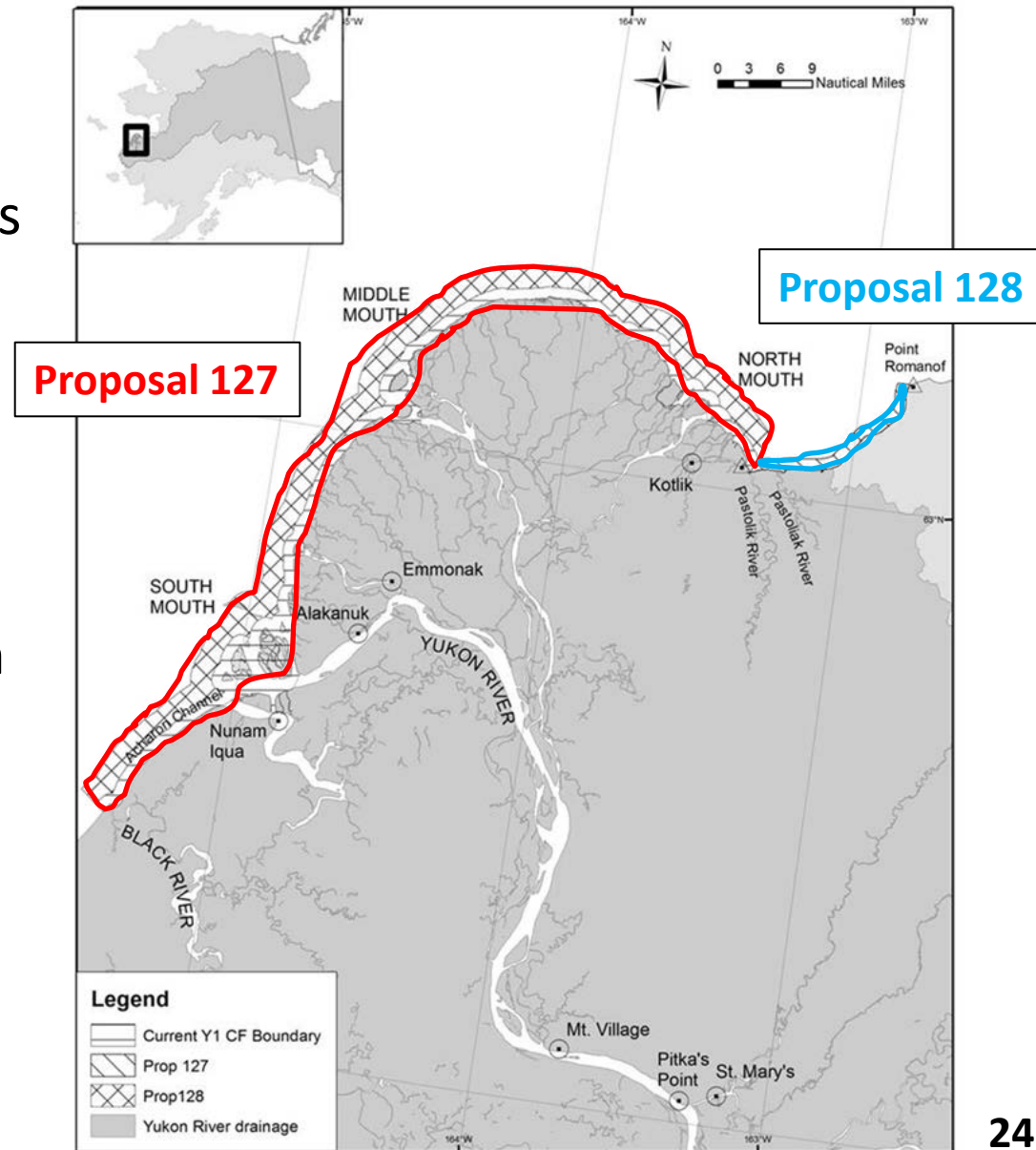
2016 proposals: District 5 fishing opportunity

- **Proposal 114:** Require subsistence salmon fishing permits in Yukon Area District 5 and set permit limits for king salmon during times of king salmon conservation
- **Proposal 115:** Allow king salmon less than 25 inches to be retained from fish-friendly fish wheels in subsistence fisheries



2016 proposals: New commercial fishing areas and species

- **Proposal 125:** Establish gillnet commercial fishery for pink salmon in Districts 1-3
- **Proposals 127 and 128:** Expand the commercial fishing area along the coast/mouth of the Yukon River



Acknowledgements

Yukon Delta Fisheries Development Association

U.S. Fish and Wildlife Service

Yukon River Panel

Yukon River Drainage Fisheries Association

Bering Sea Fishermen's Association

Tanana Chiefs Conference

Association of Village Council Presidents

National Oceanic and Atmospheric Administration

Department of Fisheries and Oceans

