

# A Review of the Bristol Bay Subsistence Fisheries & the Nushagak River Communities



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RC 3, Tab 8 - Oral

Tab 3 – Written



# Purpose of Presentation

- Provide a general overview of the Bristol Bay subsistence fishery
- Provide subsistence information by District
- Provide subsistence harvest & permit data for the Nushagak District
- Provide background on proposals 18-22



# Proposals Related to Subsistence in Bristol Bay

- Proposal 18: Repeal limits to fishing periods in Nushagak District
- Proposal 19: Allow dip nets near Dillingham
- Proposal 20: Allow drift gillnets near Dillingham
- Proposal 21: Allow rod and reel at Six Mile Lake (Nondalton area)
- Proposal 22: Subsistence fishing any time in Egegik District



# Customary and Traditional Use (C&T) and Amounts Necessary for Subsistence (ANS)

## ■ C&T established:

- Naknek/Kvichak (1982) – re-done 2001 for new ANS
- Nushagak District (1987)
- Togiak District (1987)

## ■ ANS:

- 157,000–172,171 salmon
- 55,000–65,000 Kvichak River sockeye salmon
- 250,000 pounds finfish other than salmon
- 4,100–12,700 pound herring spawn on kelp
  - Togiak District only



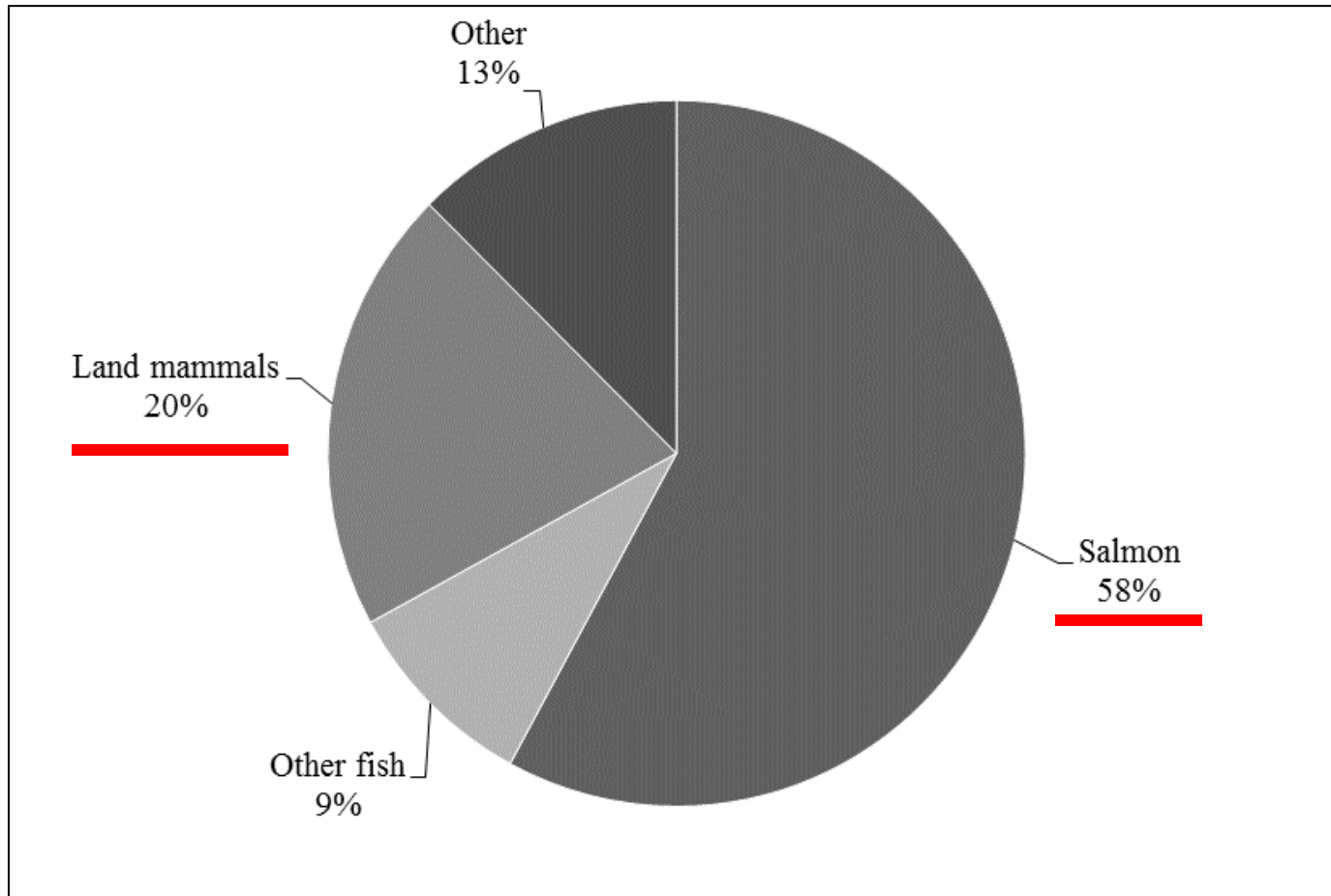
# Research Methods

- Annual subsistence salmon harvest estimates developed from returned subsistence permit harvest reports & community postseason household surveys
- Periodic baseline harvest estimates for home use developed from comprehensive in-person household surveys
- Key respondent interviews & participant observation
- Division of Subsistence research methods provide:
  - quantitative data on harvest estimates, permit information & community harvest assessments
  - qualitative data on local & traditional knowledge
  - spatial data on harvest locations & gear type



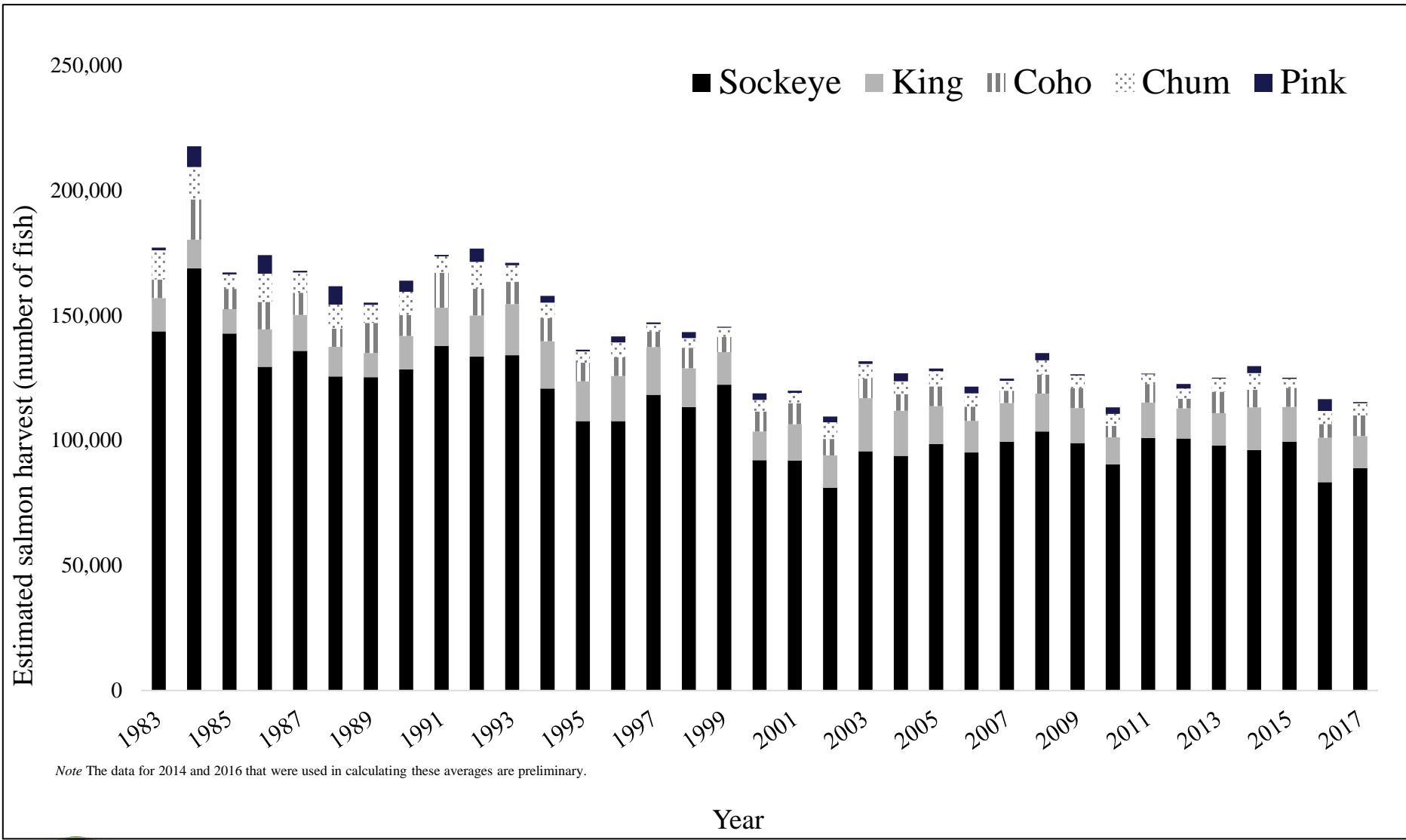
# General Bristol Bay Subsistence Overview

Composition of wild food harvests, Bristol Bay Area, Alaska, 2014





# Estimated subsistence salmon harvest by species, Bristol Bay, Alaska, 1983–2017



## Estimated subsistence salmon harvest Bristol Bay, Alaska, 1985–2017

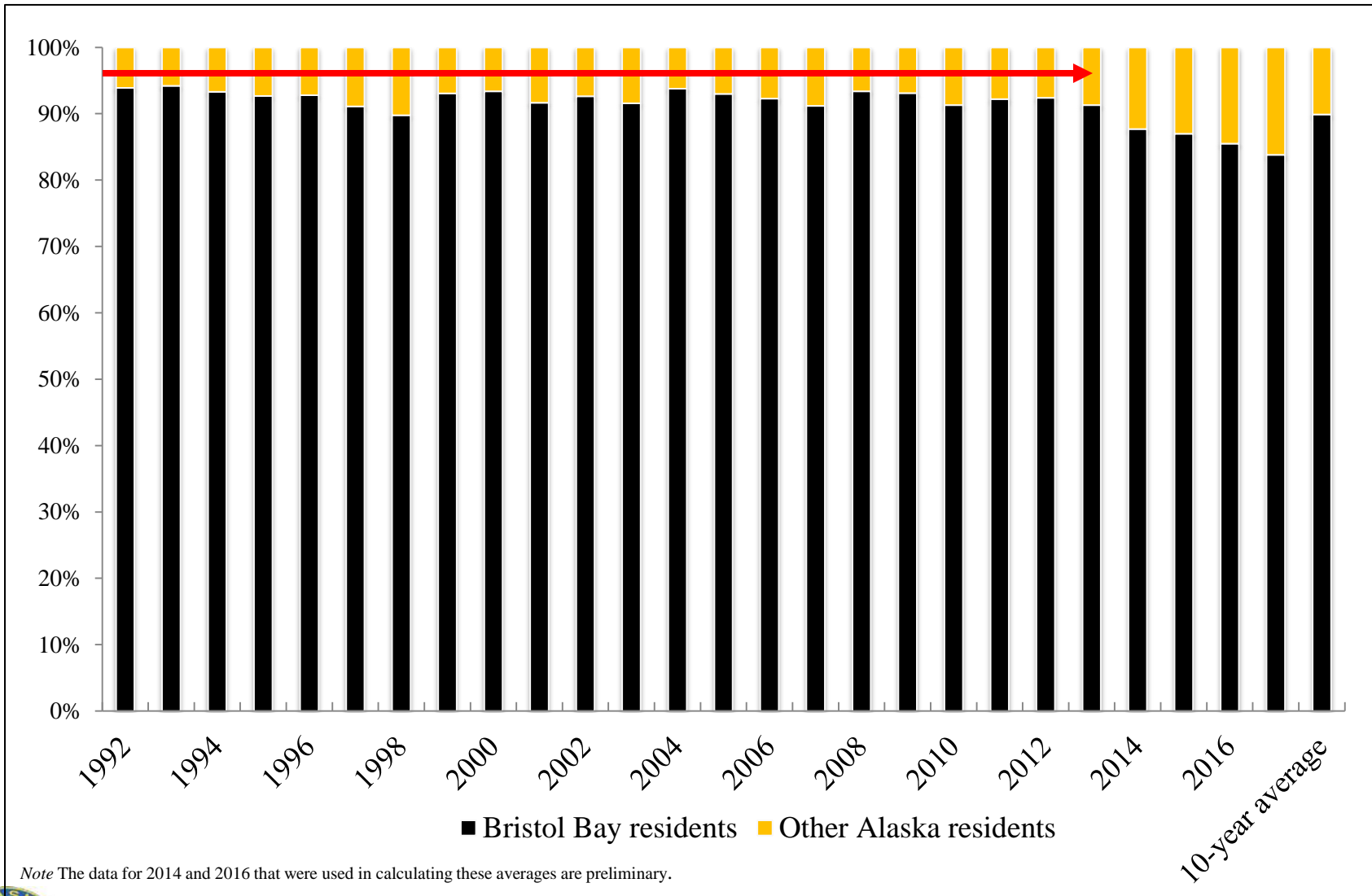
Year	Permits						
	Issued	Sockeye	King	Chum	Pink	Coho	Total
<b>Total Bristol Bay area</b>							
2017	1,103	88,903	12,880	4,821	498	8,291	115,394
5-year average (2013–2017)	1,143	93,761	14,958	5,097	1,744	7,796	123,356
10-year average (2008–2017)	1,127	96,353	14,106	4,874	1,685	7,054	124,071
Historical Average (1985–2017)	1,116	109,318	14,840	5,860	2,105	7,977	140,100

*Note Harvests are extrapolated for all permits issued, based on those returned. Harvests prior to 1985 are rounded to the nearest hundred fish. Permit and harvest estimates prior to 1989 are based on the community where the permit was issued; estimates from 1989 to the present are based on the area fished, as first recorded on the permit. The data for 2014 and 2016 that were used in calculating these averages are preliminary.*

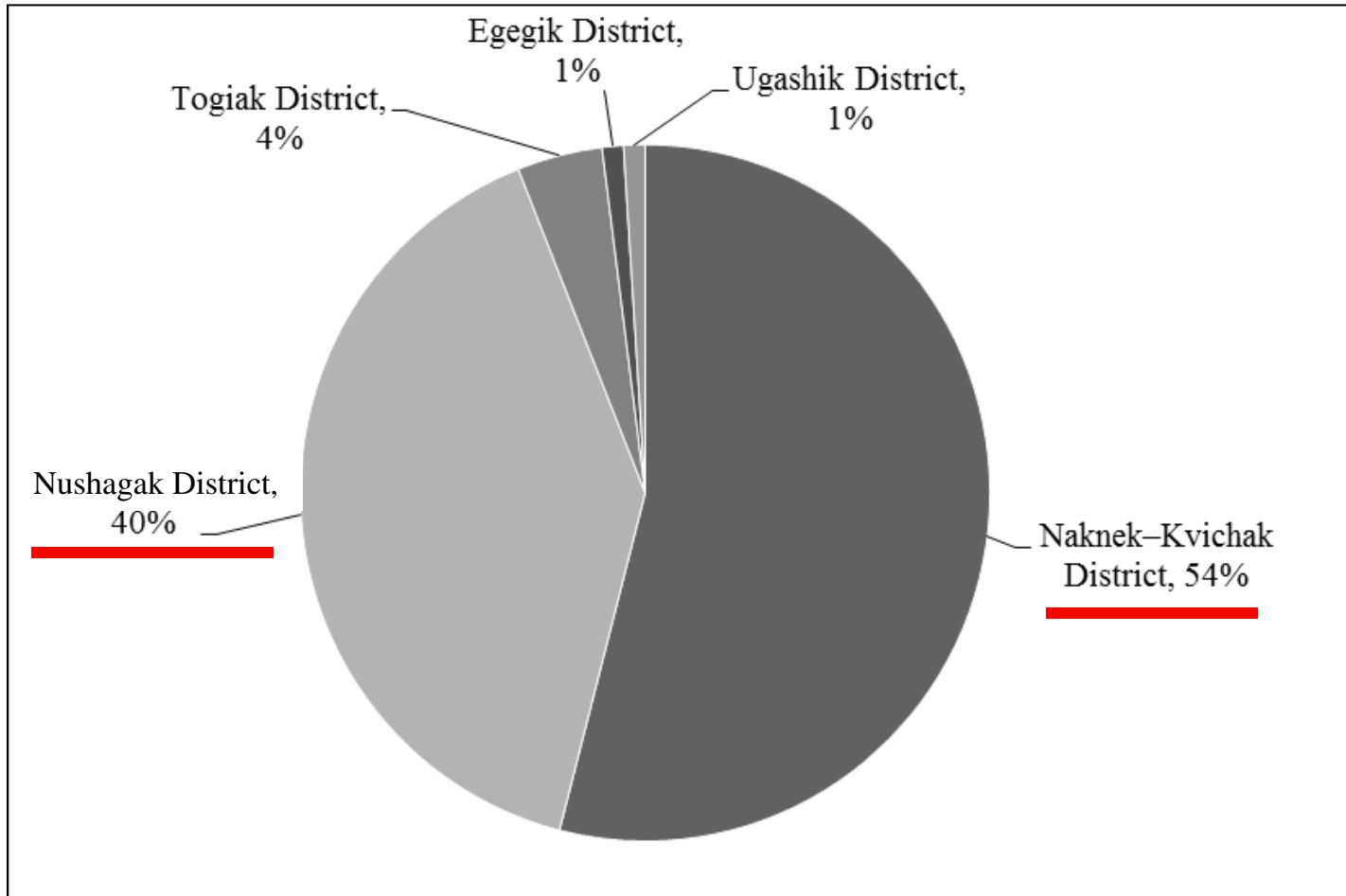




# Percentage of Bristol Bay subsistence salmon permits issued by area of residence of permit holder, 1992–2017



# Comparison of Bristol Bay subsistence salmon harvest by district, 2008–2017



## 10-year average subsistence salmon harvest by district, Bristol Bay Area, Alaska, 2008–2017

District	Permits issued	Average salmon harvest					Total	Salmon per permit
		King	Sockeye	Coho	Chum	Pink		
Naknek–Kvichak District	463	627	64,214	742	262	328	66,174	143
Nushagak District <sup>a</sup>	554	12,501	26,208	5,185	3,953	1,177	49,024	88
Togiak District	61	930	3,276	469	532	93	5,300	87
Egegik District	34	84	1,282	266	22	5	1,660	49
Ugashik District	17	39	830	171	10	6	1,056	62
<b>Total Bristol Bay Area</b>	<b>1,128</b>	<b>14,182</b>	<b>95,811</b>	<b>6,833</b>	<b>4,778</b>	<b>1,610</b>	<b>123,214</b>	109

Source ADF&G Division of Subsistence, Bristol Bay subsistence salmon permit database.

Note <sup>a</sup>The data for 2014 and 2016 that were used in calculating these averages are preliminary.



# Chinook (king) Salmon Research Initiative (CSRI): Nushagak River

- **Purpose:** assess Chinook salmon dynamics and declines, with a recognition that these declines have caused, “social and economic hardships across many communities in rural and urban Alaska”<sup>1</sup>
- **Method:** document local and traditional knowledge (LTK) of Nushagak River Chinook salmon stock, and “improvements to the existing subsistence harvest monitoring and assessment program”<sup>2</sup>



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<sup>1</sup>ADF&G Chinook Salmon Research Team 2013:1

<sup>2</sup>ADF&G Chinook Salmon Research Team 2013:35



# CSRI: Nushagak River Chinook Salmon Project

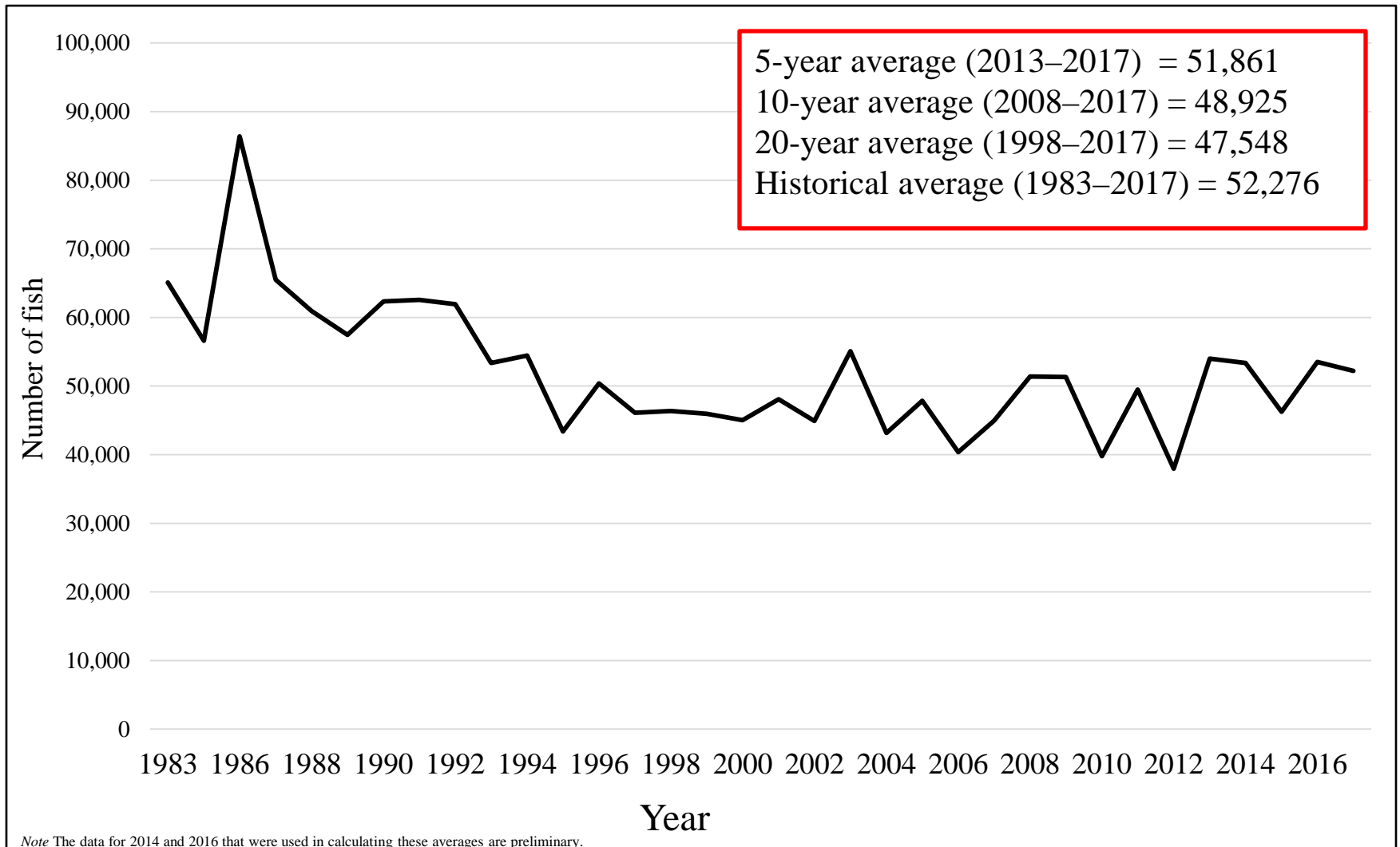


## Communities and Years of Study:

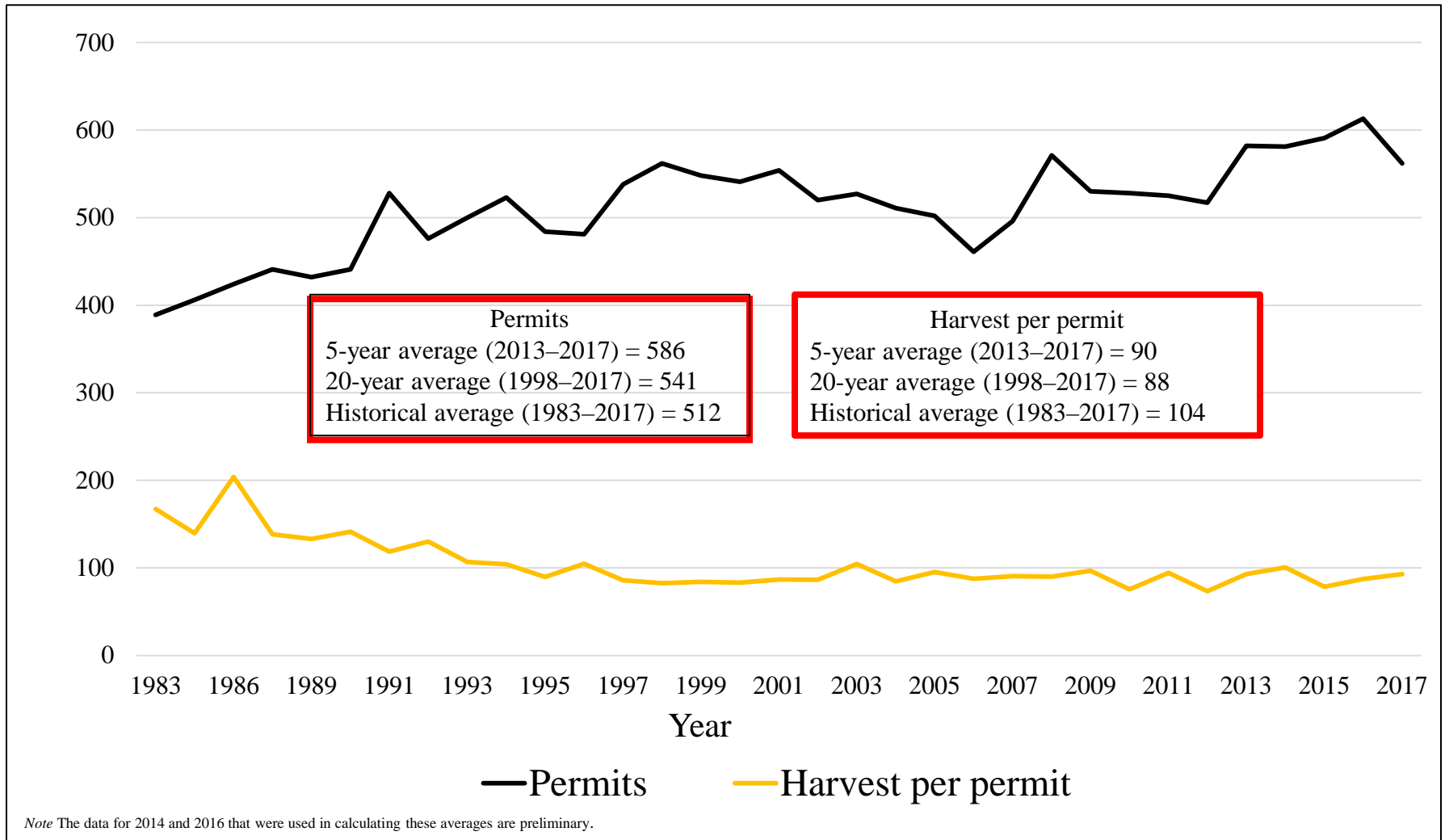
- 2013, 2016: Clarks Point, Ekwok, New Stuyahok, Koliganek
- 2014: all of the above, including Dillingham
- 2016: Dillingham



# Estimated subsistence harvests of salmon, Nushagak District, Alaska, 1983–2017

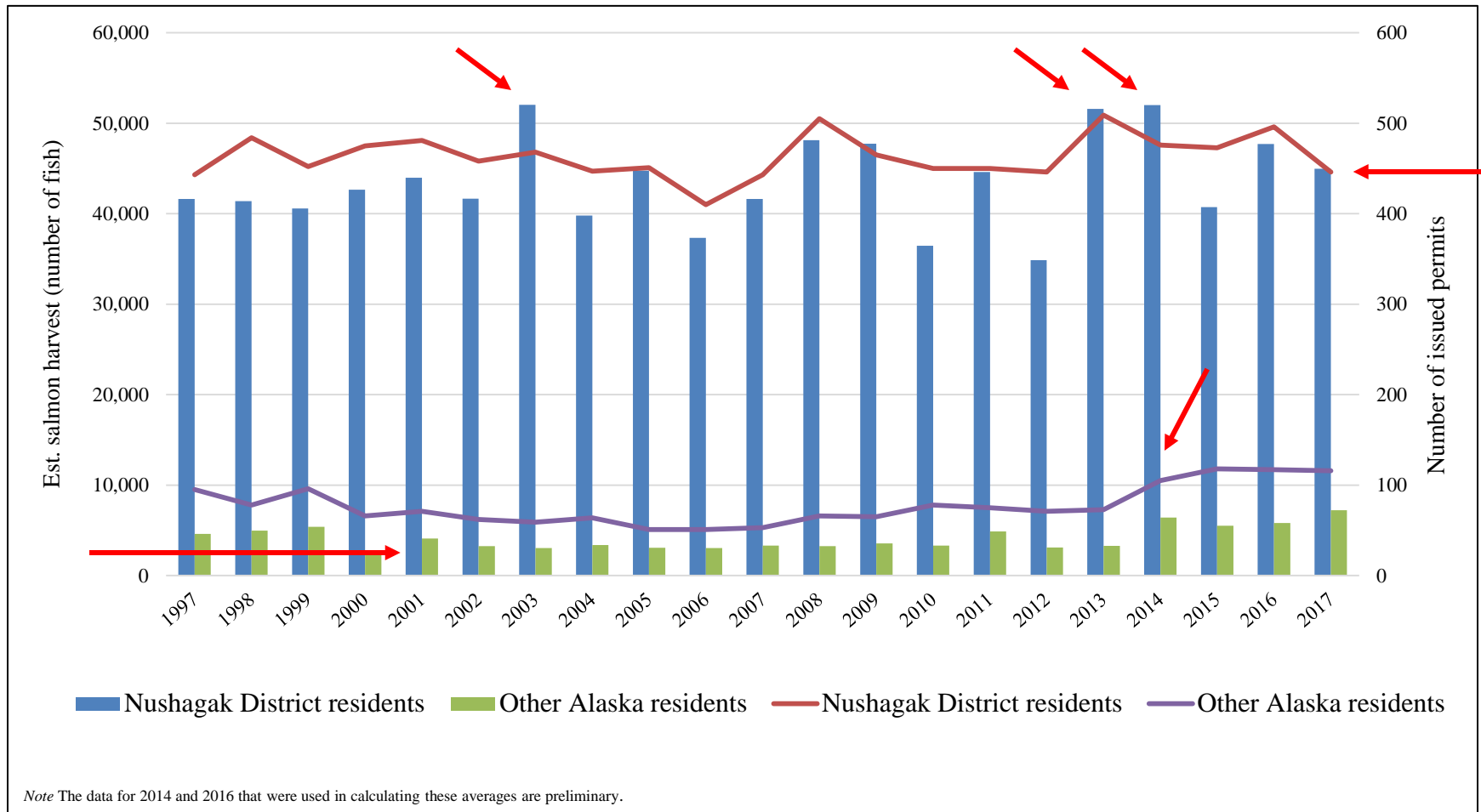


# Number of permits issued and harvest per permit in the Nushagak District, Alaska, 1983–2017

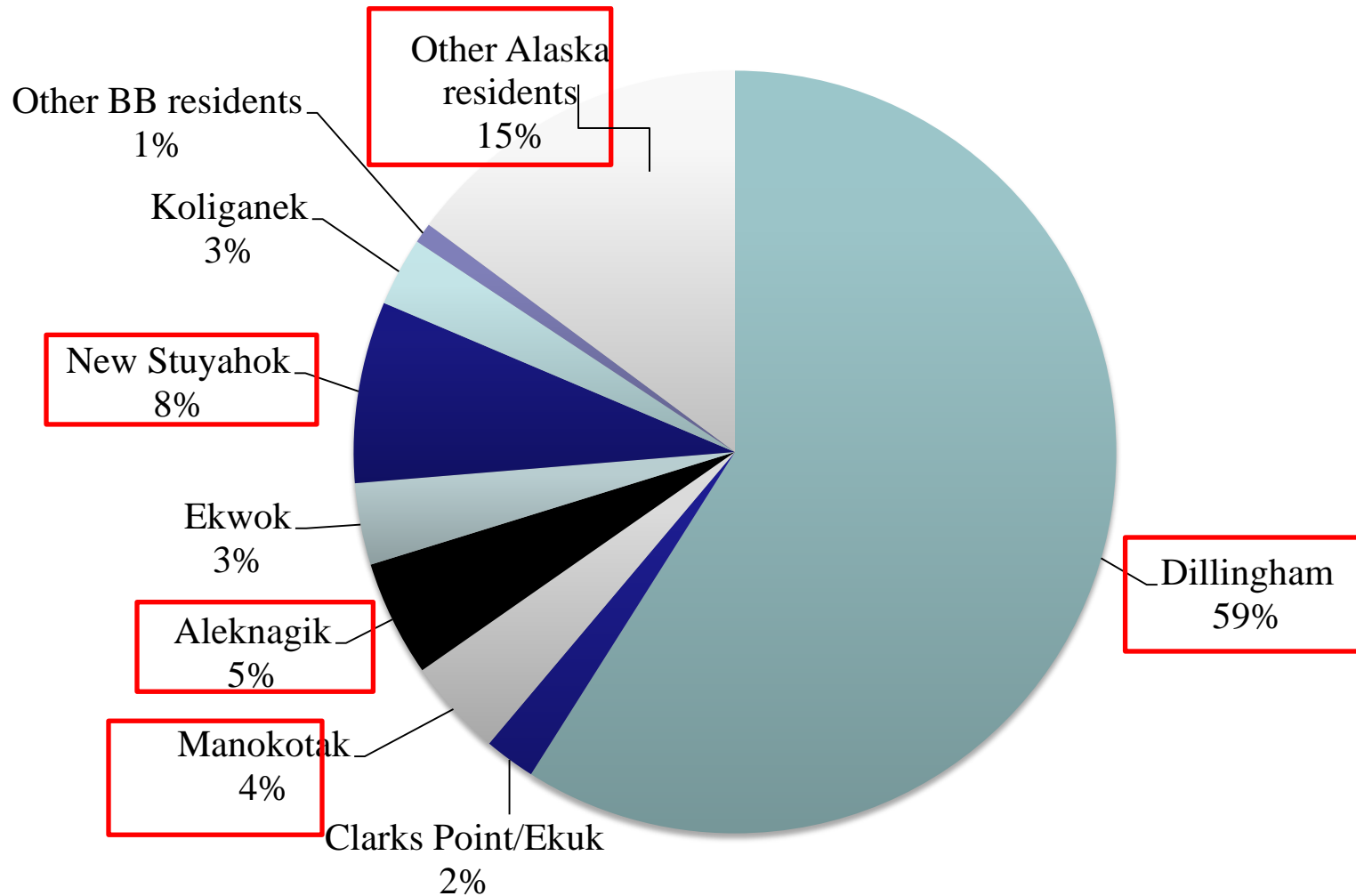




# Estimated salmon harvests by Nushagak District community residents and nonlocal residents, and number of issued permits, 1997–2017



# Nushagak District issued permits by community 10-year average (2008–2017)





## Nushagak Bay Area Subsistence Fishing Regulations



**10 fathom set gillnet**  
Area open to subsistence fishing during three 24-hour periods per week between July 2 and July 17.



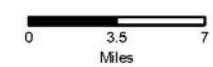
**25 fathom set gillnet**  
Area open to subsistence fishing during three 24-hour periods per week between July 2 and July 17.



**Area open to commercial fishing**  
June 1 - September 30  
Open to subsistence fishing during all open commercial periods. Open during periods of extended commercial closure by emergency order.

May 1 - May 31 and  
October 1 - October 31  
Open to subsistence fishing by emergency order Monday 9 AM through Friday 9 AM.

For full Bristol Bay Area subsistence fishing regulations see Title 5, Chapter 01, Article 6 of the Alaska Administrative Code.



# Summary

- More information contained in written report RC 3, Tab 3
- Technical Report for the Nushagak CSRI project is forthcoming in early 2019
  - Data considered preliminary
- All communities involved in the research had data review meetings in the Spring 2018



# Acknowledgements

- Residents, Tribal Councils, and Cities of the following communities:
  - Clarks Point, Dillingham, Ekwok, New Stuyahok, Koliganek
- Ted Krieg, Division of Subsistence (retired) in Dillingham
- Division of Subsistence
- Division of Commercial Fisheries
- Division of Sport Fish
- Boards Support



Questions?

