# An Ethnographic Overview of the Kuskokwim River King Salmon Subsistence Fishery

A report to the Alaska Board of Fisheries

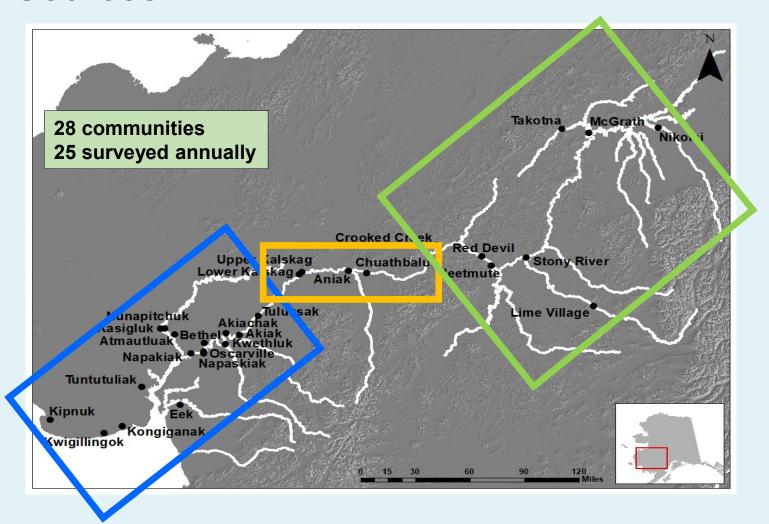
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January 2023

RC 3: Oral Reports, tab 13

#### **Data Sources**





#### Regional Differences in the Fishery, lower river

#### Lower

- 88% of population in 16 communities, Bethel (~6,150)
- 1,500 fishing households, 88% of Kuskokwim salmon harvest
- Large, low gradient, tidal river
- Drift and set gillnets
- First opportunity on all species



## Regional Differences in the Fishery, middle river

#### Middle

- 7% of population in 4 communities, including Aniak (~500 people)
- 170 fishing households, 9% of harvest
- Narrower river with fewer channels
- Gillnets, fish wheels, rod and reel
- Lower abundance of salmon



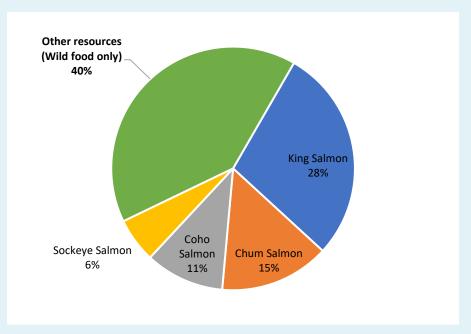
#### Regional Differences in the Fishery, upper river

#### **Upper**

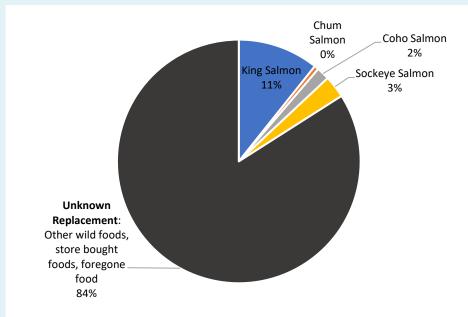
- 5% of population in 8 communities, including McGrath (~300 people)
- 115 fishing households, 3% of harvest
- Set gillnets, fish wheels, rod and reel
- Late season king, no sockeye upstream of Stony River



## Composition of wild food harvests, middle river

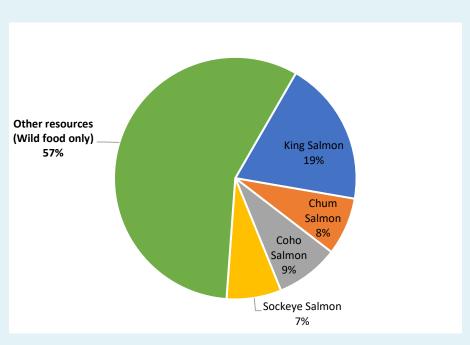


Middle Kuskokwim River Communities (Study Year 2009)

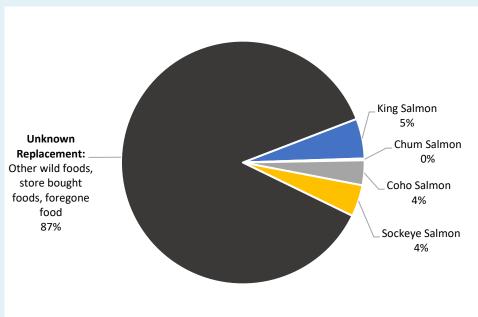


Middle Kuskokwim River Communities (2021)

#### Composition of wild food harvests, upper river

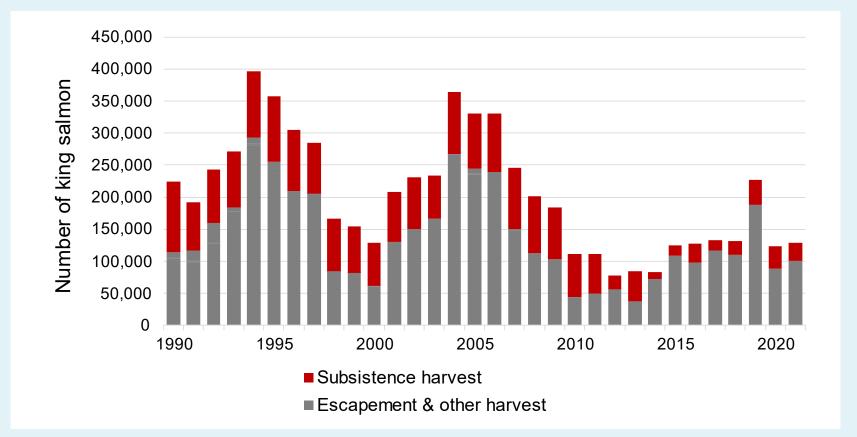


Upper Kuskokwim Communities (Study Years 2009 & 2012)

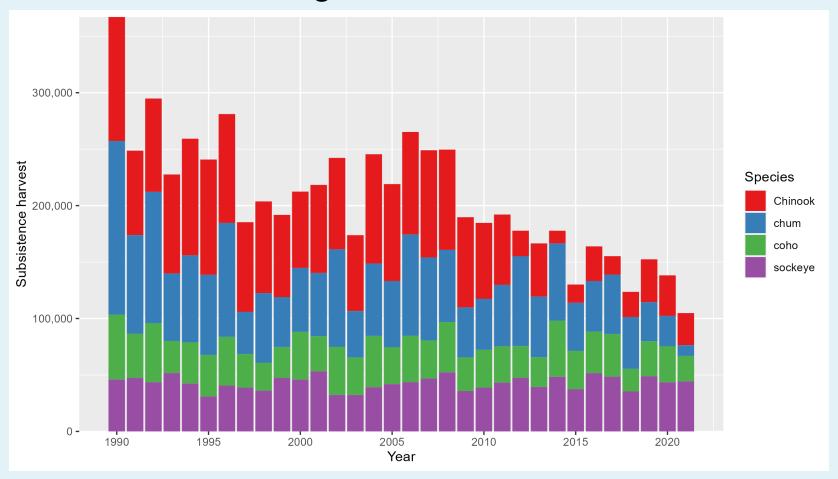


Upper Kuskokwim Communities (2021)

# Kuskokwim River King Salmon Run Size and Total Subsistence Harvest, 1990-2021



# Subsistence Salmon Harvest by Species, Kuskokwim Drainage



#### Changes to the Kuskokwim Subsistence Salmon Fishery

- King salmon conservation measures make it more difficult to catch chum and sockeye salmon
- Adapting to infrequent and short openers, derby atmosphere, travel away from traditional fishing areas
- Processing changes, disruptions to transmission of knowledge
- Dipnets becoming a popular gear (proposal 97)
- Multispecies declines



#### **Current Work**

- Title: Traditional Ecological Knowledge of Salmon in the Lower Kuskokwim River
- Communities: Napakiak, Nunapitchuk, Kasigluk, Tuntutuliak, and Eek
- Purpose: Document 1) contemporary and historical fishing methods and areas,
   2) adaptations to increased restrictions,
   3) socioeconomic and cultural impacts of salmon restrictions and
   4) improve dialog and relationships between lower Kuskokwim communities and the Department







## Current Work, continued

- Title: Natural Indicators of Salmon in the Upper Kuskokwim River
- Communities: McGrath, Takotna, Nikolai
- Purpose: Document traditional ecological knowledge of natural indicators of salmon presence and abundance. Map salmon habitat.







#### **Current Work Continued**

- **Title:** Use and Harvest of Salmon in the Lower Kuskokwim Tributaries of the Johnson, Gweek, Kialik rivers and Paillek slough
- Communities: Napakiak, Tuntutuliak, Eek (tentative)
- **Purpose:** Quantify and contextualize salmon harvest within lower river tributaries when salmon harvest is closed in the mainstem.







## Acknowledgements







