Arctic-Yukon-Kuskokwim Region 2025 Escapement Goal Review: A Report to the Alaska Board of Fisheries

Presented by:

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&

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Written Report: RC 3 Tab 1
Oral Report: RC 3 Tab 5

Presentation Objectives

- Introduce escapement goal policies
- Explain the review process
- Orientation to Arctic-Yukon-Kuskokwim escapement goals
- Summarize findings

Escapement Goal Policies

- Policy for the Management of Sustainable Salmon Fisheries

  (5 AAC 39.222)

- Policy for Statewide Salmon Escapement Goals

  (5 AAC 39.223)

- Goals are adopted to ensure salmon stocks are conserved, managed, and developed using the sustained yield principle

Pacific Salmon Treaty – Yukon River Salmon Agreement

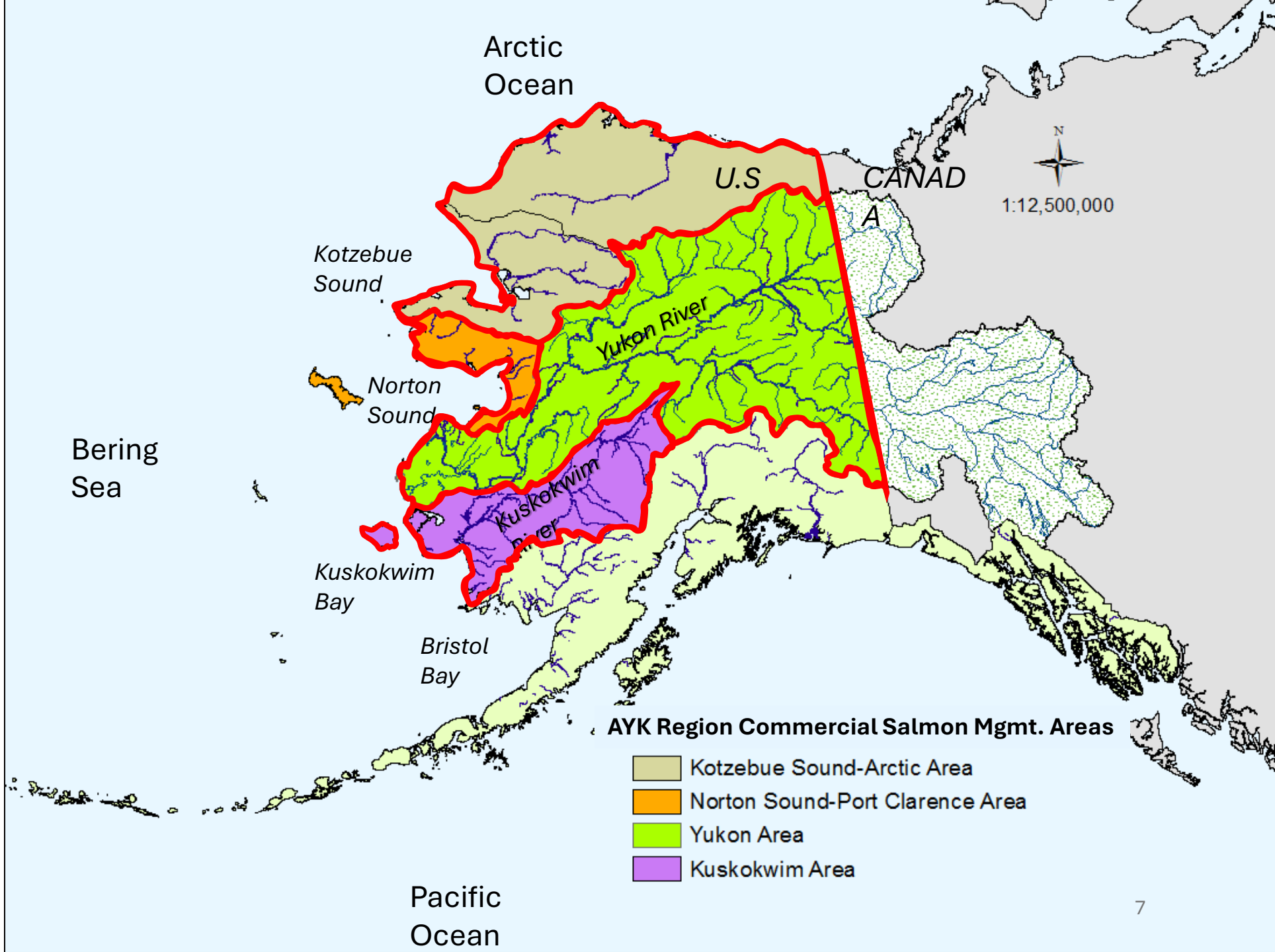
- Bilateral U.S./Canada Yukon River Panel recommends escapement goals to ADF&G for Canadian origin king and fall chum salmon

Escapement Goal Terms

1) Biological Escapement Goal (BEG):
   - Escapement that provides the greatest potential for maximum sustained yield – expressed as a range based on productivity and data uncertainty
2) Sustainable Escapement Goal (SEG):
   - Escapement that is known to provide for sustained yield over a 5- to10-year period – accounts for data uncertainty
3) Optimal Escapement Goal (OEG):
   - A management objective that considers biological and allocative factors
     - may differ from the SEG or BEG
     - adopted as a regulation by the Board

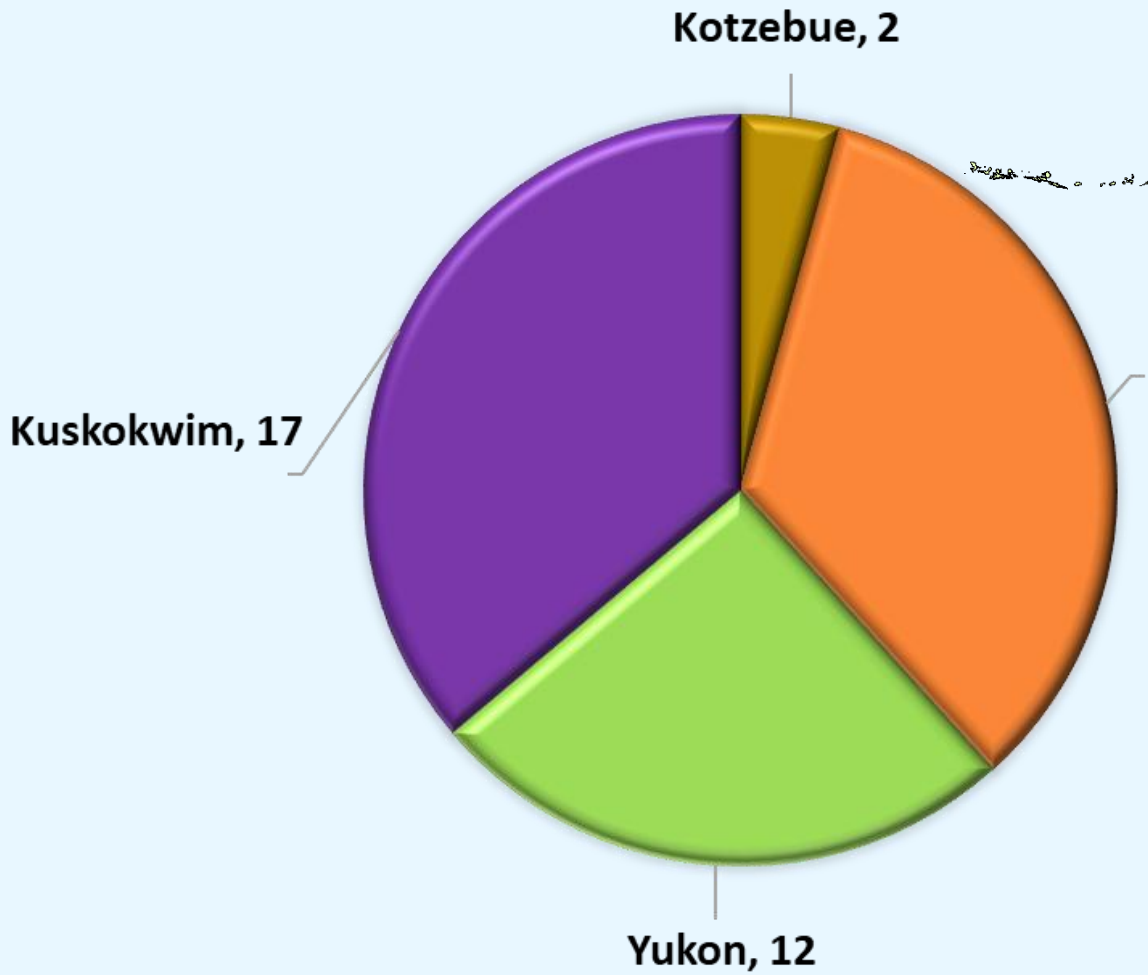
AYK Escapement Goal Review Process

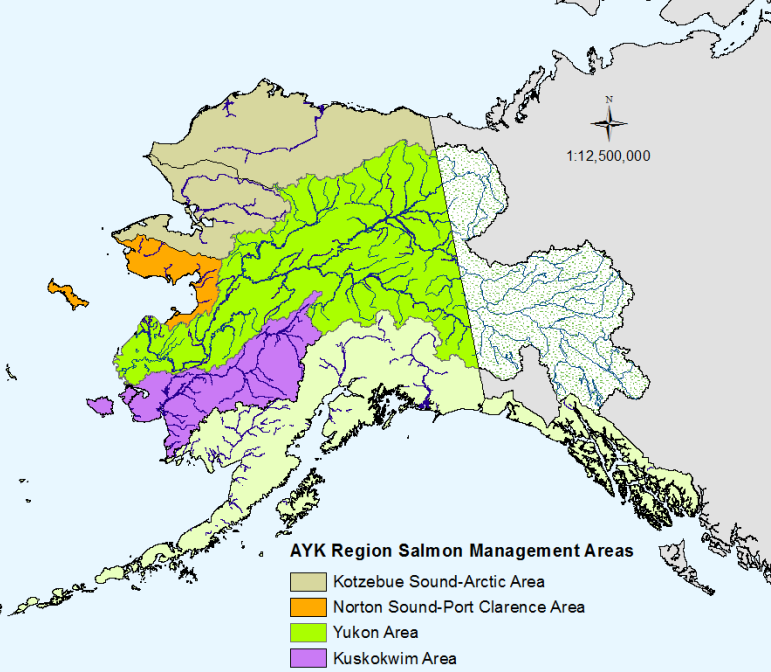
4 Management Areas



Orientation to AYK Escapement Goals

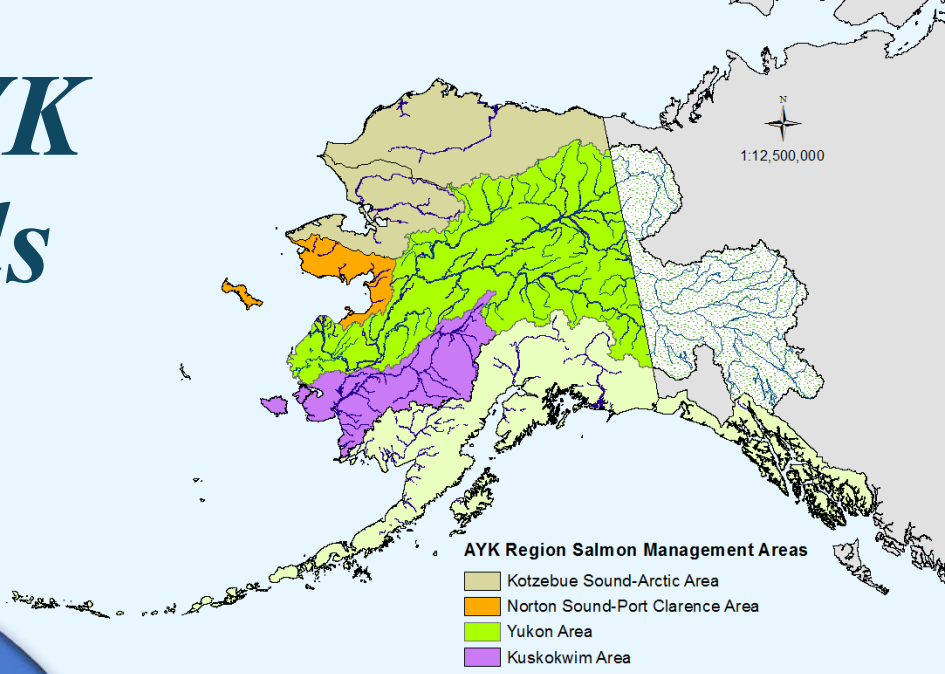
Currently
47 Goals

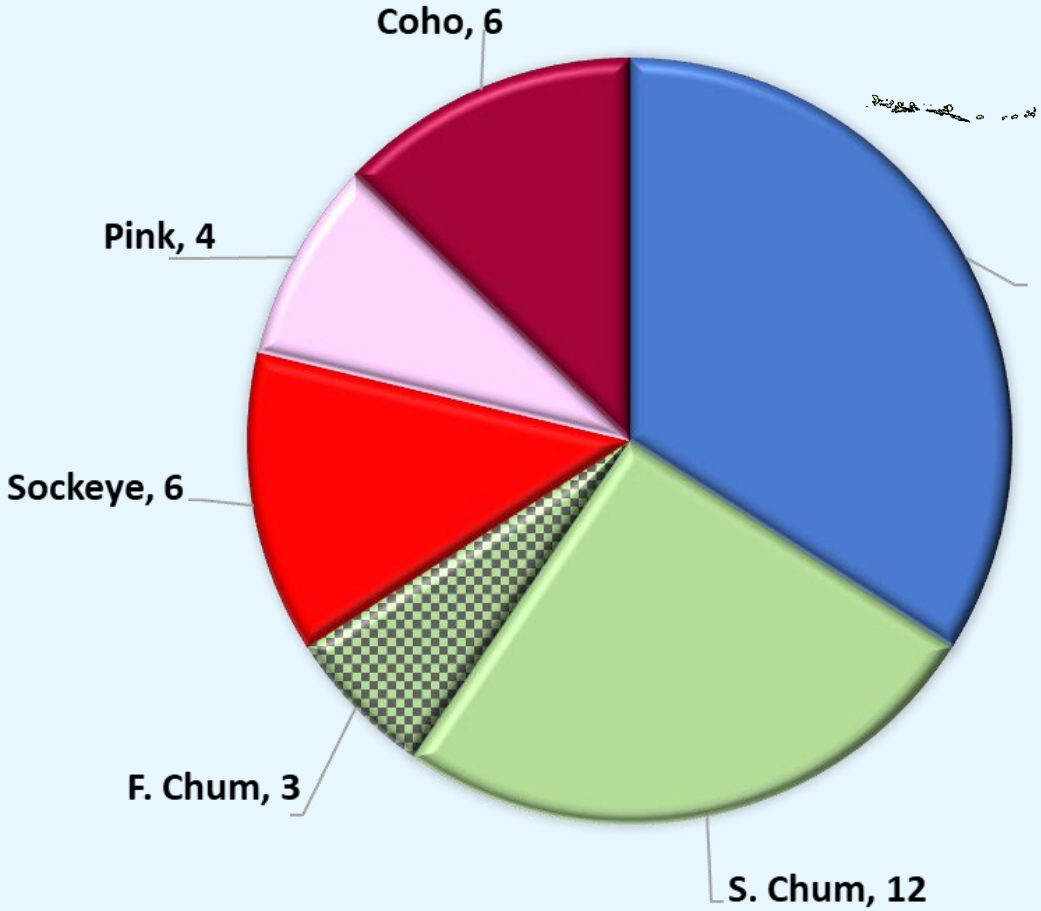




Goals est. for all 5 species of salmon

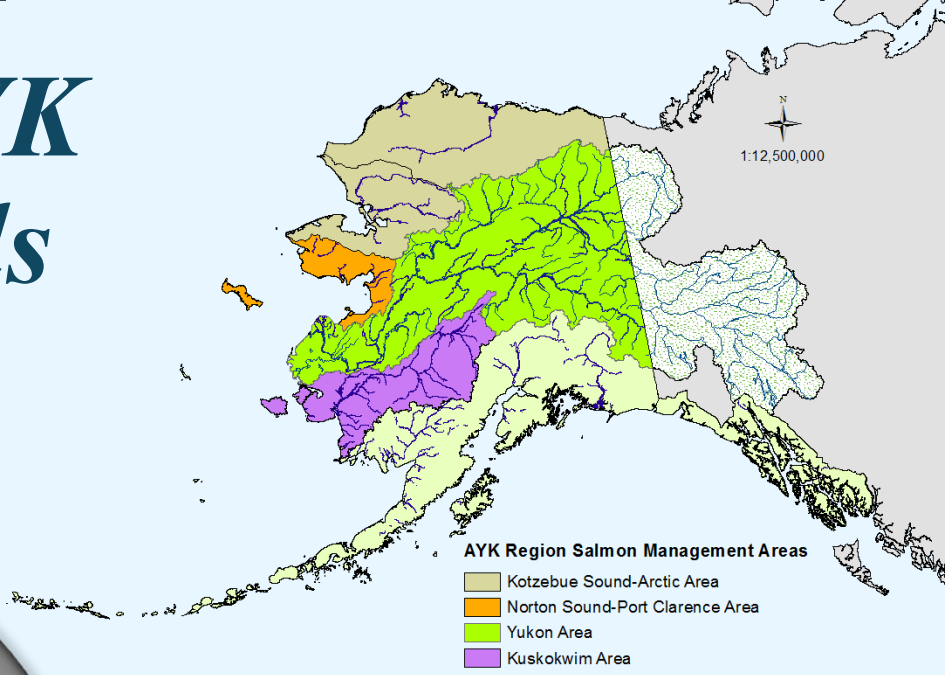
Orientation to AYK Escapement Goals

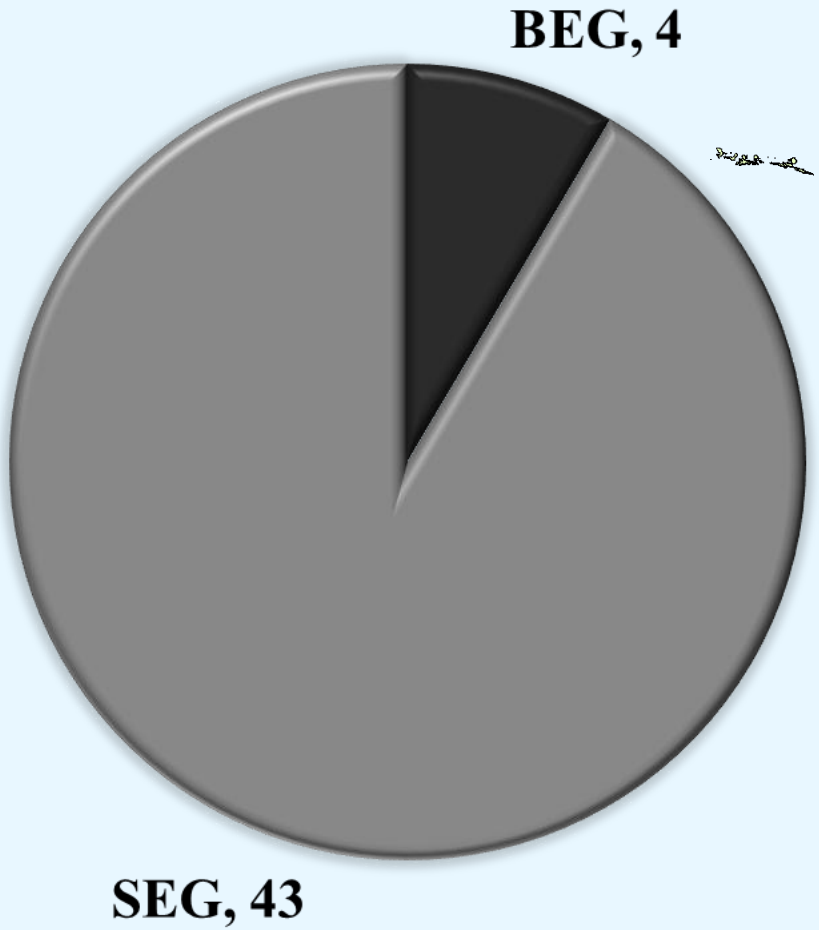




Orientation to AYK Escapement Goals

SEGs predominate throughout the region

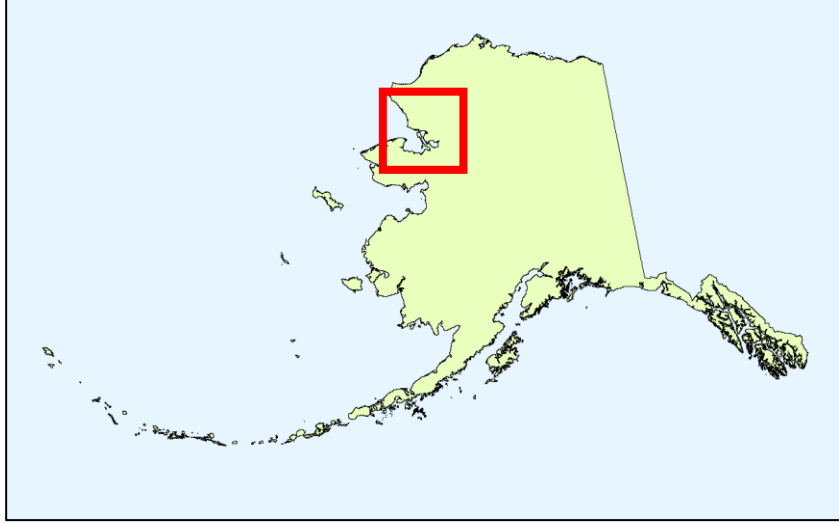




Summary of 2025 Escapement Goal Decisions for the AYK Region

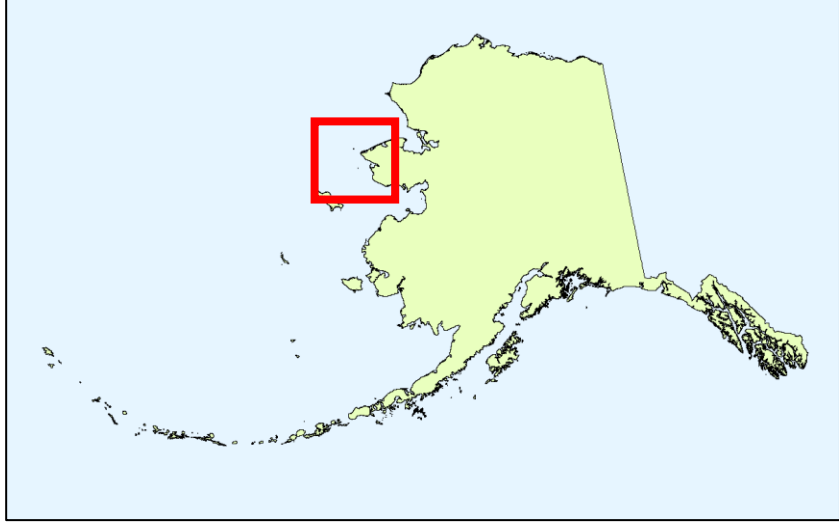
- 40 of the 47 total goals continued with no change
- Revising two goals is warranted
- Discontinuing five goals is warranted
- New escapement goals are not warranted
- Escapement goal changes have no implications on existing management plans

Kotzebue District



- No changes to existing escapement goals

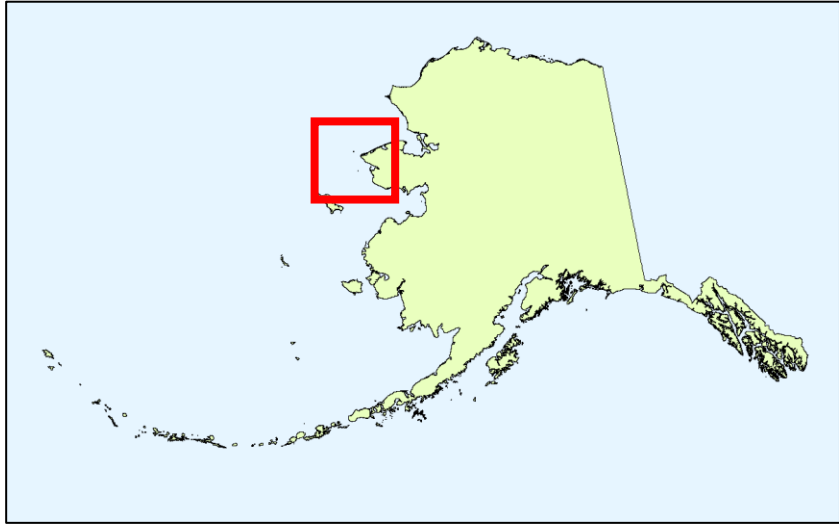
Port Clarence District



- Revise the Pilgrim River (Sockeye Lake)
  - From: weir-based SEG of 6,800 – 36,000
  - To: weir-based lower bound SEG of ≥6,400

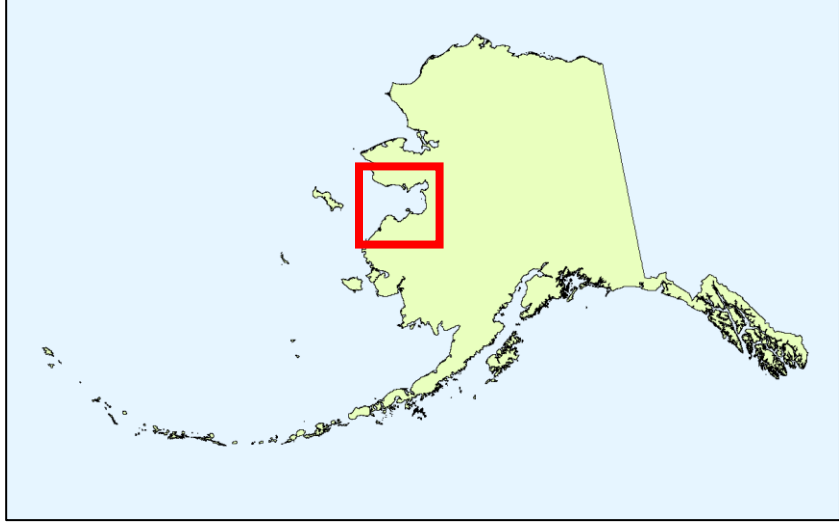
Port Clarence District

Pilgrim River (Salmon Lake)



- Small stock at northern extent of range
- Fertilized annually since 1997
- Supports a modest subsistence fishery
- No commercial interest
- Upper end of existing SEG range doesn't support sustained yields and is not used to make management decisions
- Revised lower-bound SEG of ≥6,400 provides a high probability of achieving maximum sustained yield and aligns with management focus on providing maximum opportunity for subsistence

Norton Sound District



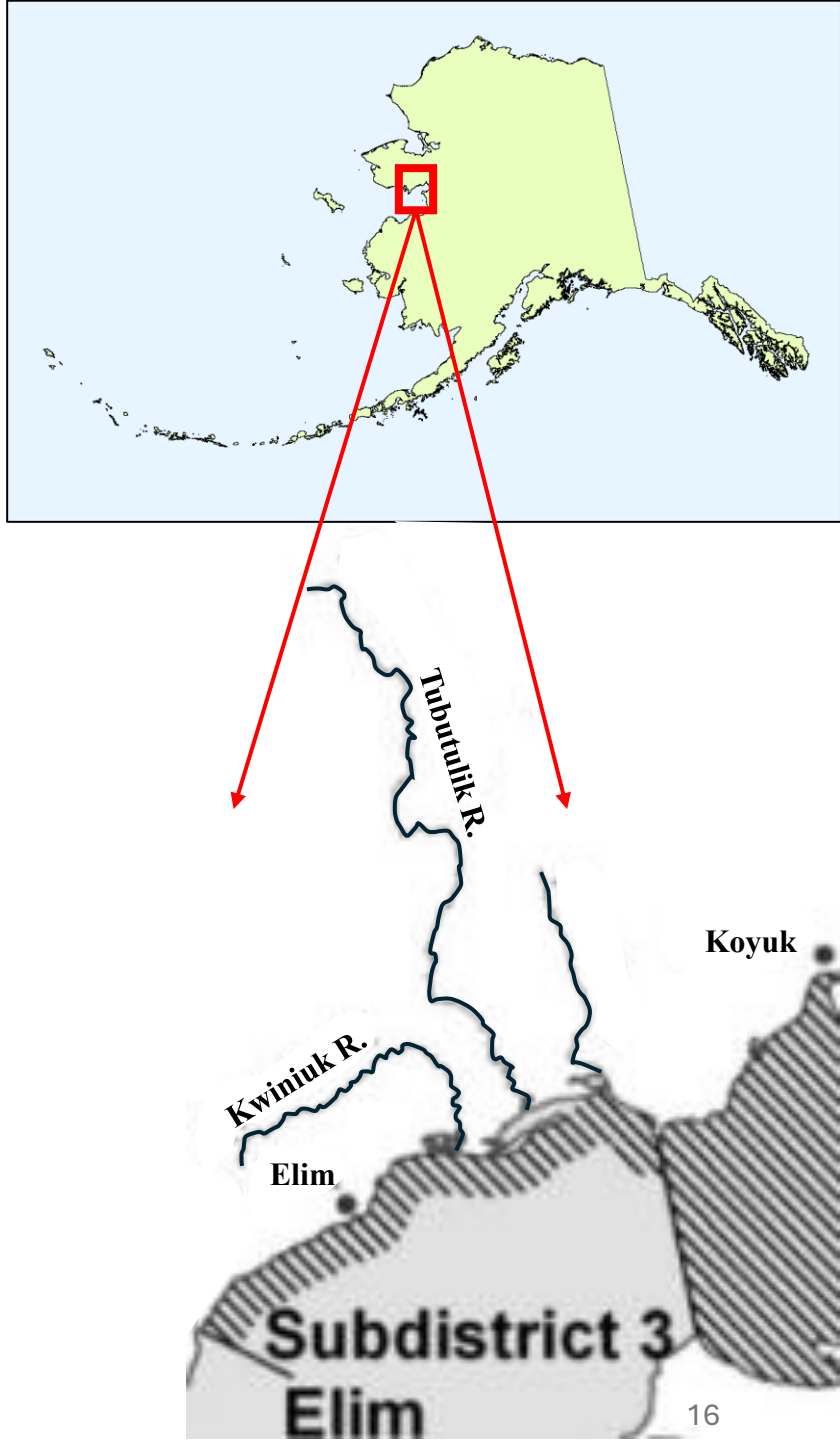
- Discontinue the Tubutulik River chum salmon aerial survey SEG of 3,100 – 9,000, due to an inability to reliably assess the goal

- Revise the Kwiniuk River coho salmon goal
  - from an aerial survey-based SEG of 650 – 1,300
  - to a tower-based lower bound threshold of ≥4,400

Norton Sound District

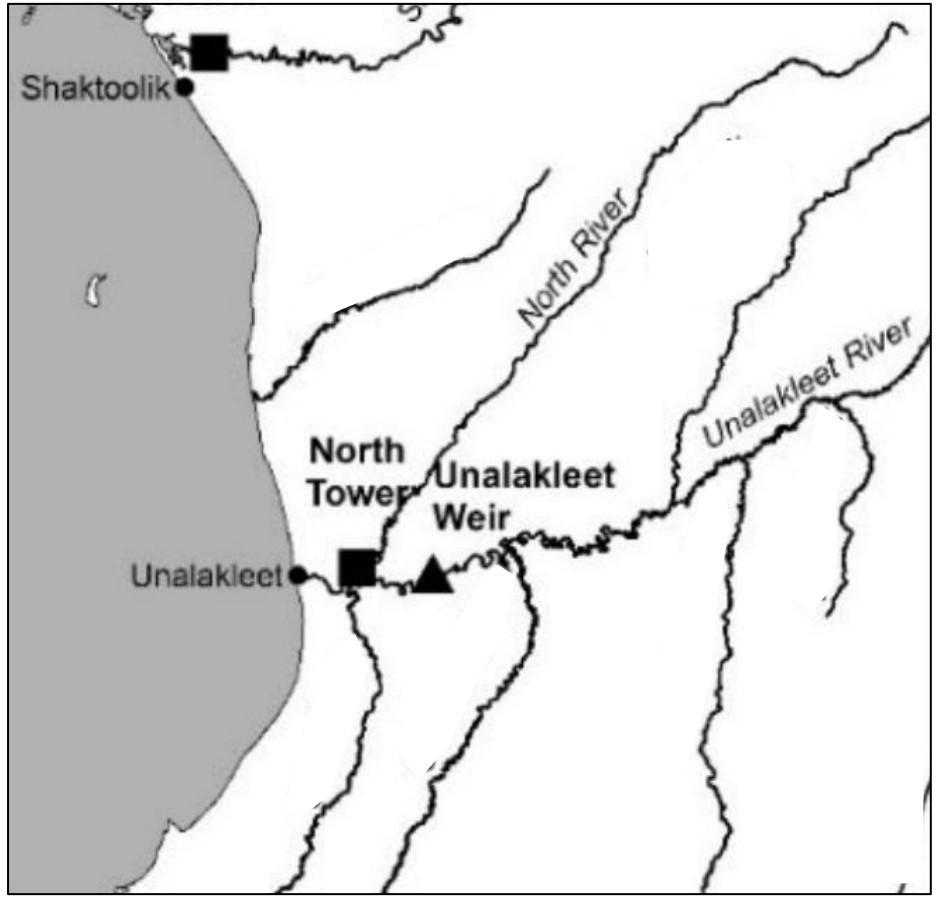
Subdistrict 3 Tubutulik and Kwiniuk rivers

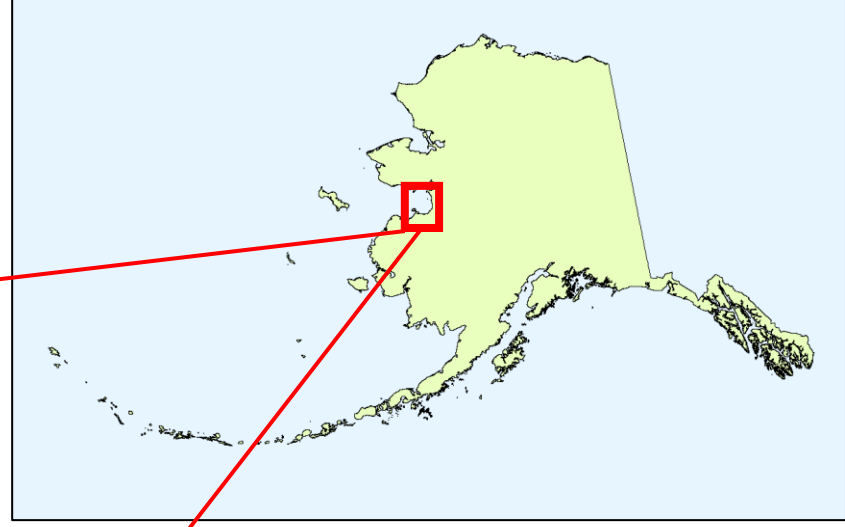
- Tubutulik R. chum and Kwiniuk R. coho SEGs are not often assessed
- Management has evolved to rely on escapement data from the Kwiniuk River counting tower
- Discontinue Tubutulik R. SEG in lieu of the existing Kwiniuk Tower SEG of 9,100 – 32,600
- Revise Kwiniuk R. aerial survey SEG to a tower-based lower bound threshold of ≥4,400

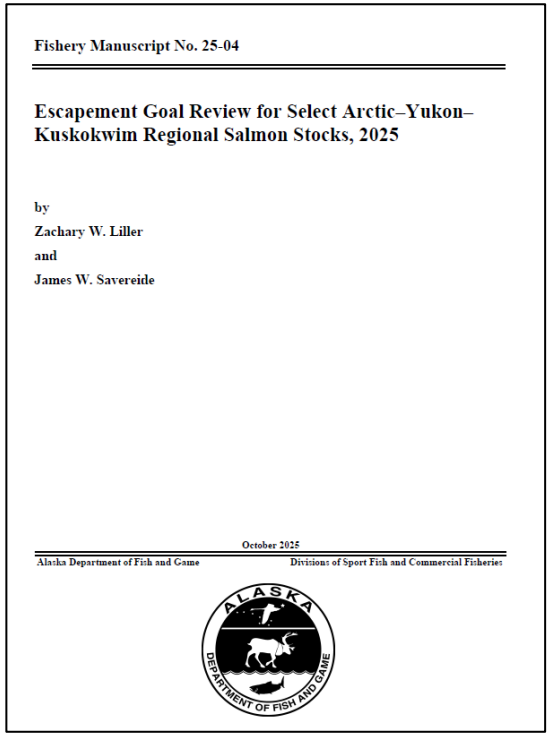


Norton Sound District

Subdistrict 6 Unalakleet River king salmon







Fishery Manuscript No. 25-04

Escapement Goal Review for Select Arctic–Yukon–Kuskokwim Regional Salmon Stocks, 2025

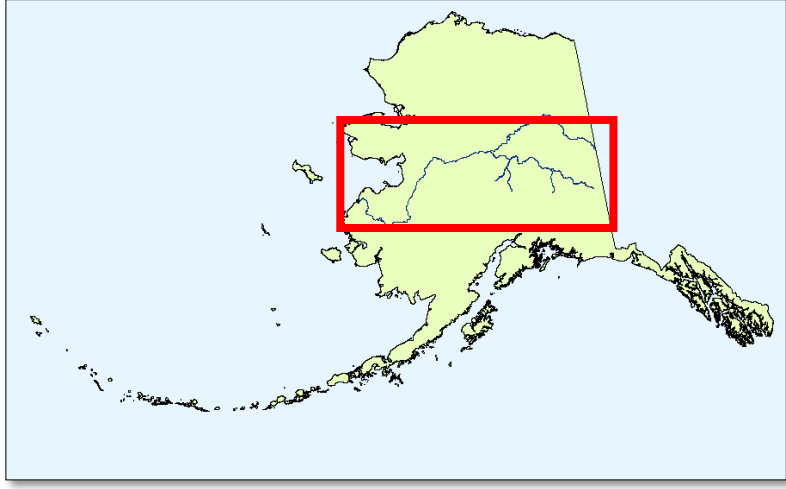
by
Zachary W. Liller
and
James W. Savereide

October 2025

Alaska Department of Fish and Game — Divisions of Sport Fish and Commercial Fisheries

No action: Additional information in full report

Yukon Management Area

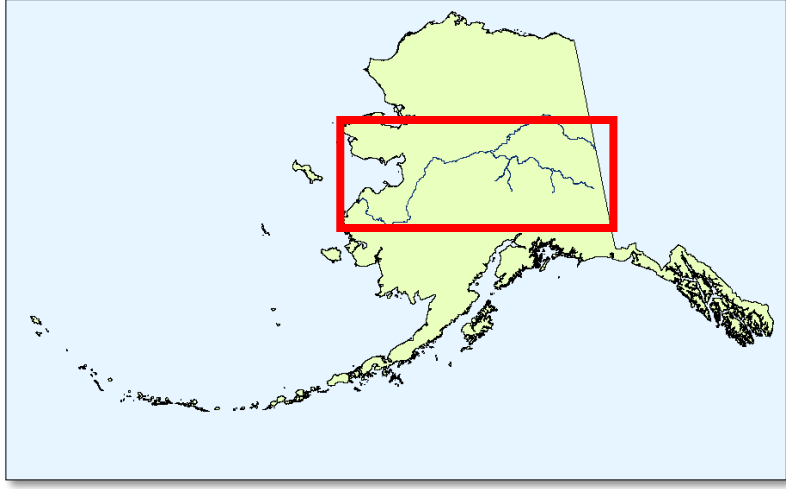


- No changes to existing escapement goals

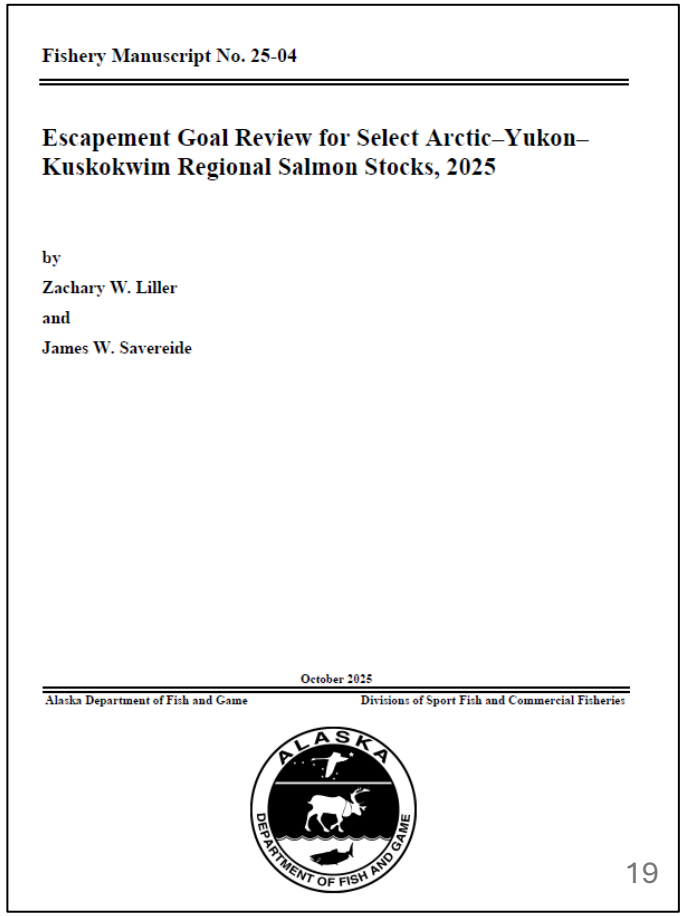
Yukon Management Area

summer chum salmon

no action - additional information in full report



- Drainagewide BEG of 500,000 – 1,200,000 was established in 2016
- Tributary goals on Andreafsky R. and Anvik R have limited utility
- ADF&G may revise the escapement goal structure in future cycles



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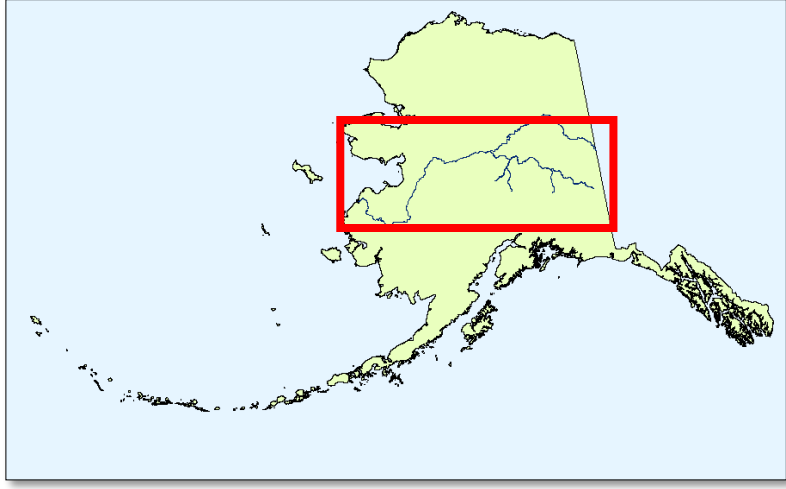
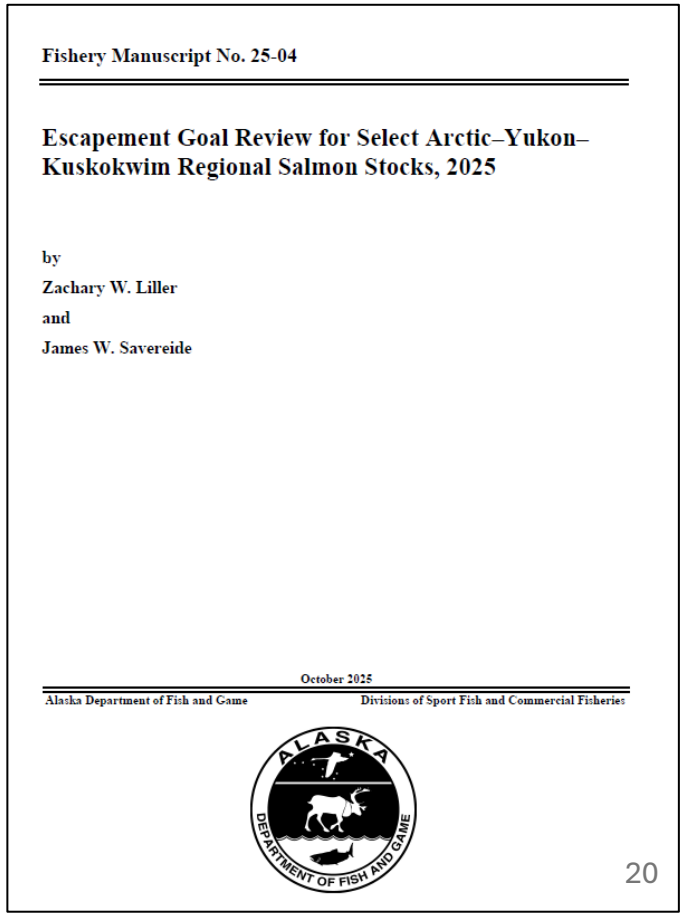
Yukon Management Area

king salmon

no action - additional information in full report



- New tools have been developed since last review
  - Revised genetic baseline
  - Comprehensive data reviews
  - Multi-stock run reconstruction
  - Stock-specific production models



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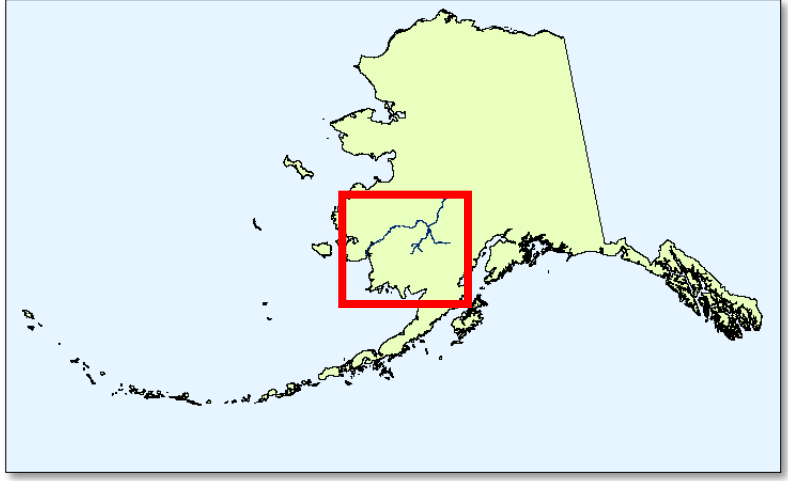
Kuskokwim Management Area

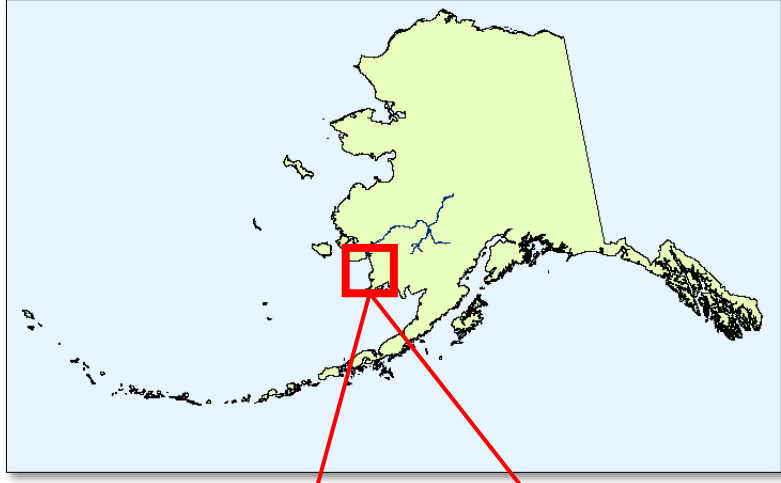


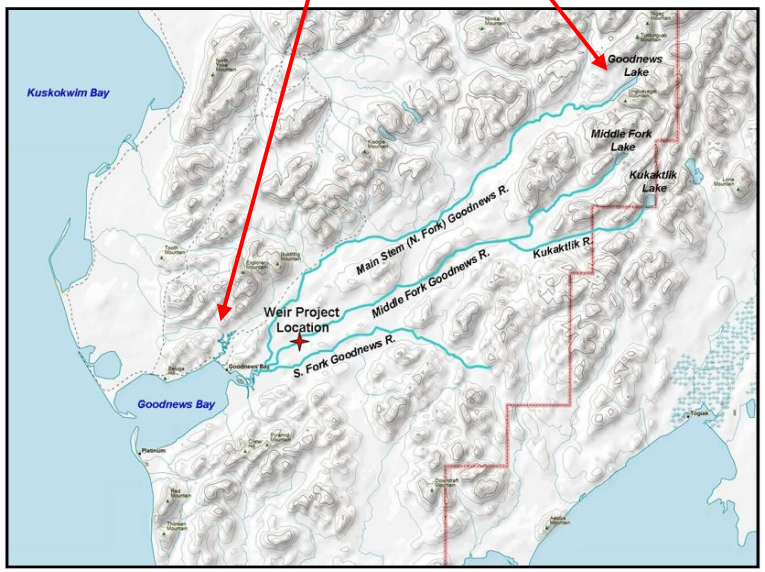
- Discontinue Middle Fork Goodnews River SEGs due to an inability to assess the following goals:
  - King salmon SEG: 1,500 – 3,600
  - Chum salmon SEG: ≥12,000
  - Sockeye salmon SEG: 22,000 – 43,000
  - Coho salmon SEG: ≥12,000

Kuskokwim Management Area

Middle Fork Goodnews River

- Inability to assess goal:
  - No funding to operate the weir
  - Coho salmon SEG not assessed since 2012
  - King, chum, and sockeye SEGs not assessed since 2019
- AD&FG will retain weir infrastructure and continue to pursue funding options
- Aerial surveys will continue to provide escapement data for king and sockeye salmon





Summary of Decisions

- No changes for Kotzebue or Yukon management areas
- Revise the Pilgrim River (Salmon Lake) SEG to a lower bound threshold
- Discontinue the Tubutulik River aerial survey-based SEG
- Revise the method for assessing Kwiniuk River coho salmon and update the SEG to a lower-bound threshold
- Discontinue all weir-based salmon SEGs established for the Middle Fork Goodnews River

Questions