Oral Report to the Alaska Board of Fisheries 2020

Review of Salmon Escapement Goals in the Kodiak Management Area

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Oral Report: RC 3; Tab 1
Written Report: provided as additional report
Presentation Objectives

• Policies that direct the escapement goal review
• Describe team formation and approach
• Identify goals and methods
• Present recommendations
Policy and Escapement Goal Definitions

This review was based on:

• *Policy for the Management of Sustainable Salmon Fisheries (SSFP; 5 AAC 39.222)*

• *Policy for Statewide Salmon Escapement Goals (EGP; 5 AAC 39.223)*

• Two important terms defined in the SSFP are:
  
  Biological Escapement Goal (BEG)
  
  Sustainable Escapement Goal (SEG)
Approach and Process for Review Team

• Three-year interval

• Review available data for stocks

• Determine appropriate goal type and methods

• Perform analysis, assess goal range, review by team

• Develop draft recommendations for directors of divisions of Commercial Fisheries and Sport Fish
Current Escapement Goals in the KMA

- Karluk River
- Ayakulik River
- Upper Station
- Frazer Lake
- Malina Lakes
- Sockeye salmon
- Afognak Lake
- Buskin River
- American River
- Olds River
- Pasagshak River
- King salmon
- Coho salmon
- Saltery Lake
Current Escapement Goals in the KMA

Pink and chum salmon

Mainland District aggregate

Kodiak Archipelago aggregate
Team Recommendations

• No change to 18 goals

• Change 4 goals
Upper Station Late-Run Sockeye Salmon
Current - BEG: 120,000–265,000

• Looked into more recent data 1996–2018
  – No significant Spawner Recruit Analyses
• Yield analysis, Environmental Models, Percentile Approach
• Inconsistency in model outcomes, but most corroborate current goal is reasonable
• Recommend revising to SEG to be clear about confidence of estimates of $S_{MSY}$. 
Upper Station Late-Run Sockeye Salmon
Recommendation - SEG: 120,000–265,000

Current Goal: BEG 120,000–265,000
Recommendation: SEG 120,000–265,000
Afognak River Sockeye Salmon
Current - BEG: 20,000–50,000

- Looked into more recent data 2000–2018
- Spawner Recruit Analysis, Yield analysis, Environmental Models, Percentile Approach
- Inconsistency in model outcomes, but most corroborate current goal is reasonable
  - Spawner Recruit Analysis indicated a decrease below measured escapement
- Recommend revising to SEG to be clear about confidence of estimates of $S_{msy}$. 
Afognak River Sockeye Salmon
Recommendation - SEG: 20,000–50,000

Current Goal: BEG 20,000–50,000
Recommendation: SEG 20,000–50,000
Buskin River Coho Salmon
Current - BEG: 4,700–9,600

- High water events common in Buskin River.
- In-depth analysis of missed fish passage during high water.
- Recommend revising to SEG to due to uncertainty in passage during inoperable periods at high water.
Buskin River Coho Salmon
Recommendation - SEG: 4,700–9,600

Current Goal= BEG 4,700–9,600
Recommendation: SEG 4,700–9,600
Olds River Coho Salmon
Current - Lower Bound SEG: 1,000

- Assessed via foot survey
- Updated since previous review using the percentile approach.
- Recommend revising lower bound SEG.
Olds River Coho Salmon
Recommendation - Lower Bound SEG: 500
Review Summary

- King salmon: No Change
- Pink salmon: No Change
- Chum salmon: No Change
- Sockeye salmon:
  - Change Upper Station Late Run to an SEG with the same range
  - Change Afognak River to an SEG with the same range
- Coho salmon:
  - Change Buskin River to an SEG with the same range
  - Change Olds River to a LB SEG of 500 fish
Thank You

Questions