#### Oral Report to the Alaska Board of Fisheries 2023

Review of Salmon Escapement Goals in the Alaska Peninsula/ Aleutian Islands and Chignik Management Areas



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Oral Report: RC 3, Tab 1

#### **Presentation Objectives**

- Identify policies
- Identify escapement goals and review methods
- Present findings





#### Policy and Escapement Goal Definition

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)
- Important terms defined in the SSFP are biological escapement goal (BEG) sustainable escapement goal (SEG) lower-bound SEG (LB SEG)

#### **Review Approach and Process**

- Three-year interval
- Review stock data quality and availability
- Determine appropriate goal type and methods
- Perform analysis, assess goal range, team review
- Develop draft findings for directors of Commercial Fisheries and Sport Fish Divisions
- Post-meeting memo signed by both directors



#### Alaska Peninsula – Aleutian Islands Management Area

# Summary: Decisions by Goal

#### Decisions: No Change

Sockeye Salmon

Stock	Goal Type	Range
Cinder River	SEG	36,000 to 94,000
Meshik River	SEG	48,000 to 86,000
Bear Lake Early-run	SEG	176,000 to 293,000
Bear Lake Late-run	SEG	117,000 to 195,000
Nelson River	SEG	97,000 to 219,000
North Creek	SEG	7,500 to 10,000
McLees Lake	LB SEG	>10,000

#### Alaska Peninsula – Aleutian Islands Management Area

### Summary: Decisions by Goal

#### Decisions: No Change

Species/Stock	Goal Type	Range
King Salmon		
Nelson River	BEG	2,400 to 5,000
<b>Pink Salmon</b> South Peninsula Annual Aggregate	SEG	1,750,000 to 4,000,000
Chum Salmon		
Southeastern District	SEG	62,500 to 151,900
South Central District	SEG	68,900 to 99,200
Southwestern District	SEG	86,900 to 159,500

- Sockeye Salmon
  - Ilnik River- current SEG 40,000 to 60,000



- Finding Revision to SEG: 40,000 to 75,000
  - Recent escapement data was assessed with the Percentile Approach (15<sup>th</sup> to 65<sup>th</sup> percentiles)
    - Moderate harvest rate
    - Contrast = 9.2

• Sandy River- current SEG 34,000 to 74,000



- Finding SEG: 37,000 to 69,000
  - Recent escapement data was assessed with the Percentile Approach (25<sup>th</sup> to 75<sup>th</sup> percentiles)
    - High Harvest Rate
    - Contrast = 6.3

Christianson Lagoon– current SEG 25,000 to 50,000



- Finding SEG: 23,000 to 50,000
  - Recent escapement data was assessed with the Percentile Approach (25<sup>th</sup> to 75<sup>th</sup> percentiles)
    - High Harvest Rate
    - Contrast = 101.6

Orzinski Lake – current SEG 15,000 to 20,000



- Finding –SEG: 14,000 to 28,000
  - Recent escapement data was assessed with the Percentile Approach (15<sup>th</sup> to 65<sup>th</sup> percentiles)
    - Moderate Harvest Rate
    - Contrast = 26.8

Mortensen Lagoon- current SEG 3,200 to 6,400



- Finding –SEG: 1,400 to 5,700
  - Recent escapement data was assessed with the Percentile Approach (25<sup>th</sup> to 75<sup>th</sup> percentiles)
    - High Harvest Rate
    - Contrast = 35

• Thin Point Lake- current SEG 14,000 to 28,000



- Finding SEG: 9,000 to 19,000
  - Recent escapement data was assessed with the Percentile Approach (25<sup>th</sup> to 75<sup>th</sup> percentiles)
    - High Harvest Rate
    - Contrast = 40.1

- Coho salmon
  - Nelson River current LB SEG 18,000



- Finding Revision to SEG: 19,000 to 29,000
  - Recent escapement data was assessed with the Percentile Approach (25<sup>th</sup> to 75<sup>th</sup> percentiles)
    - Moderate harvest rate
    - Contrast = 3.6

- Coho salmon
  - Ilnik River current LB SEG: >9,000



- Finding Revision to SEG: 9,000 to 24,000
  - Recent escapement data was assessed with the Percentile Approach (20<sup>th</sup> to 60<sup>th</sup> percentiles)
    - Moderate harvest rate
    - Contrast = 122

# <u> Alaska Peninsula – Aleutian Islands Management Area</u>

# Summary: Methods and Findings by Goal

#### **Methods**

- Chum Salmon
  - Consistency of data
  - Single Peak aerial survey from within the river with good or fair survey conditions
  - Only systems that are consistently surveyed successfully (>29 of 31 years)



Northern District Chum Salmon: Observed escapement by year using the All PAS Index (solid circles) and revised District Index (open circles), and historical escapement goals (dashed line).

Chum Salmon

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- Northern District current SEG
- 119,600 to 239,200
  - Finding Revision to SEG 49,000 to 132,000
    - 18 Index streams
- Northwestern District current SEG
  - Finding Revision to SEG
    - 9 Index streams

100,000 to 215,000 49,000 to 133,000



# <u>Chignik Management Area</u> Summary: Methods and Findings by Goal

Findings: No Change

- King Salmon
  - Chignik River BEG:
- Pink Salmon
  - Even-year aggregate SEG:
  - Odd-year aggregate SEG:
- Chum Salmon
  - Aggregate SEG:
- Coho Salmon
  - No goals in CMA

1,300 to 2,700

170,000 to 280,000 260,000 to 450,000

45,000 to 110,000

# <u>Chignik Management Area</u> Summary: Methods and Findings by Goal

Finding: Revise Goals

Chignik River sockeye salmon

