

Oral Report to the Alaska Board of Fisheries 2008

Review of Salmon Escapement Goals in the Chignik Management Area

**by
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**Oral Report:
RC 2, Tab 2**

**Written Report:
RC 2, Tab 5**

Presentation Objectives

- **Introduce the policies behind the escapement goal review**
- **Describe the formation and purpose of the Chignik Management Area Escapement Goal Review Team**
- **Identify the current Chignik Area escapement goals**
- **List the methods used during the escapement goal review process**
- **Present the escapement goal recommendations**

Escapement Goal Review

This review was based on:

- Policy for the Management of Sustainable Salmon Fisheries (SSFP; 5 AAC 39.222)
- Policy for Statewide Salmon Escapement Goals (5 AAC 39.223)

Two important terms defined in the SSFP are:

- *biological escapement goal (BEG)*
- *sustainable escapement goal (SEG)*

Chignik Management Area Escapement Goal Review Team

- Determine goal type: BEG or SEG
- Determine appropriate methods
- Estimate goal



Photo by Philip Tschersich









Pink Salmon
49 Index Streams
in 5 Districts

Chum Salmon
42 Index Streams
in 5 Districts

Methods

Chinook Salmon Escapement Goal

- Not reviewed

Sockeye Salmon Escapement Goals

- Spawner-recruit analysis (BEG)
- Percentile Approach (SEG)
- Zooplankton Models (SEG)
- Euphotic Volume Model (SEG)

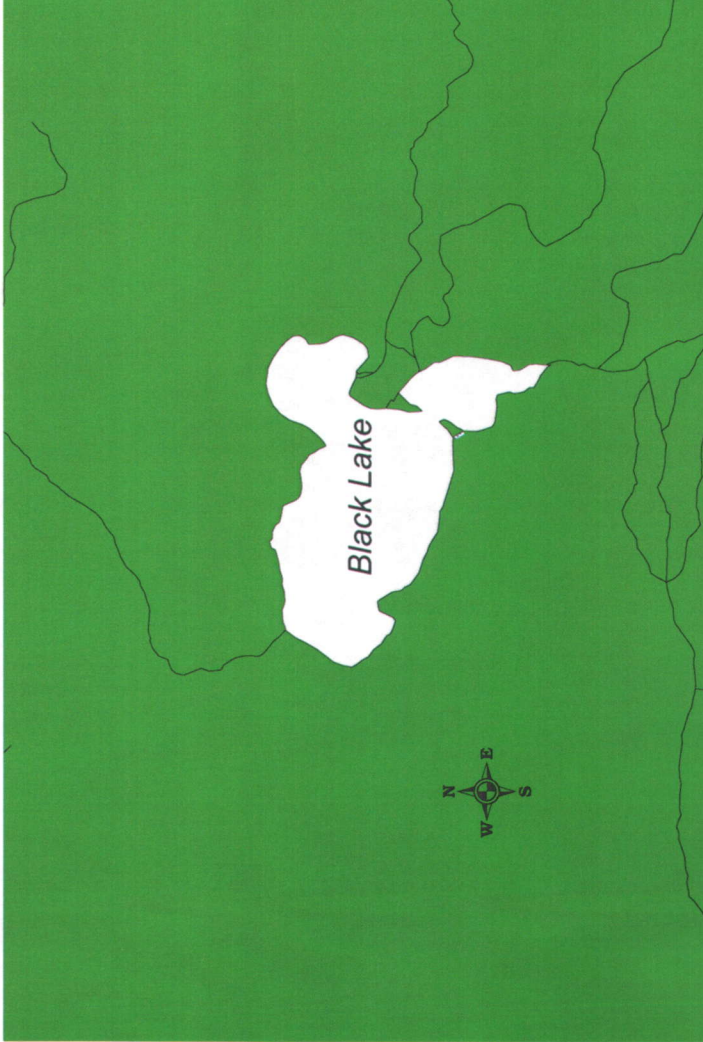
Pink Salmon Escapement Goals

- Yield Analysis (SEG)

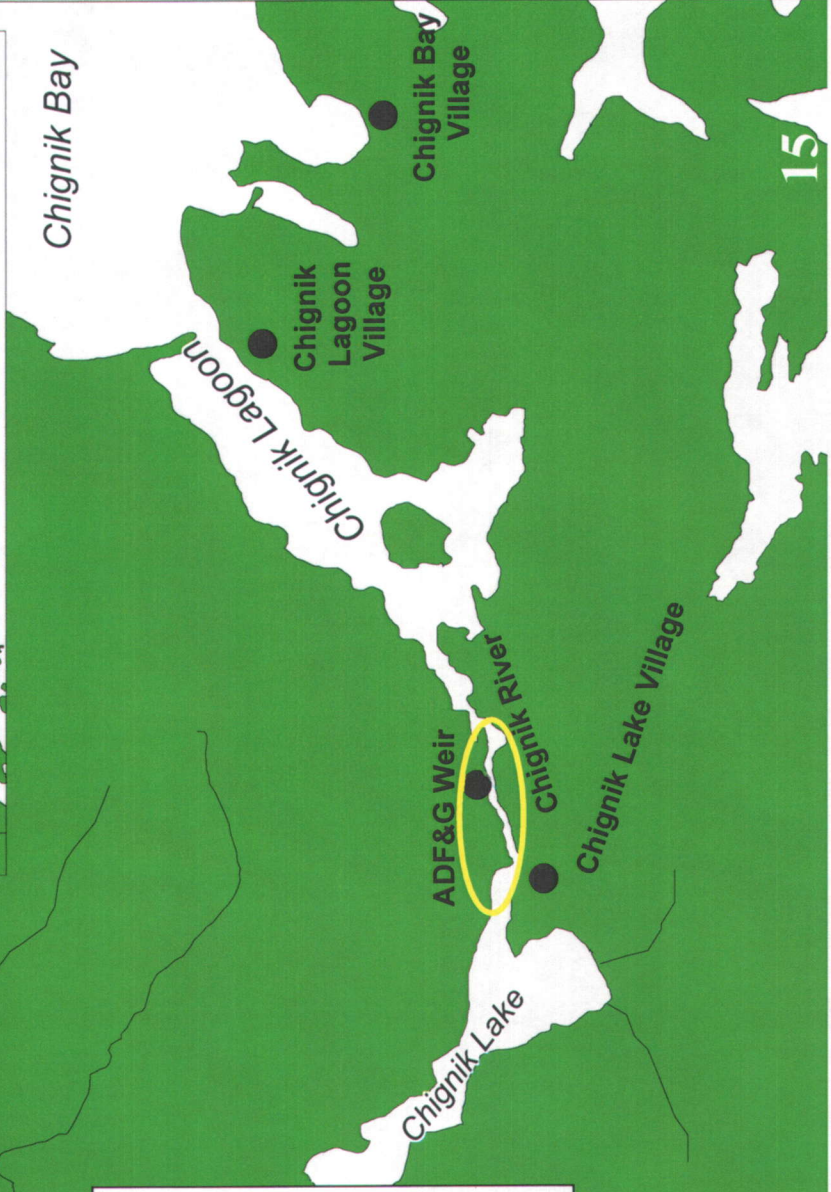
Chum Salmon Escapement Goals

- Risk analysis (SEG)





Chignik River Chinook
Salmon
BEG: 1,300-2,700
No review, no change
recommended



Sockeye Salmon

Black Lake: SEG: 350,000 - 400,000

-No change recommended

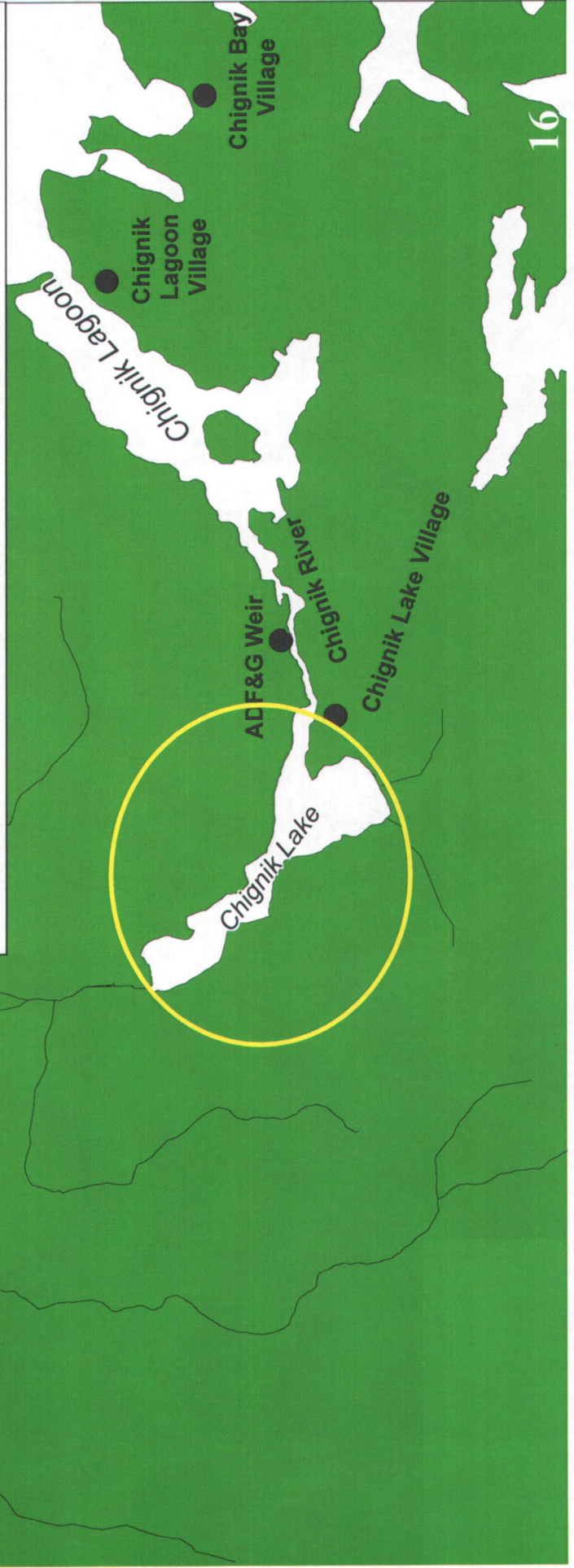
Chignik Lake: SEG:200,000 - 250,000

-Change to SEG: 250,000 - 400,000

-Includes 50,000 fish for

subsistence objectives

-Based on spawner-recruit





Entire Chignik Management Area Pink Salmon

49 Index Streams

Current goal: BEG Aggregate of 5 districts:

Even years: 327,000 - 737,000

Odd years: 541,000 - 1,177,000

Recommended goal: SEG aggregate of 5 districts:

Even years: 200,000 - 600,000

Odd years: 500,000 - 800,000



Review of the 6 Existing Salmon Escapement Goals in the Chignik Management Area

Recommendations:

- Chinook salmon BEG: No change
- Sockeye salmon SEGs: change one, leave one unchanged
- Pink salmon BEGs: Change to two aggregate SEGs
- Chum salmon SEG: Change one aggregate SEG



Photo by Philip Tschersich