Commercial Herring Fisheries in Southeast Alaska

2025 Report to the Alaska Board of Fisheries

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by

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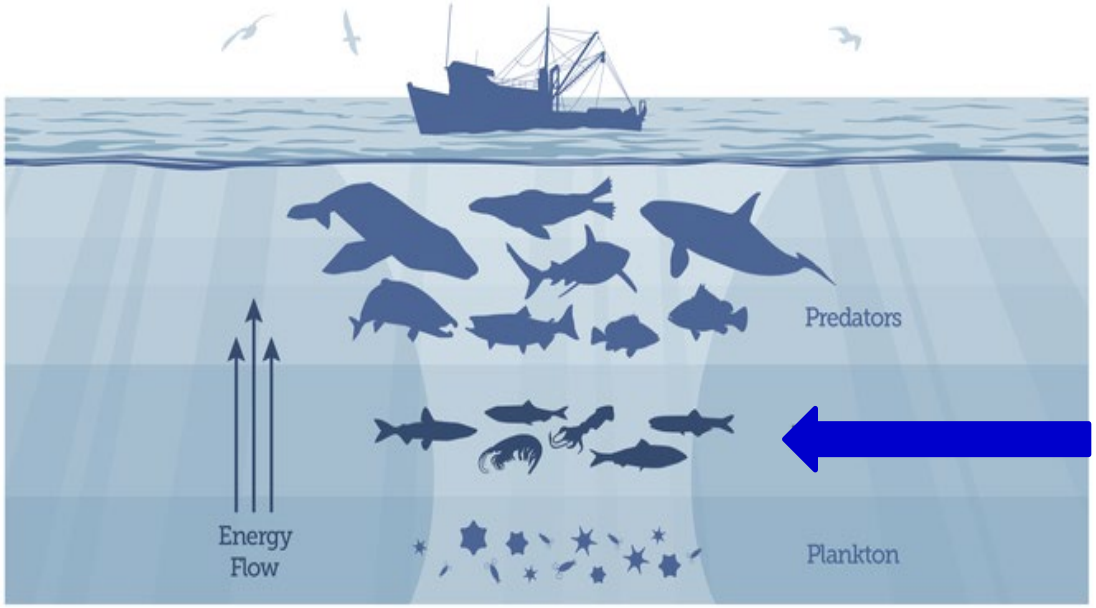
Topics

- Ecosystem considerations for herring
- Orientation of stocks and fisheries
- Management plan overview; Harvest rates; Closed waters
- 20 herring proposals – presentation will focus on pertinent issues
  - Sitka Sound:
    - Harvest rate strategy (Proposals 171-177)
    - Closed waters (178-79)
    - Sitka Sound Management Plan (180-182)
  - Spawn on Kelp:
    - Add Sitka Sound to Northern SOK area for open pounds (183)
    - Expand Craig SOK seining area (184-186)
    - Allow protective mesh around SOK pound (187)
  - All commercial herring fisheries:
    - Limit duration, reporting requirements, catch cap (188)
    - Reduce purse seine length (189)
    - Require fishery co-management with tribal governments (190)

Ecosystem Considerations

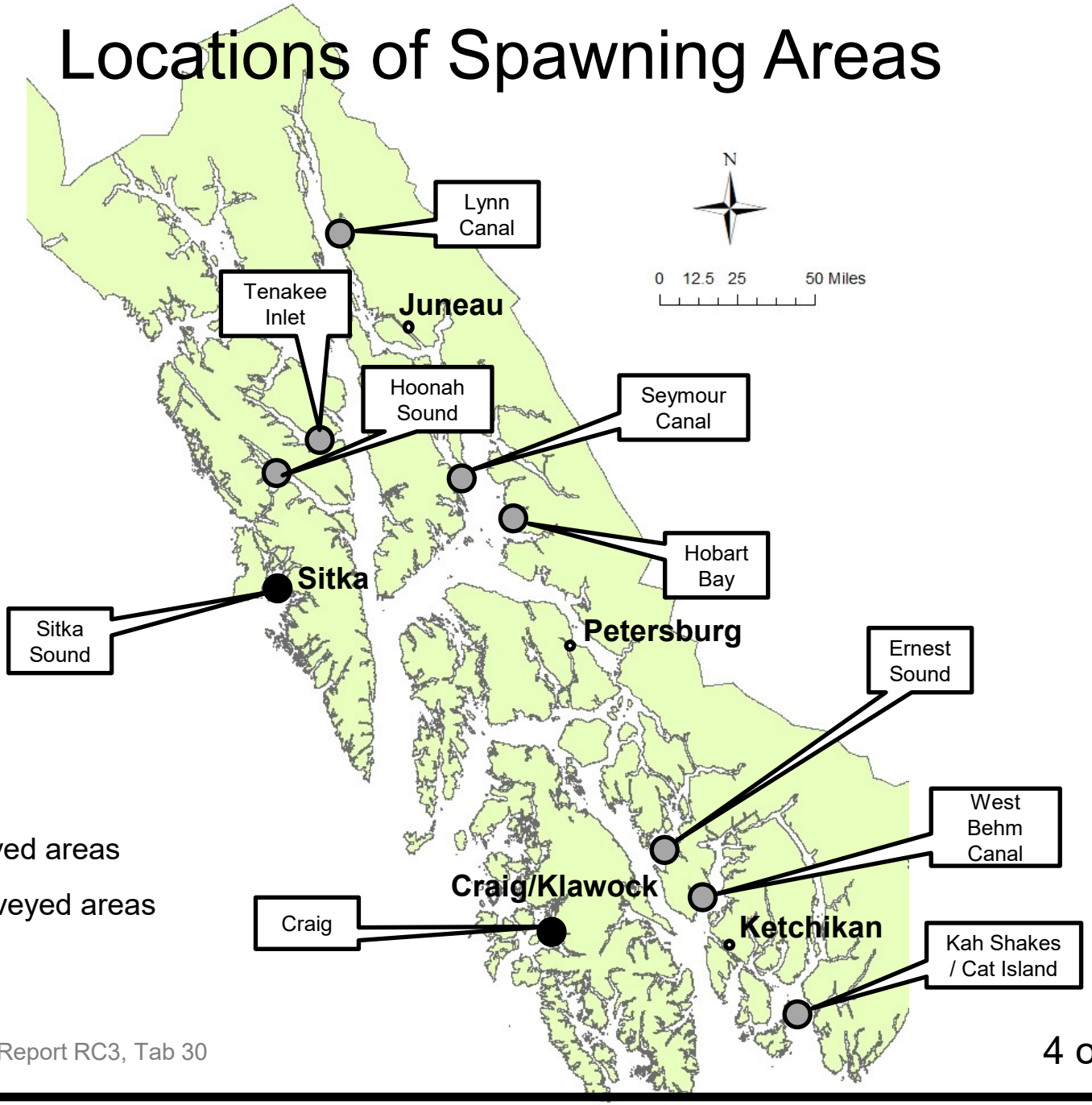
- Herring play an important role in ecosystem, linking lower and higher trophic levels



Herring and other mid-trophic prey species

- Important prey for many marine mammals, fish, birds

Locations of Spawning Areas



● = actively surveyed areas

○ = historically surveyed areas

Southeast Herring Fisheries and Gear Types

- Subsistence spawn on branches and kelp
  - Traditional and culturally important harvest of eggs
  - Harvested in spring by placing hemlock branches in spawn areas or collecting eggs on kelp

- Commercial Sac-roe
  - Purse seine or gillnet
  - Spring fisheries just prior to spawning
  - Largest fishery for landings and usually for overall value

- Commercial Spawn on kelp
  - Closed or open pounds;
  - Herring captured with purse seine
  - Spring fisheries

- Commercial Bait/food
  - Purse seine
  - Fall/Winter fisheries
  - Smallest fishery for landings and overall value

Southeast Herring Management Plan (5 AAC 27.190)

For management of herring, the department :

1) Shall identify stocks on a spawning area basis;

2) Shall establish minimum spawning biomass thresholds;

3) Shall assess abundance of mature herring before fishing;

4) May set exploitation rate between 10% and 20%;

5) May consider sources of mortality;

6) May modify fishing periods to minimize incidental mortalities.

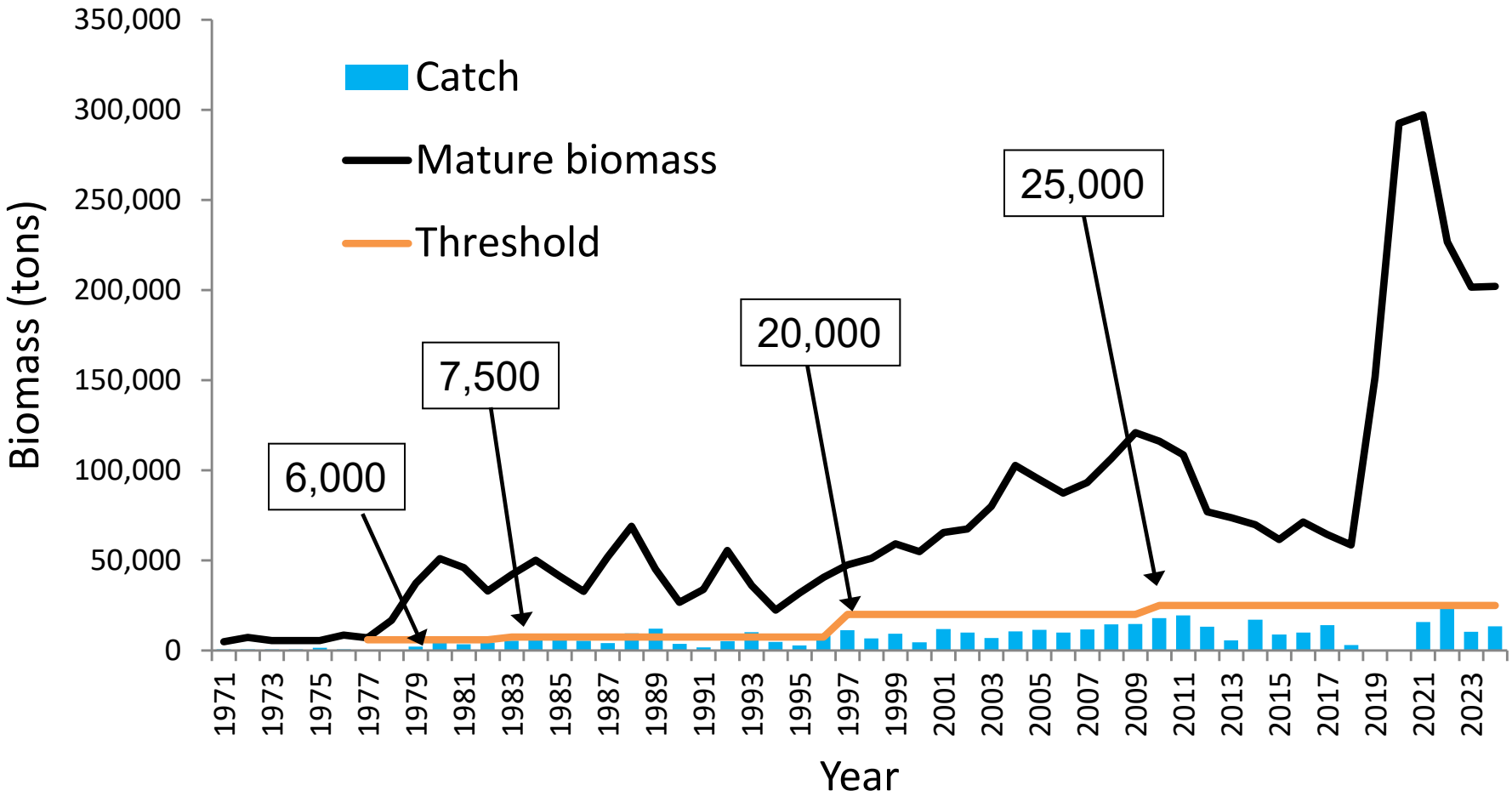
Thresholds

- Goals
  - Use with corresponding appropriate harvest rate
  - Allow stock to rebound more quickly when at low levels
  - Provide spawning base for reproduction / future recruitment

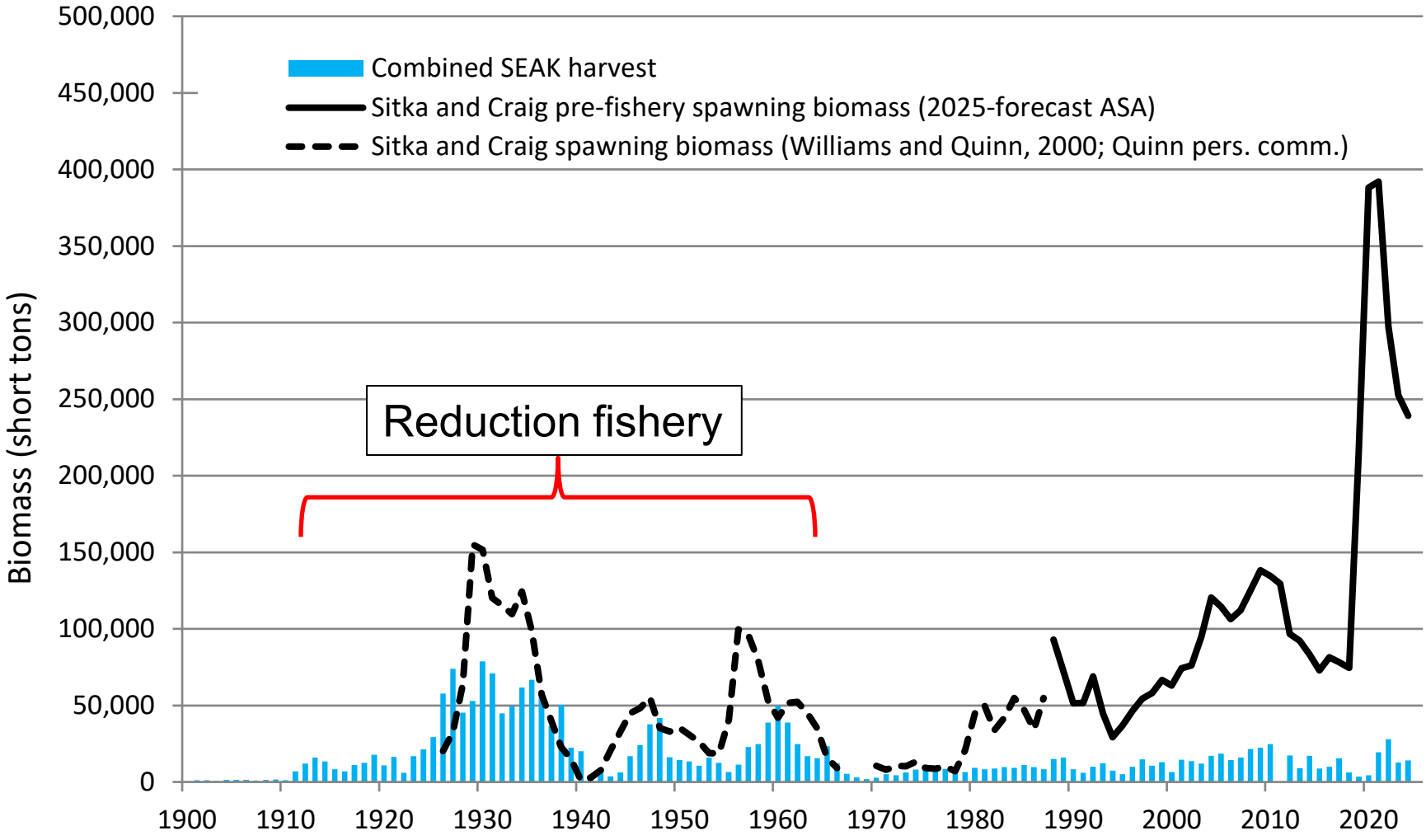
- Established based on one of two approaches:
  - Percent of unfished biomass, a commonly used approach
  - Set based on estimates of historical abundance and data quality

- More recent research suggests thresholds above 25% of unfished biomass may be necessary for species that rely on herring, and to allow low productivity stocks to recover.

Sitka Sound Biomass, Catch and Threshold



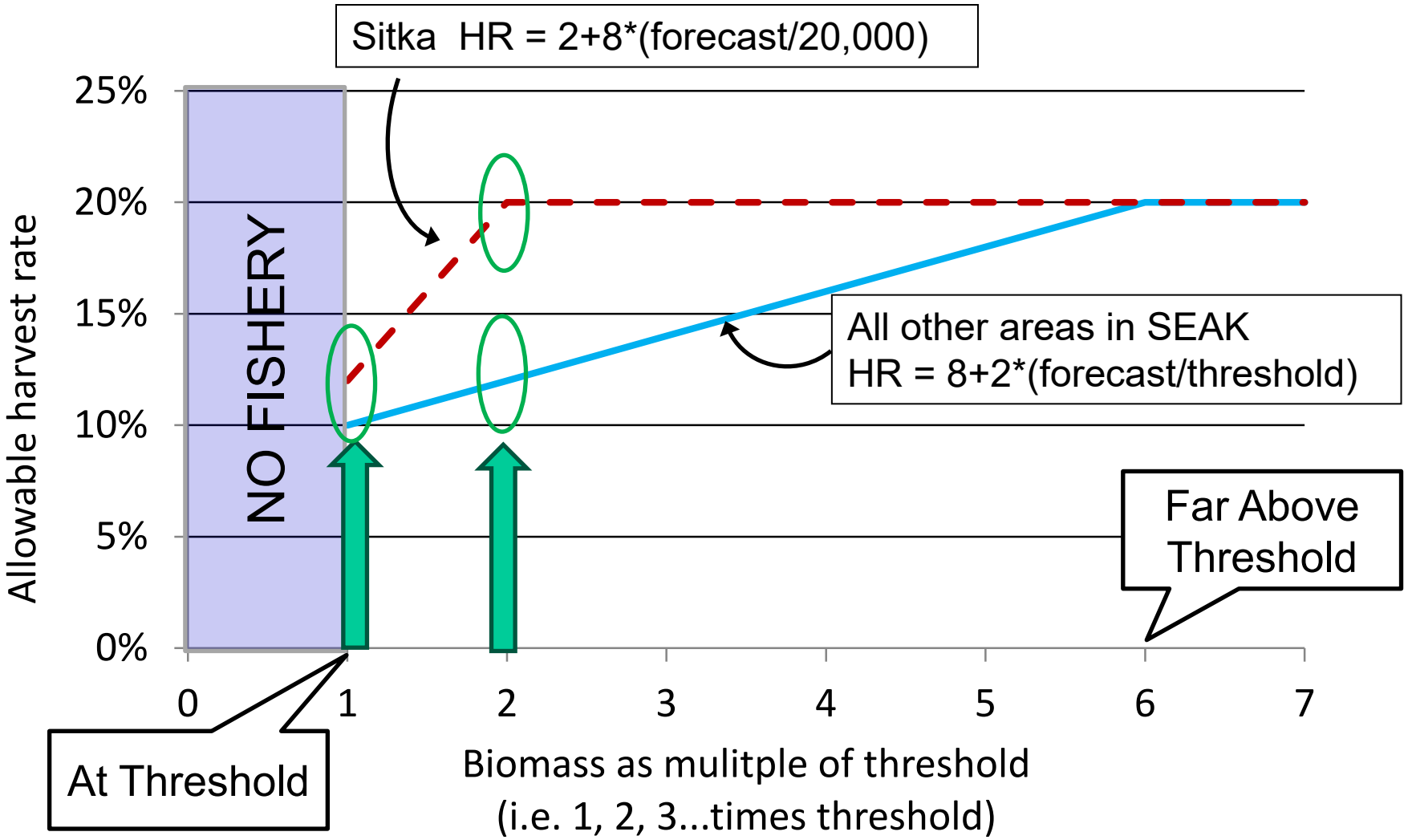
Historical Biomass and Catch



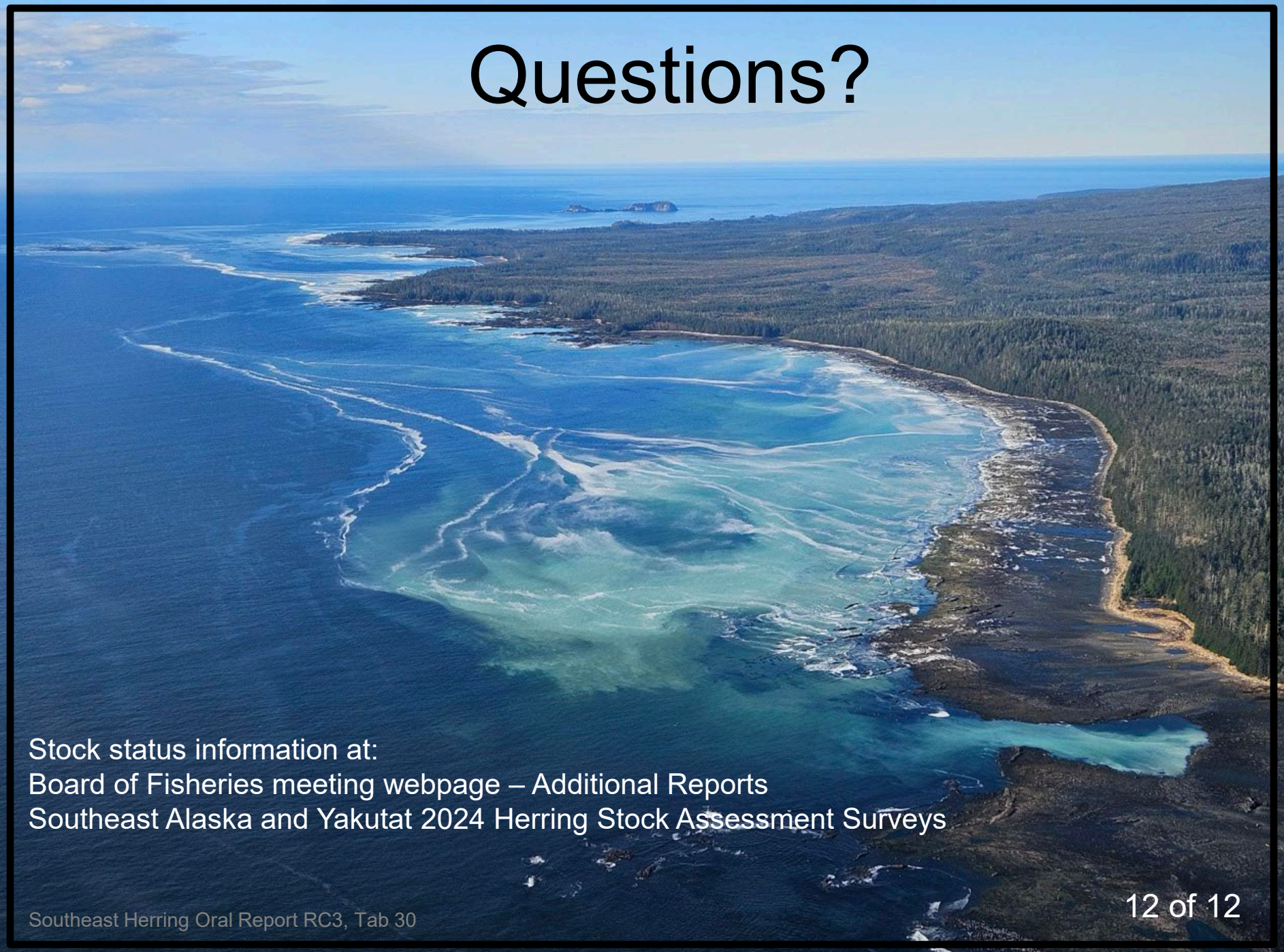
Harvest Rates

- Goals: sustainability; optimize yield; minimize closures.
- Established based on analysis of other Alaskan herring stocks; 20% maximum of the mature biomass.
- Southeast uses sliding scale as an additional measure of protection.
- Convention has been 20% harvest rate and threshold of 25% Unfished Biomass; however recent analysis suggests lower harvest rate and higher threshold more appropriate.

Current Sliding Scale Harvest Rate



Questions?



Stock status information at:
Board of Fisheries meeting webpage – Additional Reports
Southeast Alaska and Yakutat 2024 Herring Stock Assessment Surveys