



Estuarine Striped Bass Fishery Management Plan

Draft Amendment 2

DEPARTMENT OF ENVIRONMENTAL QUALITY

Marine Fisheries

MFC Meeting | Charlton H. Godwin, M. Todd Mathes, and Nathaniel Hancock | February 2022



Presentation Outline

- Draft Amendment 2
 - Goal and Objectives
 - Management Units
 - Stock Assessments
 - Fisheries
 - Environmental Concerns
 - Issue and Information Papers
 - Timeline
- Action Item
 - Vote to approve draft Amendment 2 for review by the public and advisory committees



Goal and Objectives

Goal:

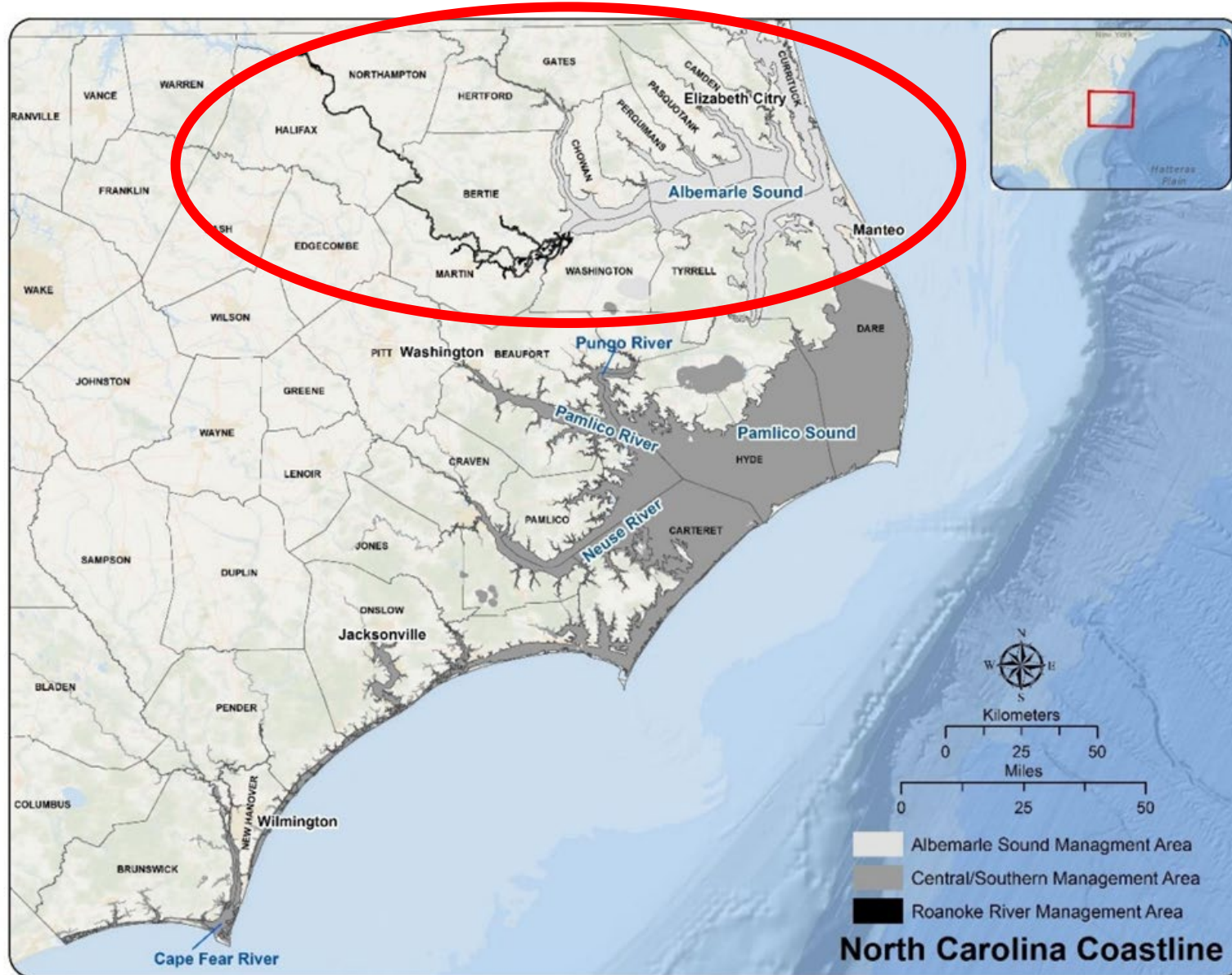
Manage the estuarine striped bass fisheries to achieve self-sustaining populations that provide sustainable harvest based on science-based decision making processes. If biological and/or environmental factors prevent a self-sustaining population, then alternate management strategies will be implemented that provide protection for and access to the resource.

Objectives:

- Implement management strategies within North Carolina and encourage interjurisdictional management strategies that maintain and/or restore spawning stock with adequate age structure and abundance to maintain recruitment potential and to prevent overfishing.
- Restore, enhance, and protect critical habitat and environmental quality in a manner consistent with the Coastal Habitat Protection Plan, to maintain or increase growth, survival, and reproduction of the striped bass stocks.
- Use biological, social, economic, fishery, habitat, and environmental data to effectively monitor and manage the fisheries and their ecosystem impacts.
- Promote stewardship of the resource through public outreach and interjurisdictional cooperation regarding the status and management of the North Carolina striped bass stocks, including practices that minimize bycatch and discard mortality.



Northern Management Unit

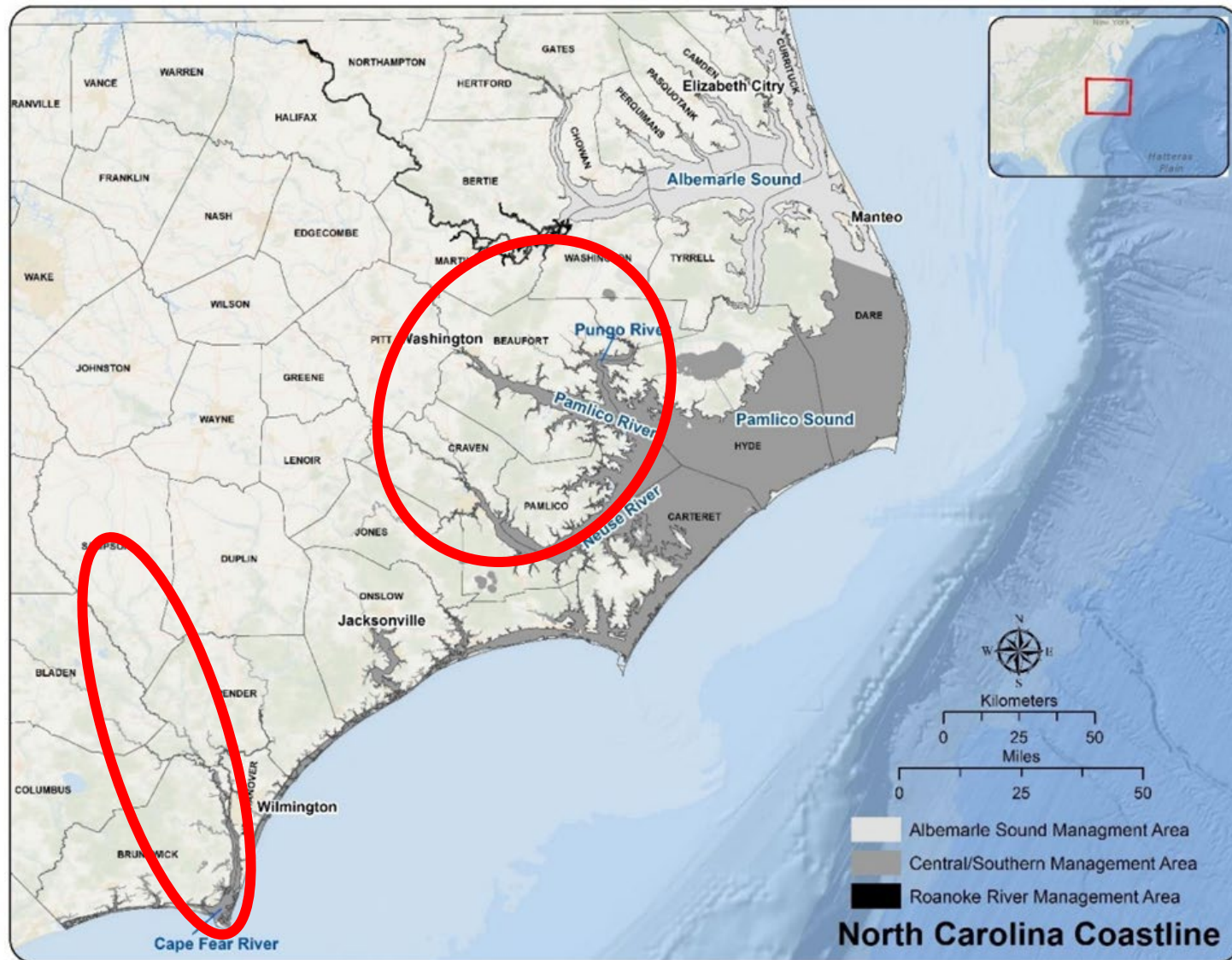


- ASMA/RRMA

- Albemarle-Roanoke (A-R) stock
- Spawning in Roanoke River
- Resident at younger ages, migratory at older ages
- Oldest fish observed 31 years
- Under ASMFC FMP



Southern Management Unit



• CSMA

- Stocks in the Tar-Pamlico, Neuse, and Cape Fear rivers
- Spawning runs do occur, however there is limited natural recruitment
- Stocking since the 1980s
- Resident fish
- Oldest fish observed 11 years
- Not under ASMFC FMP

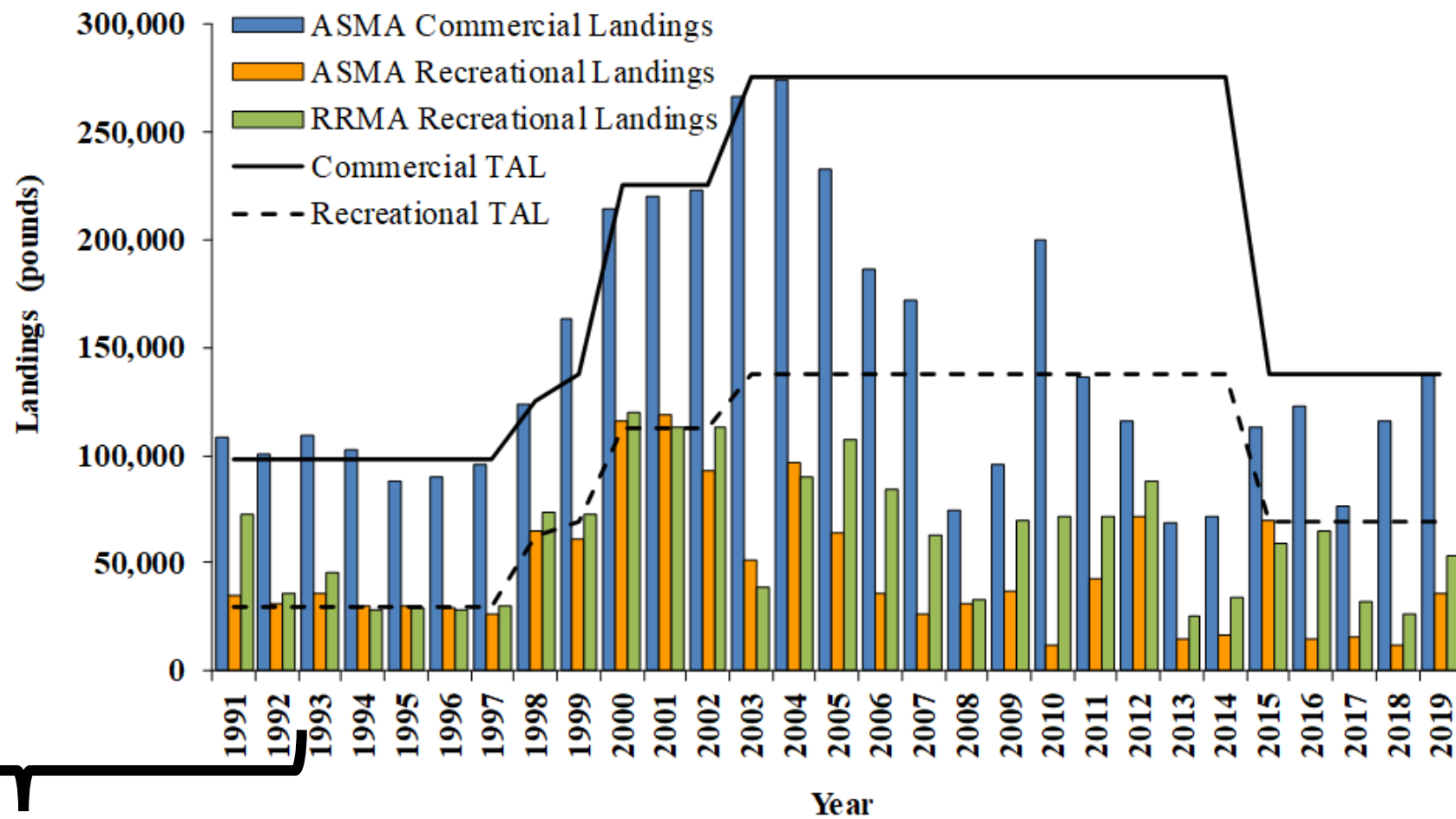


Stock Assessments

- Albemarle-Roanoke (A-R):
 - The A-R stock is overfished and overfishing is occurring
 - November 2020 Revision set to end overfishing in 1 year
- CSMA Stocks:
 - Sustainability of Tar-Pamlico and Neuse stocks unlikely at any level of fishing mortality
 - Natural recruitment is the primary limiting factor
 - Without stocking, abundance will decline
 - Even with no-possession since 2008 and stocking Cape Fear abundance continues to decline



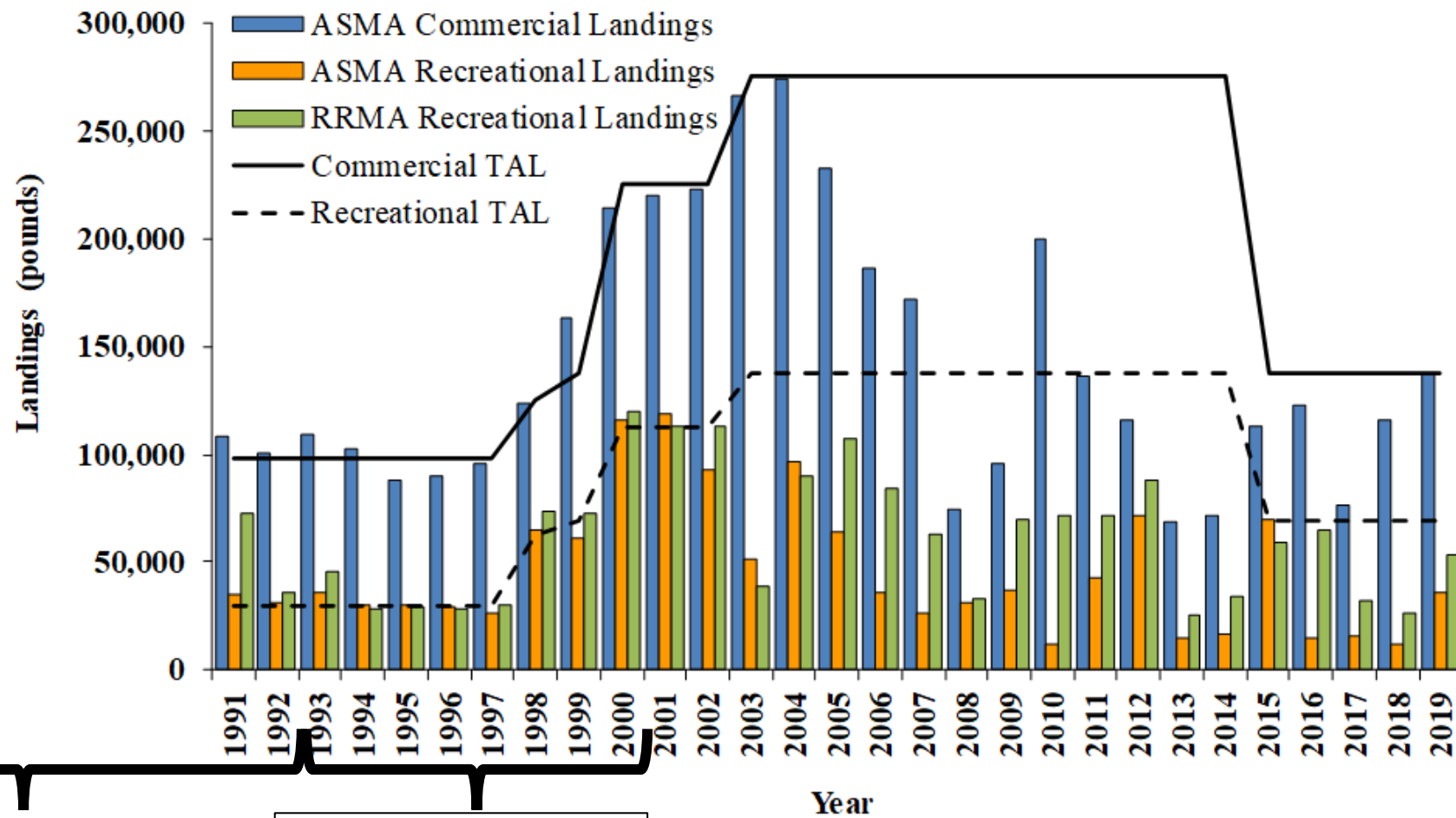
ASMA/RRMA Fisheries



Poor recruitment



ASMA/RRMA Fisheries

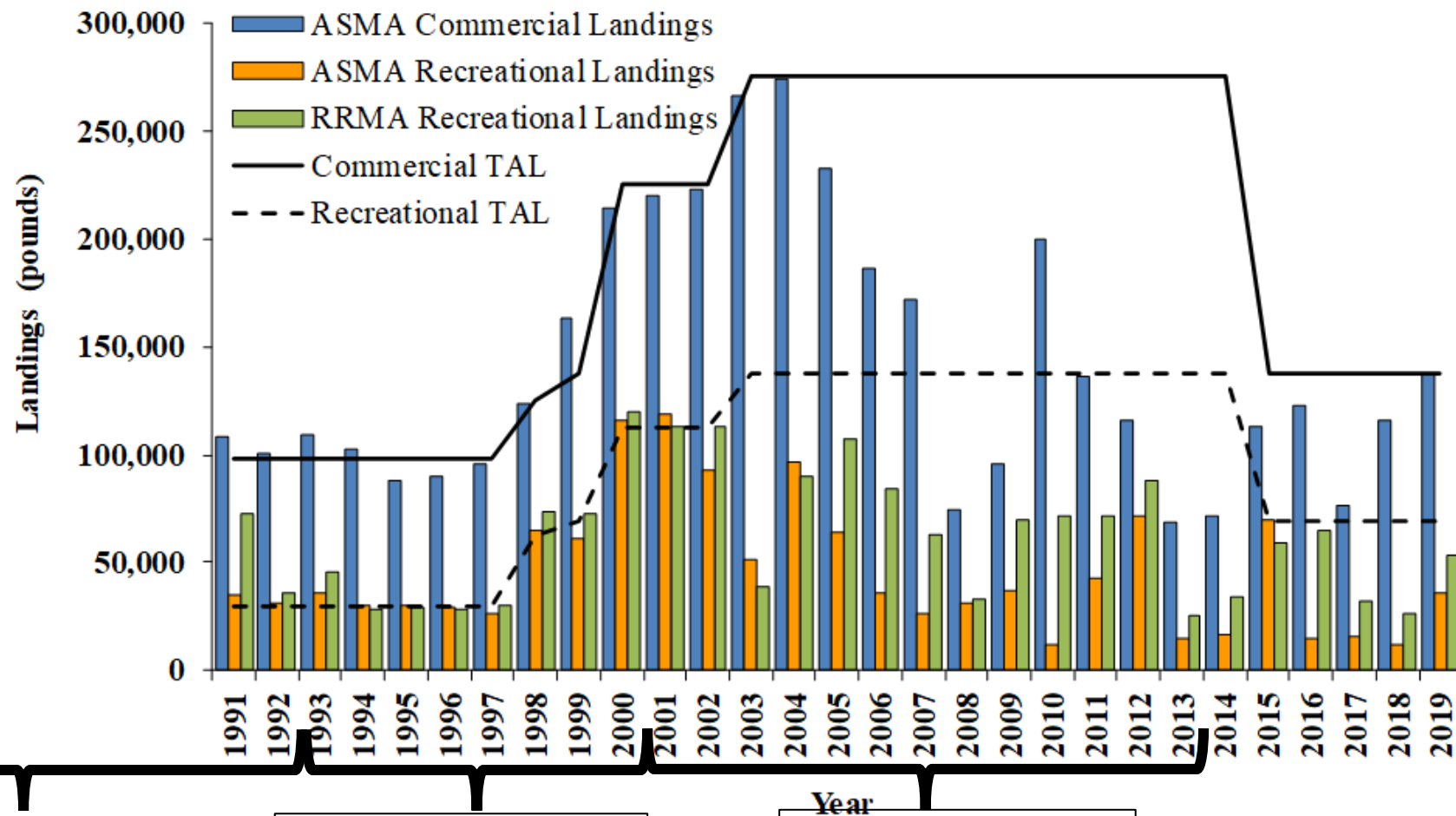


Poor recruitment

Great recruitment,
TAL Increasing



ASMA/RRMA Fisheries



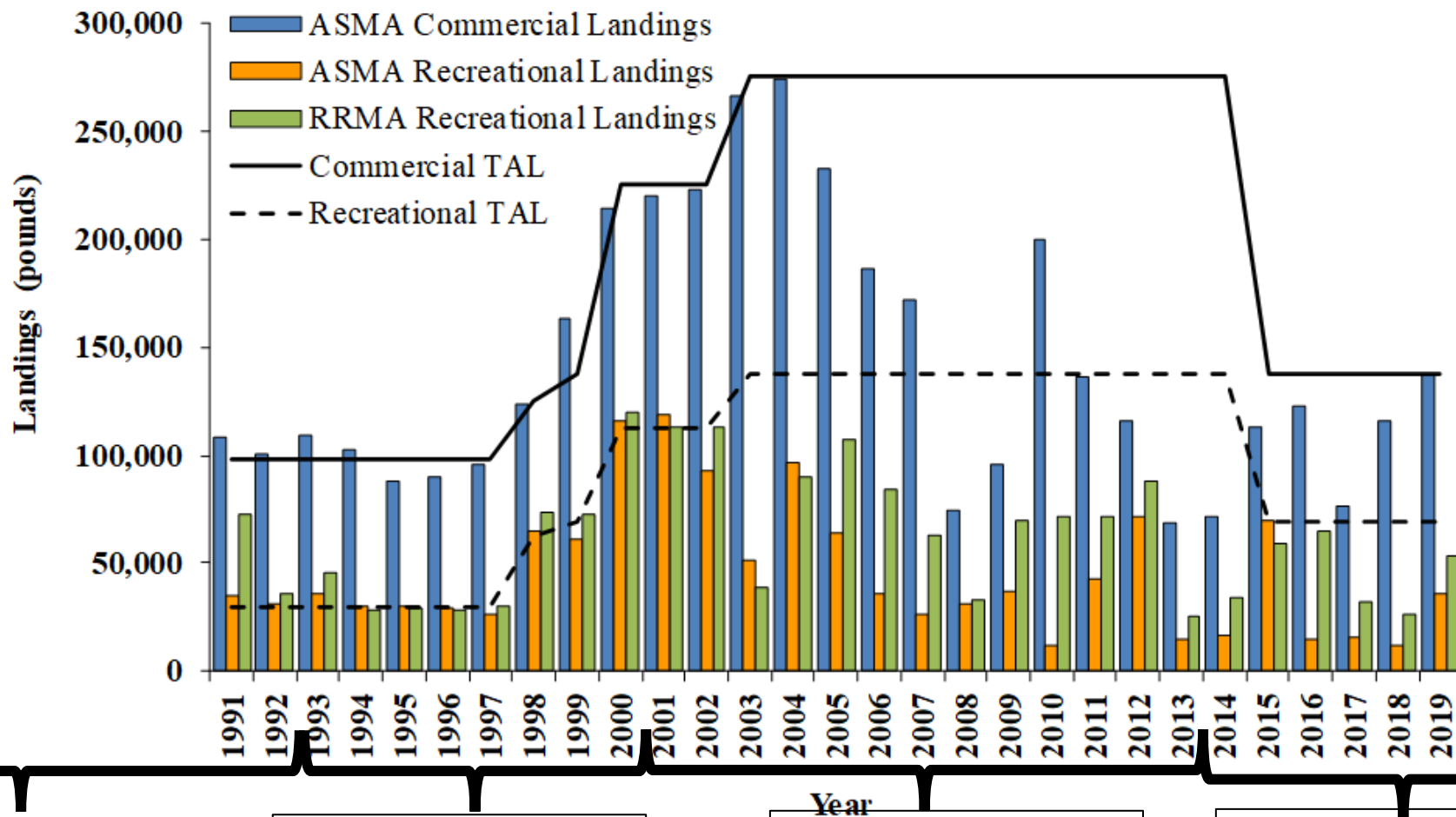
Poor recruitment

Great recruitment,
TAL Increasing

Poor recruitment,
TAL Stabilizes



ASMA/RRMA Fisheries



Poor recruitment

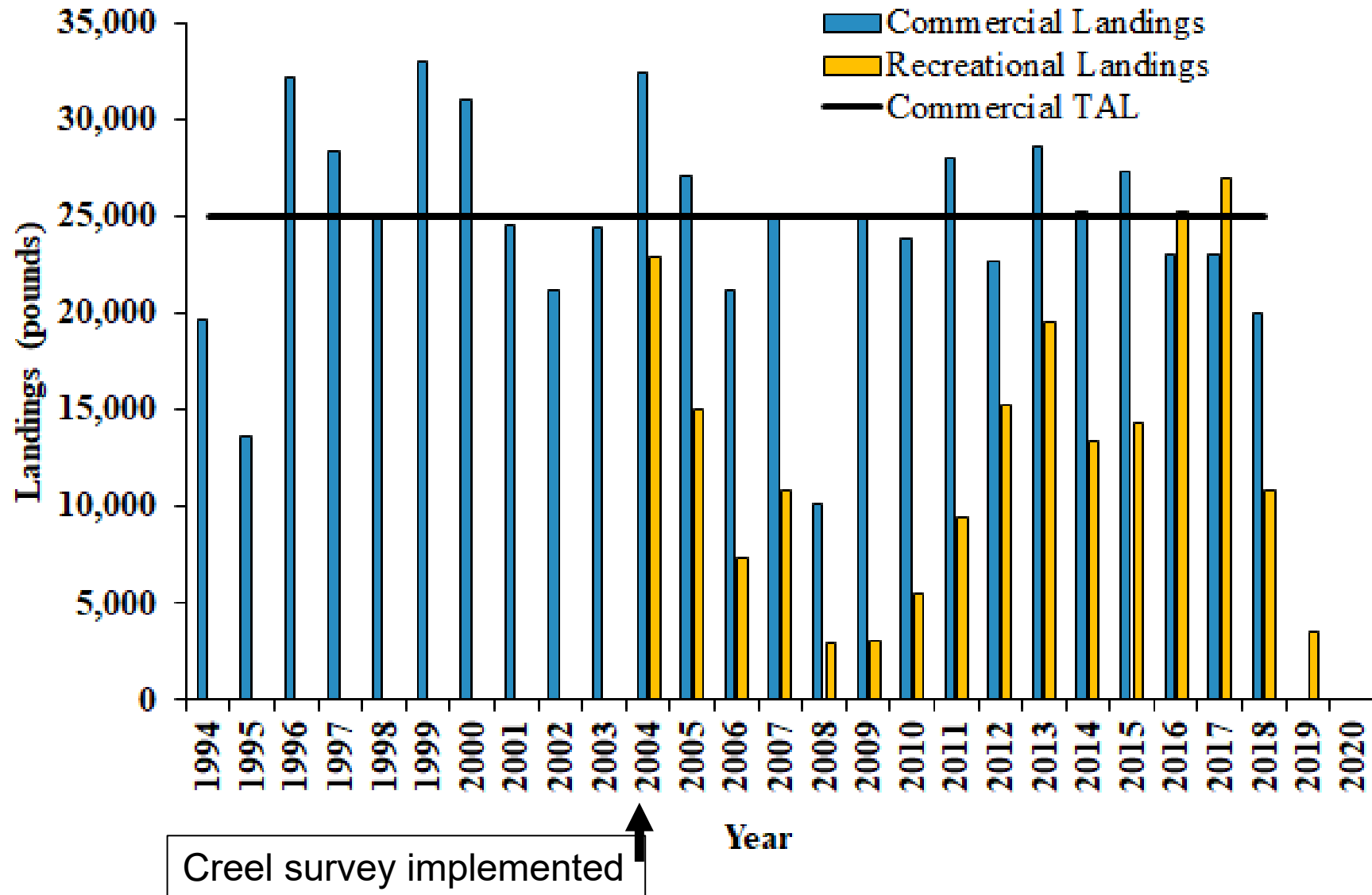
Great recruitment,
TAL Increasing

Great recruitment,
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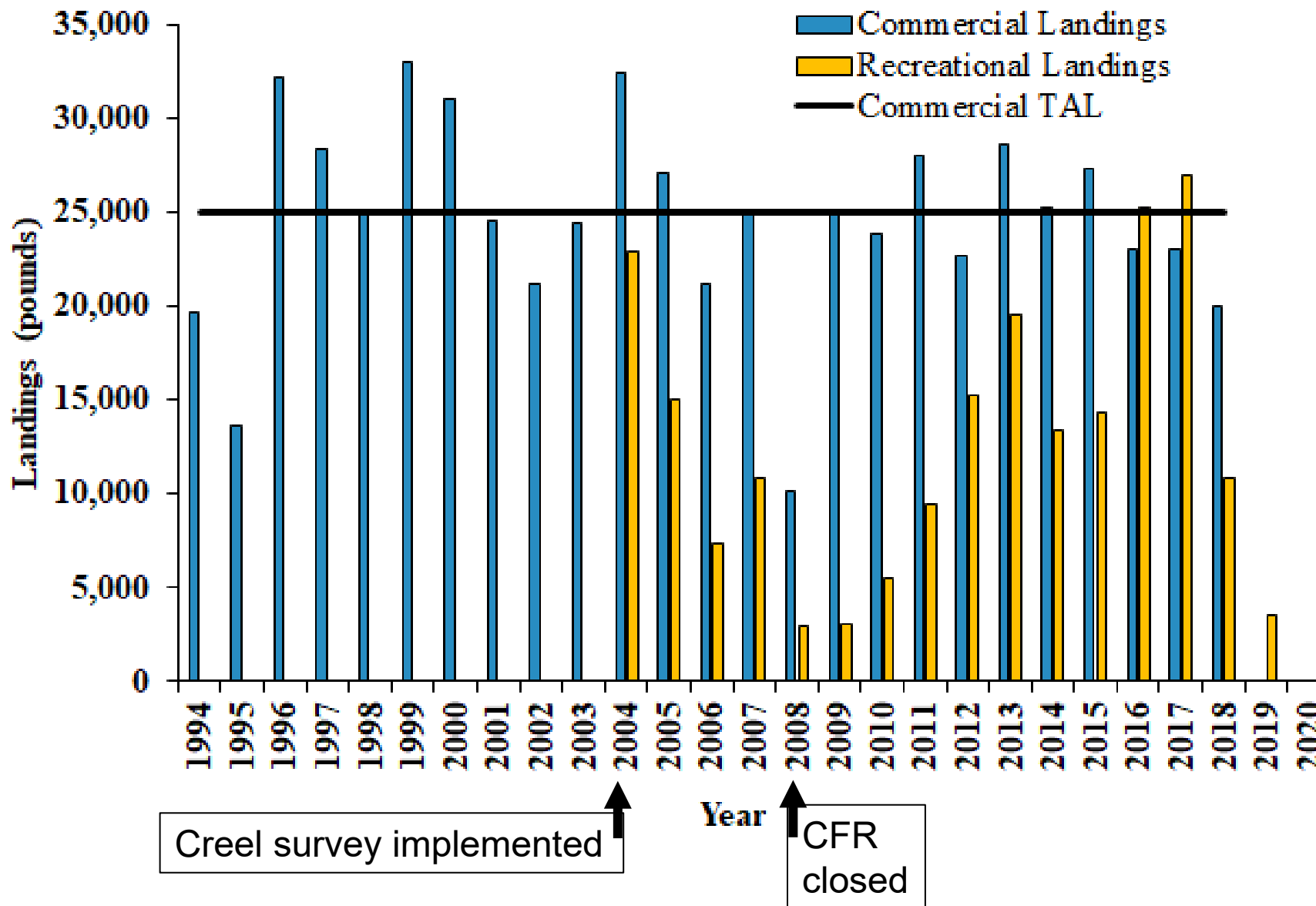
Poor recruitment,
S.A. reduced TAL



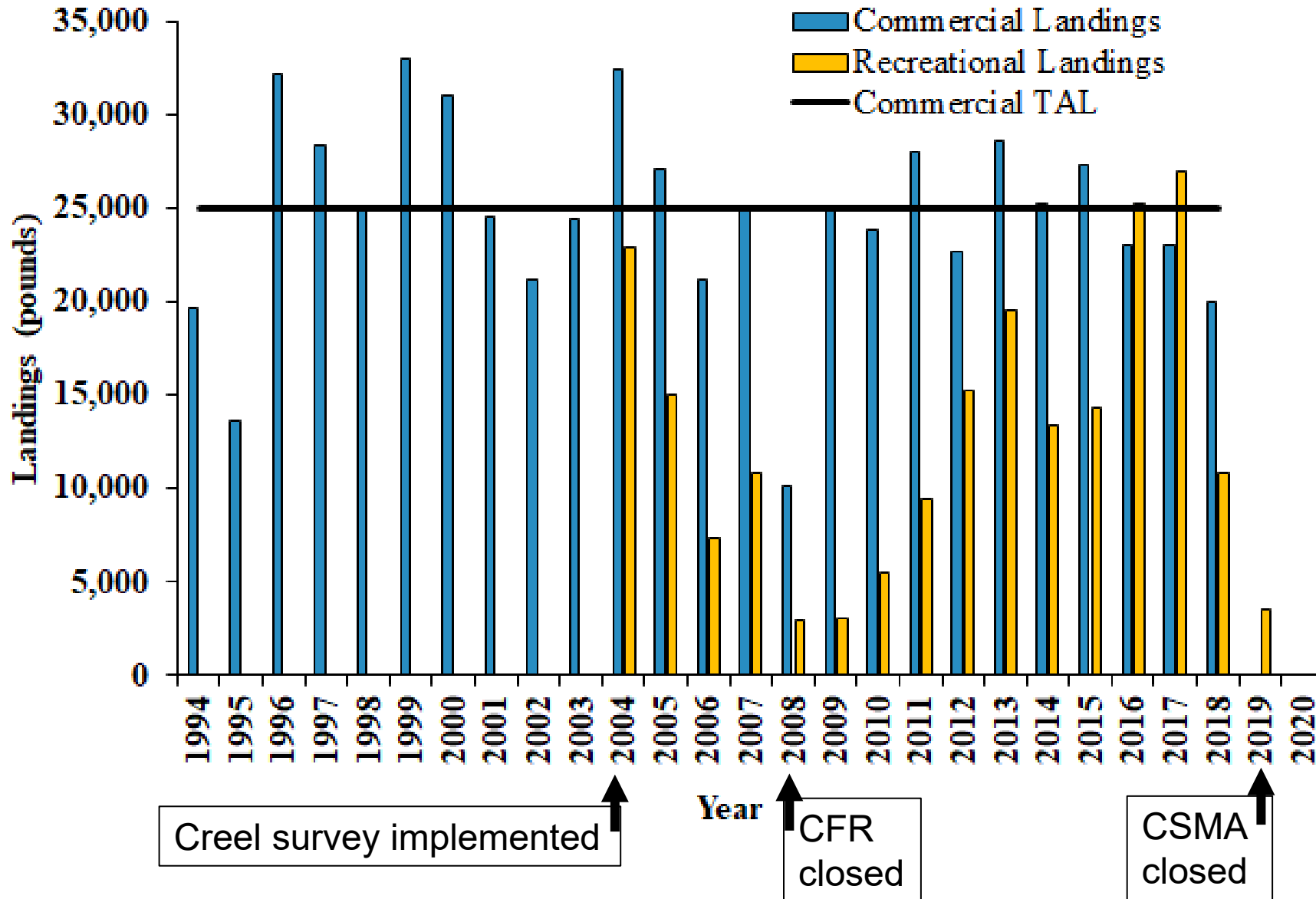
CSMA Fisheries



CSMA Fisheries



CSMA Fisheries

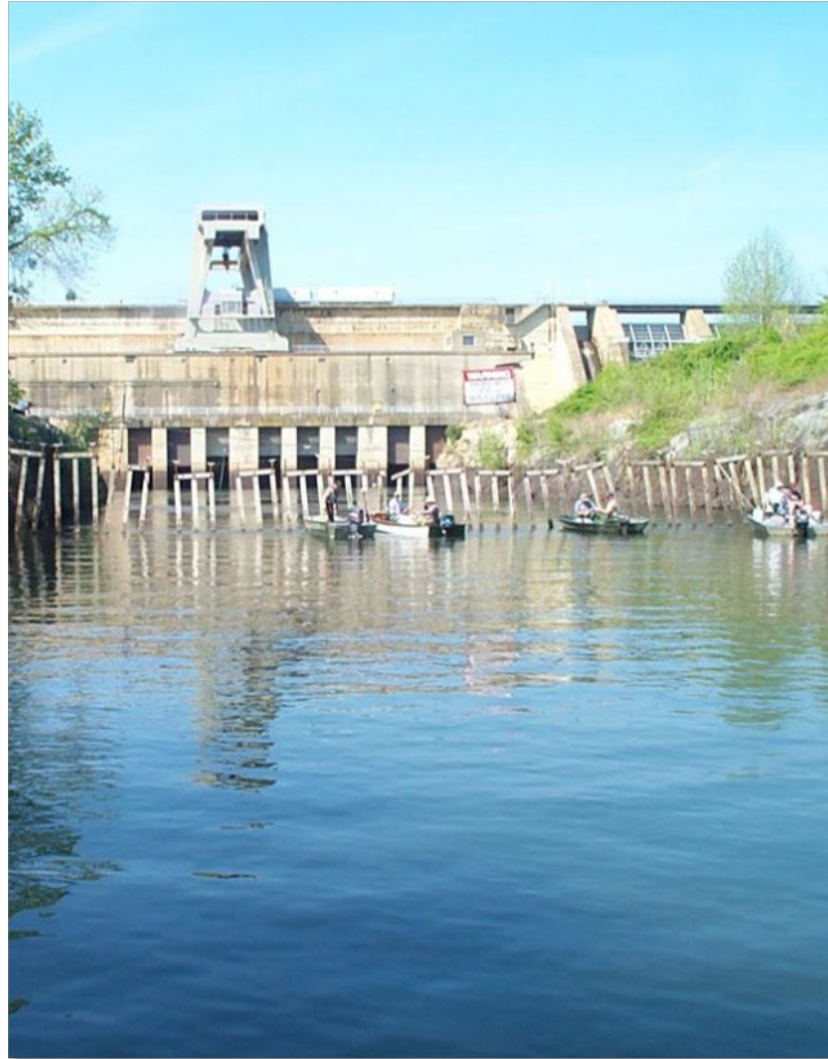
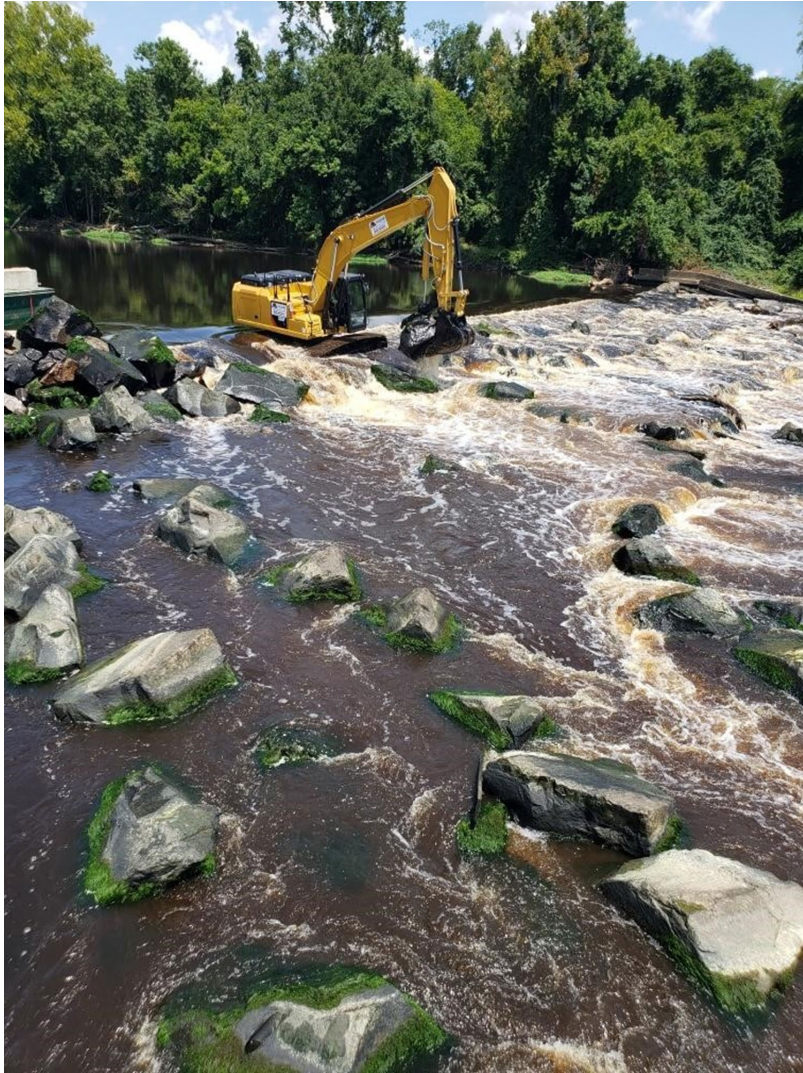


Environmental Concerns

- Habitat and water quality
 - Addressed under CHPP
- Fish kills
- Invasive species



Environmental Concerns



- Flow
 - Flow impacts recruitment
 - USACE Water Control Plan
- Egg density



Issue and Information Papers

Sustainable Harvest



Albemarle-Roanoke

End overfishing and rebuild the spawning stock to achieve long-term sustainable harvest.

Example Options

Reduce TAL, no possession provision, size limit changes, gear modifications including possibly phasing out gill nets



Tar-Pamlico and Neuse Rivers

Promote natural recruitment by expanding the age structure of the stock to achieve a self-sustaining population.

Example Options

Continue the no-possession provision and gear modifications



Cape Fear River

Consider implications of allowing harvest given high hatchery contribution to the stock, low overall abundance, limited natural recruitment, and impediments of locks and dams on spawning migration.

Example Options

Continue no-possession or allow limited harvest by area

Across Systems



Stocking Information Paper

Describes the history of striped bass stocking strategies in North Carolina and gives an overview of future stocking strategies by system. Strategies are developed through the North Carolina Interjurisdictional Fisheries Cooperative (COOP) annual work plans.



Hook & Line as Commercial Gear

Evaluate the purpose and benefit of hook-and-line as an allowable gear in the commercial striped bass fishery and examine concerns and logistics of implementing the use of hook and line gear.

Appendix 1: Stocking

- History and assessment of State program
 - Systems
 - Broodstock
 - Production methods
 - Management considerations
- Cooperative agreement
 - USFWS
 - DMF
 - WRC
- Informs sustainable harvest issue papers



Appendix 2: A-R Sustainable Harvest

- Sustainable harvest through harvest restrictions
- Commercial bycatch fishery
- TAL accountability measures
- Size limit changes including slot limits
- Gear modifications and area closures
- Adaptive Management



Appendix 3: Tar-Pamlico and Neuse Rivers Sustainable Harvest

- Requires continuous stocking to maintain abundance
- Protect older, larger fish to increase the age structure and abundance
- No-possession provision
- Gear restrictions and/or limits
- Adaptive Management
 - Data review



Appendix 4: Cape Fear River Sustainable Harvest



- No-possession provision
- Seasonal harvest
- Adaptive Management

Photo By: Adam B. Cape Fear River, N.C.



Appendix 5: Hook and Line as a Commercial Gear



- Amendment 1 Rule Change
- Explores how to implement this gear
- Considerations
 - Proactive vs reactive approach
 - Current STB Stock Status
 - No-harvest / reduced TAL



Estuarine Striped Bass Amendment 2 Timeline

• Division holds public scoping period

• Marine Fisheries Commission approve goal and objectives of FMP

• Division drafting FMP

• Division holds workshops to further develop draft FMP with plan advisory committee

• Division updating draft plan

• **Marine Fisheries Commission vote to send draft FMP for public and advisory committee review**

Next Step

• Commission advisory committees meet to review draft FMP and receive public comment

• Marine Fisheries Commission select preferred management options

• Department of Environmental Quality Secretary and legislative review draft FMP

• Marine Fisheries Commission vote on final adoption of FMP

• Division and Marine Fisheries Commission and Wildlife Resources Commission implement management strategies

Questions?

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