

## Purpose

The Fisheries Reform Act (FRA) of 1997 (and subsequent amendments) requires the North Carolina Division of Marine Fisheries to prepare Fishery Management Plans for adoption by the North Carolina Marine Fisheries Commission for all commercially and recreationally significant species or fisheries that comprise state marine or estuarine resources. The goal of these plans is to ensure long-term viability of these fisheries. Each plan shall:

- a. Contain necessary information pertaining to the fishery or fisheries, including management goals and objectives, status of the relevant fish stocks, stock assessments for multi-year species, fishery habitat and water quality considerations consistent with Coastal Habitat Protection Plans, social and economic impact of the fishery to the State, and user conflicts.
- b. Recommend management actions pertaining to the fishery or fisheries.
- c. Include conservation and management measures that will provide the greatest overall benefit to the State, particularly with respect to food production, recreational opportunities, and the protection of marine ecosystems, and that will produce a **sustainable harvest**.
- d. Specify a time period, not to exceed 10 years from the date of the adoption of the plan, for ending overfishing and achieving a sustainable harvest. This subdivision shall only apply to a plan for a fishery that is **overfished**. This subdivision shall not apply to a plan for a fishery where the biology of the fish or environmental conditions make ending **overfishing** and achieving a sustainable harvest within 10 years impracticable.

## Definitions

- ◆ **Overfished:** The condition of a fishery that occurs when the spawning stock biomass of the fishery is below the level that is adequate for the recruitment class of a fishery to replace the spawning class of the fishery.
- ◆ **Overfishing:** Fishing that causes a level of mortality that prevents a fishery from producing a sustainable harvest.
- ◆ **Sustainable Harvest:** The amount of fish that can be taken from a fishery on a continuing basis without reducing the stock biomass of the fishery or causing the fishery to become overfished.

## North Carolina Estuarine Striped Bass Fishery Management Plan Advisory Committee

### *Albemarle/Roanoke Stock*

#### Commercial

Terry Pratt  
Dossey Pruden  
Fred Waterfield  
Riley Williams

#### Recreational

William Blackwell  
James Braun  
Lee Briley  
David Buchanan  
Dale Petty

Duke Spencer—For Hire

#### Scientist

Jeff Buckel  
Roger Rulifson

### *Central/Southern Stocks*

#### Commercial

Keith Bruno  
Jason Hassell  
Alton Parker

#### Recreational

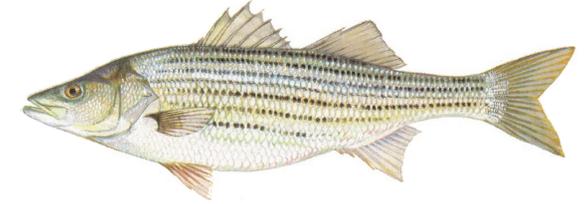
Richard Andrews  
Nick Blackerby  
Jim Dupree  
Kim Tavasso

#### Scientist

Anthony Overton

## NC Division of Marine Fisheries

# Estuarine Striped Bass Fishery Management Plan Review



## The FMP Process

This document provides information concerning an upcoming Fishery Management Plan (FMP) review for striped bass. The proposed amendment will be developed by the NC Division of Marine Fisheries (NCDMF) and the NC Wildlife Resources Commission (NCWRC), in cooperation with the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). The NC Marine Fisheries Commission (NCMFC) will appoint Advisory Committees (AC) consisting of representatives from the commercial and recreational fishing sectors, and scientific communities to assist in the development of the amendment. Stock status will be determined and management measures will be developed for two stock classifications: 1) the Albemarle/Roanoke stock, and 2) the Central/Southern stocks combined.

If necessary, the initial draft FMP amendment will include a list of issues associated with the fisheries and possible solutions to resolve those issues. As this draft progresses, the NCMFC will hold AC meetings to obtain public input on the issues. The NCDMF and the AC will then review and incorporate comments received, as necessary, and produce a final draft of the FMP amendment. A series of public meetings will be held for the public to comment on the final draft prior to adoption by the NCMFC and NCWRC. Public hearings will be held prior to adoption of permanent rules to implement the final management plan recommendations.



North Carolina Division of Marine Fisheries  
P.O. Box 769  
3441 Arendell Street  
Morehead City, NC 28557 252-726-7021



North Carolina Wildlife Resources Commission  
NCSU Centennial Campus  
1751 Varsity Drive  
Raleigh, NC 27606 919-707-0010

## Stock Status

### Stock Status: Albemarle/Roanoke Stock (A/R) - Viable

Albemarle Sound Management Area (ASMA): North of a line from Roanoke Marshes Point across to Eagle Nest Bay, which includes Albemarle, Currituck, Roanoke and Croatan sounds and the joint and inland water tributaries (management responsibility- NCMFC).

Roanoke River Management Area (RRMA): Roanoke River and its joint and inland water tributaries, including the Cashie, Eastmost, and Middle rivers, up to the Roanoke Rapids Dam (management responsibility- NCWRC).

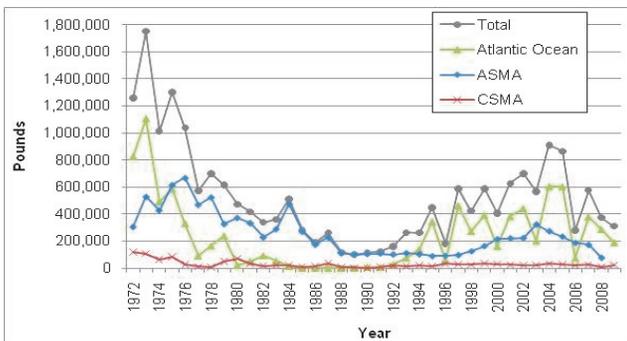
The A/R stock of striped bass was overfished during the late 1970s through the mid-1990s. Juvenile production dropped to all time lows, harvest declined and age composition of the stock was truncated. In 1994, the NCMFC and the NCWRC approved a joint management plan for the A/R stock. Management measures were implemented on all fisheries and the stock began to respond. In 1997, the stock was declared recovered by the Atlantic States Marine Fisheries Commission. The stock is currently managed under the 2004 NC Estuarine Striped Bass FMP. As the stock rebuilt and total allowable catch (TAC) was increased, fishing mortality on ages 4-6 rose steadily through the early 2000s and has been gradually falling since 2004. Annual recruitment has been at or above long term average. With the last TAC increase in 2003, landings peaked in 2004 and have since steadily declined. The 2009 stock assessment shows the A/R stock age 4-6 abundance peaked through the early 2000s and has declined from 2006-2008.

### Stock Status: Central/Southern Internal Stocks- Concern

CSMA Management Area- All coastal, joint and contiguous inland waters of North Carolina south of a line from Roanoke Marshes Point across to Eagle Nest Bay.

The NCWRC has conducted spawning stock surveys in the Tar, Neuse, and Cape Fear rivers since the middle 1990s. Several data gaps identified in the 2004 FMP are being addressed by initiation of a NCDMF creel survey, fishery independent sampling, and increased observer coverage. Despite stocking efforts, there are few mature fish on the spawning grounds. The recent draft stock assessment concluded that total mortality is excessive, the stocks persist at low levels, and due to data limitations the stock status is concern. Additional dependent and independent data must be collected before a comprehensive stock assessment can be developed.

### Commercial Striped Bass Landings 1972-2009



(ASMA Total Allowable Catch (TAC) 1990-2009; Central Southern TAC 1994-2009; At. Ocean closed 1984-1989, TAC 1990-2009)

## Estuarine Striped Bass North Carolina Fishery Management Plan

### Issues

The NCDMF and NCWRC have identified these issues:

**Habitat and Water Quality:** River flow, protection of critical habitats, blockages to historical spawning habitats, identification of other spawning and nursery areas, water based industrial development, point and non-point source discharges, hypoxia events, contaminants, and climate change.

**Fishing Mortality:** Recreational and commercial harvest, bycatch-directed and non-directed commercial and recreational and poaching.

**Fish Community Interactions:** Predator-prey relationships, diet, parasites, disease, stocking, invasive species, and aquaculture.

### What do you think the management issues are?

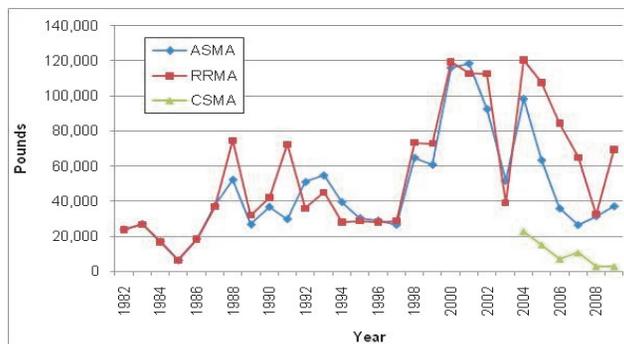
We need to hear from you. Please send comments concerning these or other management issues to the following address:

Charlton H. Godwin or Katy West  
North Carolina Division of Marine Fisheries  
Fisheries Management Section  
3441 Arendell Street  
Morehead City, NC 28557-0769  
(252) 264-3911 or (252)-946-6481  
Charlton.Godwin@ncdenr.gov or Katy.West@ncdenr.gov

For more information and a complete listing of current regulations, please visit the following websites:

[www.ncdmf.net](http://www.ncdmf.net)  
[www.ncwildlife.org](http://www.ncwildlife.org)

### Recreational Striped Bass Landings 1982-2009



(ASMA/RRMA Total Allowable Catch (TAC) 1991-2008) (CSMA Lost funding for creel in upper Neuse in 2007) (CSMA New restrictions July 1st 2008; No harvest on Cape Fear. Season is October 1st through April 30th. 2 fish per day. No fish in the 22-27 inch slot in inland waters.)

## Goals and Objectives

**Goals:** The goals of the NC Estuarine Striped Bass FMP are to achieve sustainable harvest through science based decision-making processes that conserve adequate spawning stock, provide and maintain a broad age structure, and protect the integrity of critical habitats.

### Objectives:

1. Identify and describe population attributes, including age structure, necessary to achieve sustainable harvest.
2. Restore, improve, and protect striped bass habitat and environmental quality consistent with the Coastal Habitat Protection Plan to increase growth, survival, and reproduction.
3. Manage the fishery in a manner that considers biological, social, and economic factors.
4. Initiate, enhance, and/or continue programs to collect and analyze biological, social, economic, fishery, habitat, and environmental data needed to effectively monitor and manage the fishery.
5. Initiate, enhance, and/or continue information and education programs to elevate public awareness of the causes and nature of issues in the striped bass stocks, habitat, and fisheries, and explain management programs.
6. Develop management measures, including regulations, that consider the needs of all user groups and provides sustainable harvest.
7. Promote practices that minimize bycatch and discard mortality in recreational and commercial fisheries.

### Striped Bass Juvenile Abundance Index (ASMA) 1955-2009

