A TEN YEAR PRESCRIPTION TO RECOVER THE ALBEMARLE SOUND - ROANOKE RIVER STRIPED BASS STOCK
A Ten-Year Prescription for the Recovery of the Albemarle Sound/Roanoke River Striped Bass Stock

Introduction

According to the most recent stock assessment, the Albemarle Sound/Roanoke River Striped Bass stock is overfished and overfishing is occurring. In addition, flooding of the Striped Bass spawning grounds on the Roanoke River during the past four years has resulted in poor reproduction. Therefore, the stock is in a much-diminished state as compared to that of the 1990s when Striped Bass were very abundant.

The combination of overfishing and poor juvenile recruitment has left the stock in such a condition that DMF and WRC have proposed very low levels of harvest for 2021. These harvest levels are so low as to call into question whether they are justifiable at all. Given the inherent error and lack of precision in the stock assessment model, it is doubtful that the proposed harvest levels can be taken without doing further harm to what can only now be described as a remnant stock. The citizens of North Carolina would be better served by preserving the remaining Striped Bass as spawning stock rather than as a commodity until such time as spawning grounds river flow conditions support successful recruitment.

Realistically, 10 years (at least) will be required to restore size and age classes of Striped Bass. The following time frame discussion outlines what will be necessary to have a reasonable chance at restoration of the stock. The presence of an ongoing multi-species gill net fishery is not compatible with Striped Bass recovery. In some year’s past, the numbers of Striped Bass gill net bycatch discards greatly exceeded the numbers of Striped Bass harvested. In addition, numbers of Striped Bass caught and released in the Albemarle Sound and Roanoke River recreational fishery are quite high and need to be controlled.

Fishing mortality and supplemental fingerling stockings are the only factors within our control in an effort to restore the Albemarle Sound/Roanoke River Striped Bass stock. Only during spawning seasons with average rainfall can the US Army Corps of Engineers provide optimum river flows from Kerr Lake critical to successful Striped Bass spawning. We are therefore left with few options but to reduce fishing mortality to near zero and to consider Striped Bass fingerling stocking as a last resort. Annual updates and review of the stock assessment model and its targets will be necessary to monitor progress of the recovery.


Time Frame and Actions

2021

• Begin moratorium on harvesting Striped Bass in Albemarle Sound and tributaries including Roanoke River and tributaries. Prohibit the possession or sale of Striped Bass. Begin two-year phase out of gill nets except for large mesh gill nets in Chowan River for Blue Catfish. Pound nets and fyke nets allowable for other species.

• Prohibit the use of natural bait in the Albemarle Sound and Roanoke River recreational fishery and require single barbless hooks until further notice.

• Maintain weekly contact with US Army Corps of Engineers and Dominion Energy during the spawning period to negotiate appropriate flows for the Roanoke River. Carry out annual DMF Striped Bass Juvenile Abundance sampling in Albemarle Sound, Fishery Independent sampling, as well as WRC Spawning Grounds Spawning Stock Assessment on the Roanoke River. Update stock assessment.

2022

• Maintain moratorium on harvesting Striped Bass. Begin second year of phase out of gill nets except for large mesh gill nets in Chowan River for Blue Catfish. Pound nets and fyke nets allowable for other species.

• Maintain weekly contact with US Army Corps of Engineers and Dominion Energy during the spawning period to negotiate appropriate flows for the Roanoke River. Carry out annual DMF Striped Bass Juvenile Abundance sampling in Albemarle Sound, Fishery Independent sampling, as well as WRC Spawning Grounds Spawning Stock Assessment on the Roanoke River. Update stock assessment.

2023

• Maintain moratorium on harvesting Striped Bass. Use of gill nets in Albemarle Sound and tributaries are hereby prohibited except for large mesh gill nets in Chowan River for Blue Catfish. Pound nets and fyke nets allowable for other species.

• Maintain weekly contact with US Army Corps of Engineers and Dominion Energy during the spawning period to negotiate appropriate flows for the Roanoke River. Carry out annual DMF Striped Bass Juvenile Abundance sampling in Albemarle Sound, Fishery Independent sampling, as well as WRC Spawning Grounds Spawning Stock Assessment on the Roanoke River. Update stock assessment.
2024, 2025, 2026

- Maintain moratorium on harvesting Striped Bass.
- Maintain weekly contact with US Army Corps of Engineers and Dominion Energy during the spawning period to negotiate appropriate flows for the Roanoke River. Carry out annual DMF Striped Bass Juvenile Abundance sampling in Albemarle Sound, Fishery Independent sampling, as well as WRC Spawning Grounds Spawning Stock Assessment on the Roanoke River. Update stock assessment.
- Should the Striped Bass stock not have responded by 2026, begin supplemental fingerling stocking.

2027, 2028, 2029

- Maintain moratorium on harvesting Striped Bass.
- Maintain weekly contact with US Army Corps of Engineers and Dominion Energy during the spawning period to negotiate appropriate flows for the Roanoke River. Carry out annual DMF Striped Bass Juvenile Abundance sampling in Albemarle Sound, Fishery Independent sampling, as well as WRC Spawning Grounds Spawning Stock Assessment on the Roanoke River. Update stock assessment.
- Continue supplemental fingerling stocking.

2030

- Depending upon results of stock assessment, explore the possibility of reopening the recreational Striped Bass fishery. Explore the possibility of reopening the commercial Striped Bass fishery using hook and line, pound nets and fyke nets as the allowable gears of capture.
- Maintain weekly contact with US Army Corps of Engineers and Dominion Energy during the spawning period to negotiate appropriate flows for the Roanoke River. Carry out annual DMF Striped Bass Juvenile Abundance sampling in Albemarle Sound, Fishery Independent sampling, as well as WRC Spawning Grounds Spawning Stock Assessment on the Roanoke River. Update stock assessment.
- Continue supplemental fingerling stocking.
Benefits of this 10-Year Plan

Overfishing ends within two years.

The need for an Incidental Take Permit for sturgeon and sea turtles in Albemarle Sound is diminished.

The need for gill net observers is negated.

Major sources of Striped Bass mortality are removed. Striped bass will be free from unintentional capture and handling except from pound nets, fyke nets, and recreational catch and release where survival rates are high.

Costs of this 10-Year Plan

Loss of use of gill nets in the Striped Bass and multi-species fishery.

Although alternative gears are available, some commercial fishermen will not likely invest in new gears.

Bait shops that sell natural bait during Striped Bass season will experience a loss of income. However, this loss may be mitigated by the sale of artificial lures that meet hook configuration requirements.