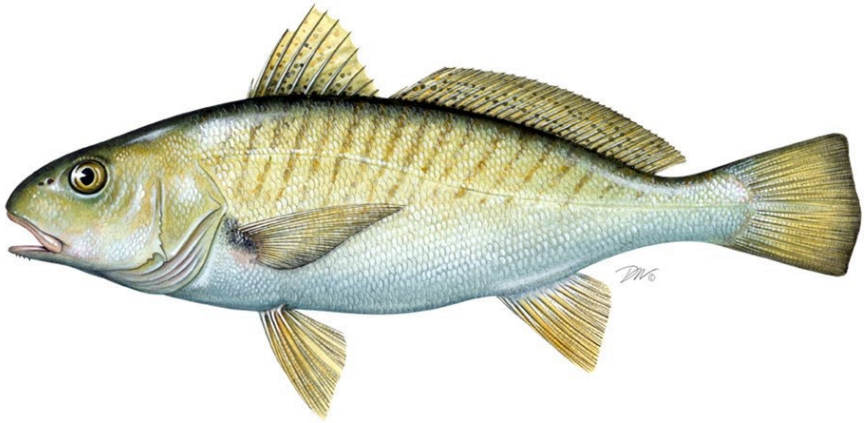
ATLANTIC STATES MARINE FISHERIES COMMISSION

2025 TRAFFIC LIGHT ANALYSIS REPORT FOR ATLANTIC CROAKER (*Micropogonias undulatus)*

2024 Fishing Year



Prepared by the Technical Committee
Approved August 2025

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

EXECUTIVE SUMMARY

Background

The purpose of this report is to evaluate the current status of Atlantic croaker using the annual Traffic Light Analysis (TLA). Annually, the Technical Committee (TC) conducts a TLA to evaluate a Mid-Atlantic (NJ-VA) and a South Atlantic (NC-FL) harvest metric, combining commercial and recreational landings in the region. The TC also evaluates a Mid-Atlantic and South Atlantic abundance metric, combining indices of abundance from fishery-independent surveys in each region. Each metric is evaluated using a color proportion of green, yellow, or red calculated for each year based on comparing the respective year to a 2002-2012 reference period. Addendum III defined two thresholds, 30% (proportion=0.30) red as a threshold for moderate concern and 60% (proportion=0.60) red as a threshold for significant concern to the fishery. Management action is triggered according to the 30% red and 60% red thresholds if both the adult abundance and harvest thresholds are exceeded for either region in any three of the four terminal years.

2024 Harvest Metrics

The Mid-Atlantic harvest metric exceeded the 60% red threshold in all four terminal years (2021-2024) and the South Atlantic harvest metric exceeded the 30% red threshold in all four terminal years. This is the 10th consecutive year the harvest metrics in both regions have exceeded the 30% threshold. However, the harvest metrics in 2024 cannot be used as a trigger mechanism because they are affected by catch restrictions triggered by previous TLAs.

2024 Abundance Metrics

The Mid-Atlantic abundance metric exceeded the 30% threshold for three of the four terminal years and exceeded the 60% threshold in one of those years (2023). However, the Mid-Atlantic abundance metric did not exceed the 30% threshold in 2024, which is the first year it has been below the 30% threshold since 2015. The South Atlantic abundance metric did not exceed thresholds in any of the four terminal years.

Conclusions

The harvest metric exceeded the 60% threshold in the Mid-Atlantic and exceeded the 30% threshold in the South Atlantic from 2021 to 2024. Since harvest restrictions have been in place since 2021, and Atlantic croaker have remained in a triggered state, the harvest metric cannot be used as a trigger mechanism in recent years. The abundance metrics tripped for the Mid-Atlantic at the 30% threshold and did not trip in the South Atlantic. Addendum III states if triggered measures have remained in place for a minimum of four years due to proportions of red above a threshold for either of the regional abundance metrics, the TC will, as part of conducting the annual TLA, evaluate trends in abundance to recommend to the Board whether triggered measures should remain in place or more restrictive measures should be considered. The TC recommends maintaining current management measures.

1 INTRODUCTION

Atlantic croaker are managed under Amendment 1 to the Interstate Fishery Management Plan for Atlantic Croaker (2005) and Addendum I (2011), Addendum II (2014), and Addendum III (2020). Addendum III describes the regional Traffic Light Analysis (TLA) and establishes management actions to be taken if the TLA triggers. Regions are the South Atlantic (FL-NC) and the Mid-Atlantic (VA-NJ).

The TLA incorporates multiple data sources (both fishery independent and dependent) into easily understood metrics for management advice. It is often used for data-limited species, or species that are not assessed on a frequent basis. The name comes from assigning a color (red, yellow, or green) to categorize relative levels of indicators on the condition of the fish population (abundance metric) or fishery (harvest metric).

The TLA uses the following data sources in Atlantic croaker management:

- Harvest Metric: recreational and commercial landings by region
- Abundance Metric: Age 2+ abundance indices by region
    - Mid-Atlantic: Chesapeake Bay Multispecies Monitoring and Assessment Program (ChesMMAP) and the Northeast Fishery Science Center (NEFSC) Multispecies Bottom Trawl Survey
    - South Atlantic: Southeast Area Monitoring and Assessment Program (SEAMAP) and the South Carolina Department of Natural Resources (SCDNR) Trammel Net Survey

Management action will be triggered according to the current 30% red (moderate concern) and 60% red (significant concern) thresholds if both the abundance and harvest thresholds are exceeded in either region in any three of the four terminal years. The thresholds are defined as the long-term mean of the reference period (2002-2012).

In 2020, the TLA for Atlantic croaker had red proportions that exceeded the 30% threshold in both the harvest and abundance metrics in the Mid-Atlantic. The South Atlantic harvest metric also exceeded the 30% threshold in 2020. Exceeding the 30% threshold represents moderate concern to the fishery and initiated a moderate management response. All non-*de minimis* states were required to institute more restrictive measures in their recreational and commercial fisheries. Management measures initiated in 2021 are currently still in place due to the anticipation of results from the ongoing benchmark stock assessment within the next year.

Due to the COVID restrictions in 2020, the survey index values used to calculate the TLA index values were imputed for the NEFSC survey in the mid-Atlantic and the SEAMAP survey in the South Atlantic region. The NEFSC index value for 2020 was imputed as the mean of the two previous years and 2021. The SEAMAP index value for 2020 was imputed as the mean of the two previous and the two subsequent years (2018-2019 and 2021-2022).

2 TRAFFIC LIGHT ANALYSIS RESULTS

2.1 Harvest Metrics (Figure 1 and Figure 2)

- Harvest restrictions were put in place in 2021 in response to the 2020 TLA triggering at the 30% threshold. These restrictions are still in place and thus the harvest metrics cannot be interpreted for the purpose of a TLA, since lower landings get a red designation and measures have been put in place to lower landings.
- Landings in both regions remain low relative to the reference period (2002-2012). It is unknown if this is due to the harvest restrictions or a continued concern for this fishery.
- The Mid-Atlantic harvest exceeds 60% red in all four terminal years. The South Atlantic harvest exceeds 30% red in all four terminal years.
- This is the 10th consecutive year the harvest metric in both regions have exceeded the 30% threshold and 7th consecutive year it has exceeded the 60% threshold in the Mid-Atlantic.

2.2 Abundance Metrics (Figure 3 and Figure 4)

- The Mid-Atlantic abundance metric exceeded the 30% red threshold in three of the four terminal years. Index values were up in 2024 with no red and a 79% green proportion. However, the Mid-Atlantic abundance index still exceeded the 30% threshold for three of the four terminal years, indicating moderate concern.
- The South Atlantic abundance metric did not exceed the 30% or 60% thresholds. The last four years are predominantly green or yellow, representing no concern.

3 SUMMARY

- Table 1 provides results of the past four years of TLA metrics for each region, as well as the current TLA status.
- Because the harvest metrics cannot be interpreted when management is in place to keep harvest low, interpretation of the TLA relies on the abundance metrics. Although the South Atlantic abundance index did not exceed any threshold level, the Mid-Atlantic abundance index continues to exceed the 30% threshold in three of the four terminal years.
- Given the TLA continues to be triggered at the 30% threshold level which has not been elevated to the 60% threshold level, the TC recommends that current management measures remain in place until the 2026 Atlantic croaker assessment is complete, after which the TLA will be re-evaluated.

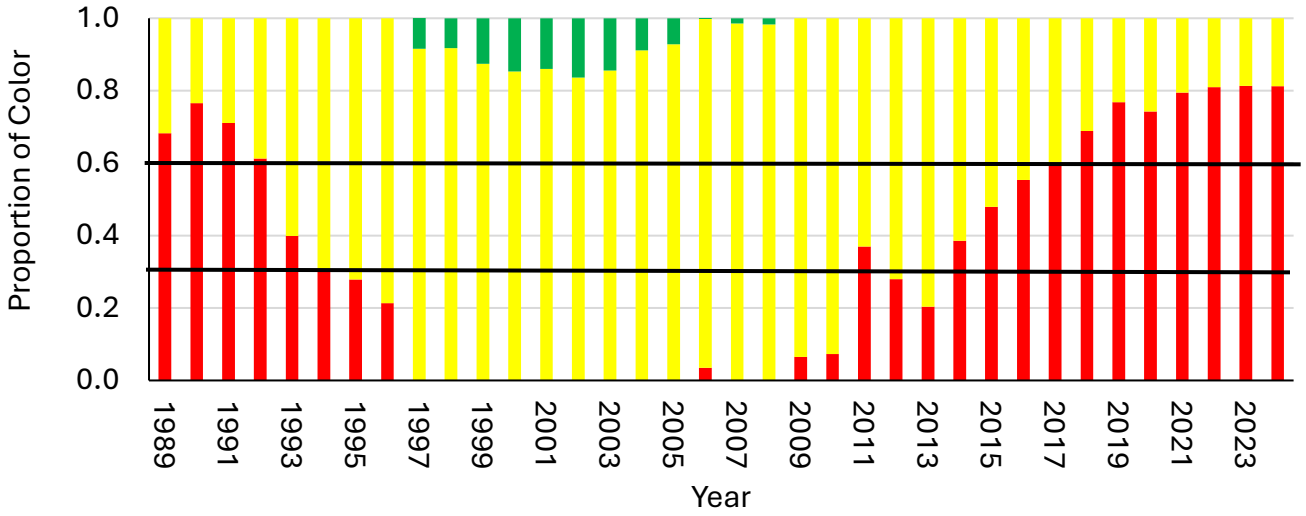


Figure 1. Annual TLA for Atlantic croaker harvest metric (commercial and recreational landings) in the Mid-Atlantic (NJ-VA) from 1989-2024 using a 2002-2012 reference period.

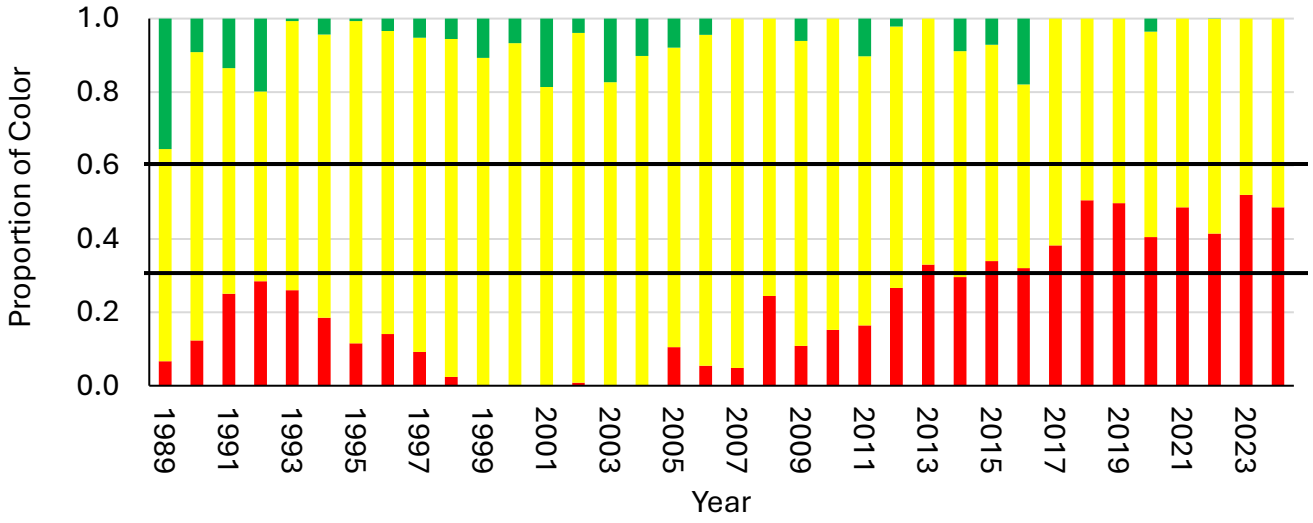


Figure 2. Annual TLA for Atlantic croaker harvest metric (commercial and recreational landings) in the South Atlantic (NC-FL) from 1989-2024 using a 2002-2012 reference period.

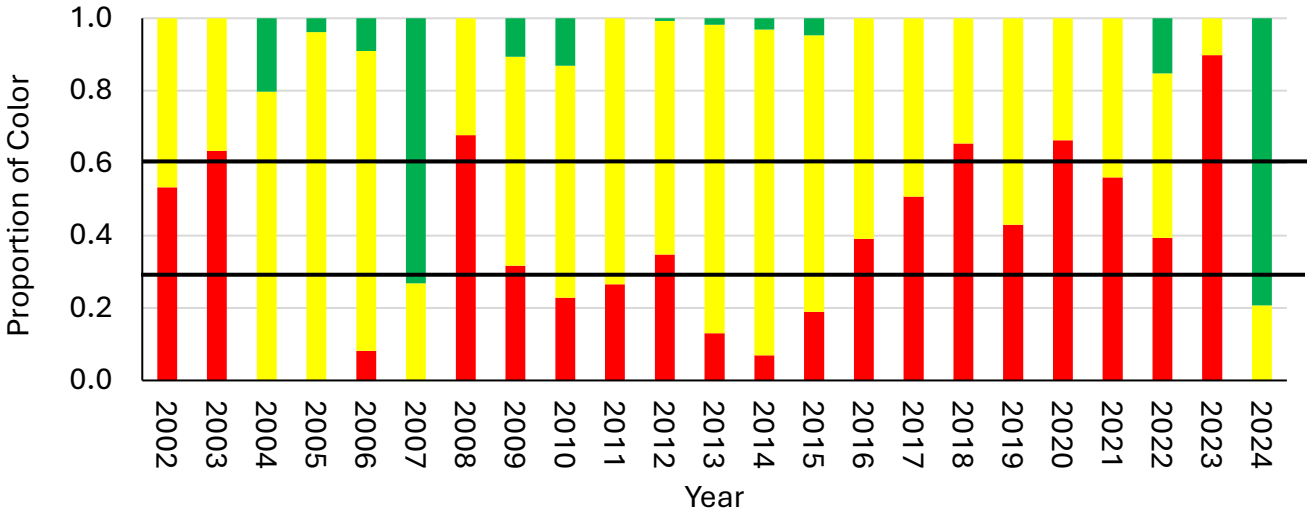


Figure 3. Annual TLA for adult (age 2+) Atlantic croaker abundance metric in the Mid-Atlantic (NEFSC and ChesMMAP surveys) from 2002-2024 using a 2002-2012 reference period.

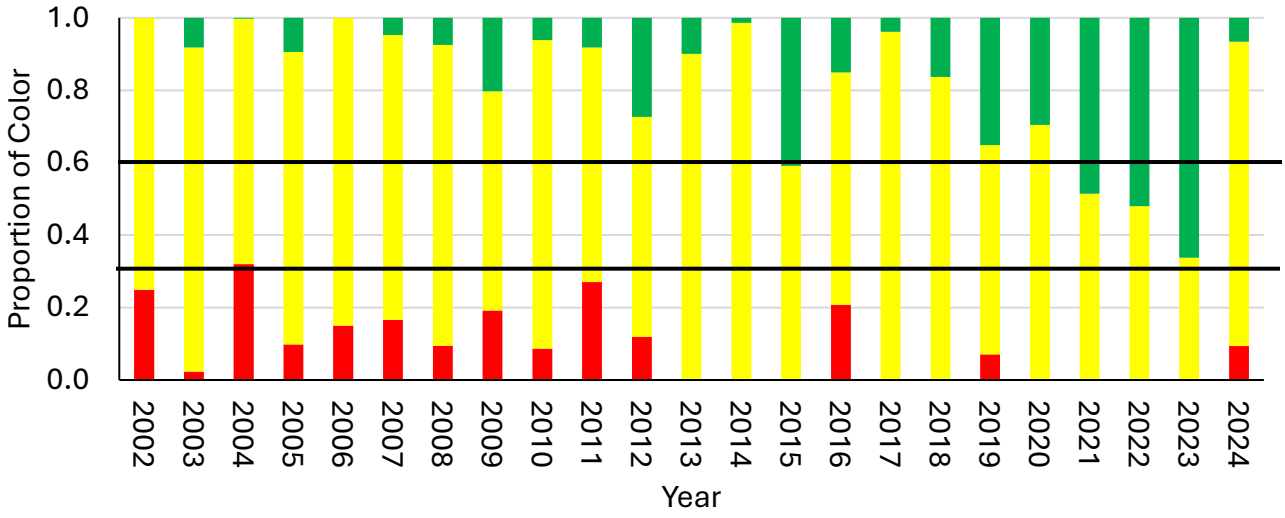


Figure 4. Annual TLA for adult (age 2+) Atlantic croaker abundance metric in the South Atlantic (SEAMAP and SCDNR trammel survey) from 2002-2024 using a 2002-2012 reference period.

Table 1. Traffic light analysis results for the Mid- and South Atlantic regions for 2021-2024. Management action is triggered according to the current 30% and 60% red thresholds if both the adult abundance and harvest metrics exceed these thresholds in any three of the four terminal years within either region.*

TLA Metric	Atlantic Croaker				2024 TLA Status
	2021	2022	2023	2024	
Mid-Atlantic Harvest*	79% red	81% red	81% red	81% red	Unknown*
South Atlantic Harvest*	49% red	41% red	52% red	49% red	
Mid-Atlantic Adult Abundance	56% red	39% red	90% red	0% red	Tripped
South Atlantic Adult Abundance	0% red	0% red	0% red	9% red	
Overall					Triggered

*Harvest metrics cannot be interpreted as a trigger mechanism in the TLA at this time since catch restrictions to lower harvest were in place since 2021 and Atlantic croaker harvest and abundance have not been in an untriggered state since restrictions were implemented. As long as catch restrictions are in place, trigger status relies solely on the abundance indices.