ATLANTIC STATES MARINE FISHERIES COMMISSION

2025 TRAFFIC LIGHT ANALYSIS REPORT FOR SPOT (*Leiostomus xanthurus)*

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 spot 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 surveys in the 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 in any two of the three terminal years in either region.

2024 Harvest Metrics

The Mid-Atlantic harvest metric exceeded the 30% red threshold in all three terminal years. The South Atlantic harvest metric exceeded the 60% red threshold in two of the three terminal years. Although catch restrictions have been in place since 2021 after the TLA triggered these actions following the 2019 fishing year, the harvest metric can now be used again as a trigger mechanism because the previous TLA was not in a triggered state.

2024 Abundance Metrics

The abundance metric did not exceed the 30% red threshold in two of the three terminal years for both the Mid- and South Atlantic.

Conclusions

Harvest exceeded the 60% threshold in the South Atlantic in two of the three terminal years and the 30% threshold in all of the three terminal years in the Mid-Atlantic. Although harvest restrictions put in place in 2021 are still in effect, the harvest metric can be used as a trigger mechanism in 2024 because the previous TLA did not indicate a triggered state. The abundance metrics did not trigger in either the Mid-Atlantic or South Atlantic. The TC recommends maintaining current management measures.

1 INTRODUCTION

Spot is managed under the Omnibus Amendment for Spot, Spotted Seatrout, and Spanish Mackerel (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 into a single, easily understood metric 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 spot management:

- Harvest Metric: recreational and commercial landings by region
- Abundance Metric: Age 1+ 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 North Carolina Division of Marine Fisheries (NCDMF) Pamlico Sound Survey (Program 195)

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 two of the three terminal years. The thresholds are defined as the long-term mean of the reference period (2002-2012).

In 2020, the TLA for spot had red proportions that exceeded the 30% threshold for the period of 2017-2019 in harvest metrics for both regions. 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 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). In addition, the NCDMF Pamlico Sound Survey was not able to sample all stations in 2020 and 2021.

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. Although harvest restrictions are still in place, the harvest metric can now be evaluated again because the previous TLAs did not indicate a triggered state.
- Landings in both regions remain low relative to the reference period (2002-2012).
- The Mid-Atlantic harvest metric exceeds the 30% red threshold in all three of the terminal years. The South Atlantic harvest metric exceeds the 60% red threshold in two of the three terminal years.

2.2 Abundance Metrics (Figure 3 and Figure 4)

- In 2024, the Mid-Atlantic abundance metric did not exceed either red threshold. The Mid-Atlantic abundance index exceeded the 30% red threshold in only one of the three terminal years, so overall the abundance index did not trip for this region.
- The South Atlantic abundance metric did not exceed either threshold in any of the three terminal years.

3 SUMMARY

- Table 1 provides results for the past three years of TLA metrics for each region, as well as the current TLA status.
- Both harvest metrics tripped at the 30% threshold (moderate concern), and the South Atlantic harvest metric tripped at the 60% threshold (significant concern).
- Neither abundance index tripped at any level.
- The TC recommends maintaining current management measures.

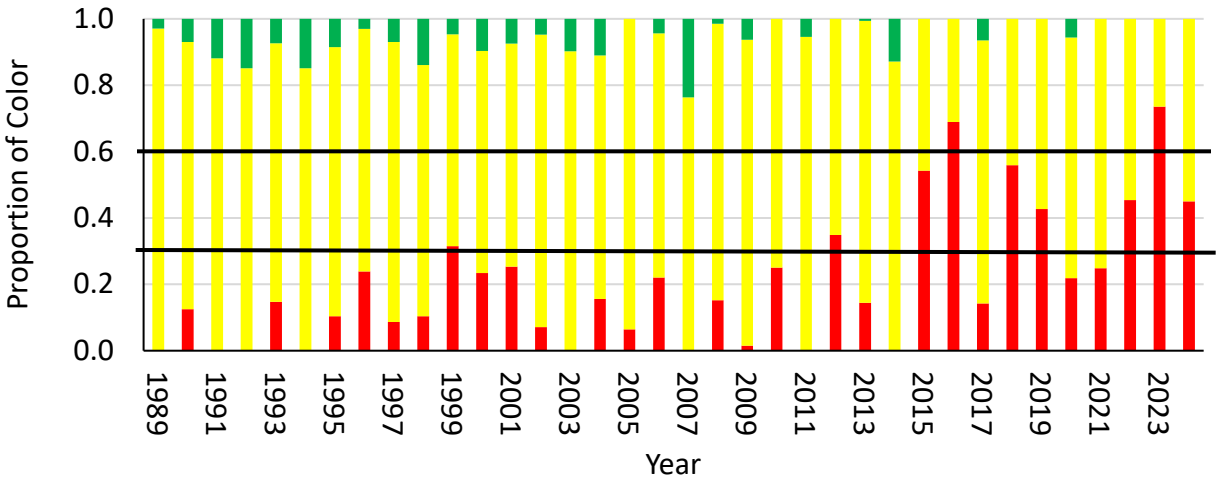

Figure 1. Annual TLA for spot harvest metric (commercial and recreational landings) in the Mid-Atlantic (NJ-VA) from 1989-2024 using a 2002-2012 reference period.

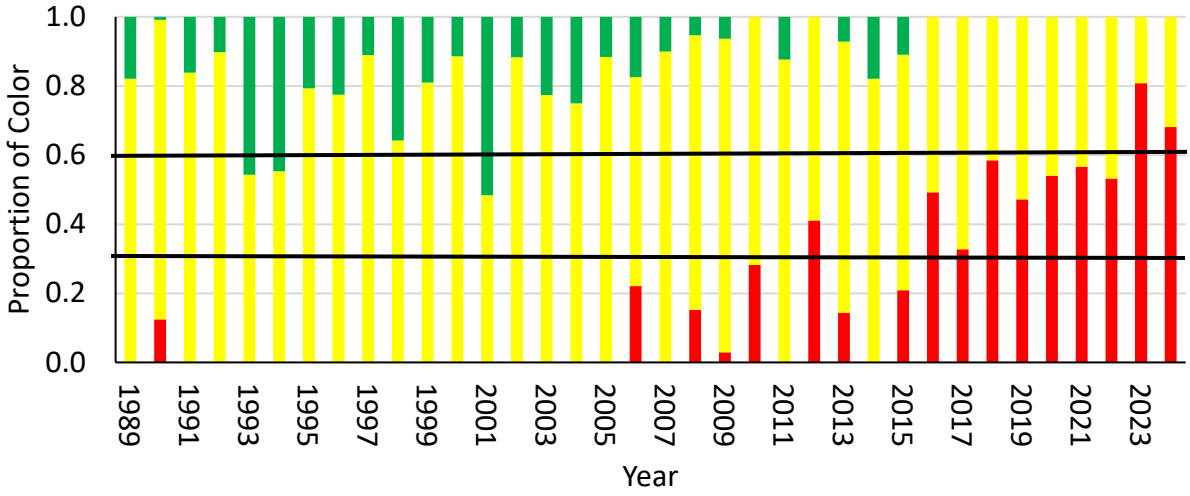

Figure 2. Annual TLA for spot harvest metric (commercial and recreational landings) in the South Atlantic (NC-FL) from 1989-2024 using a 2002-2012 reference period.

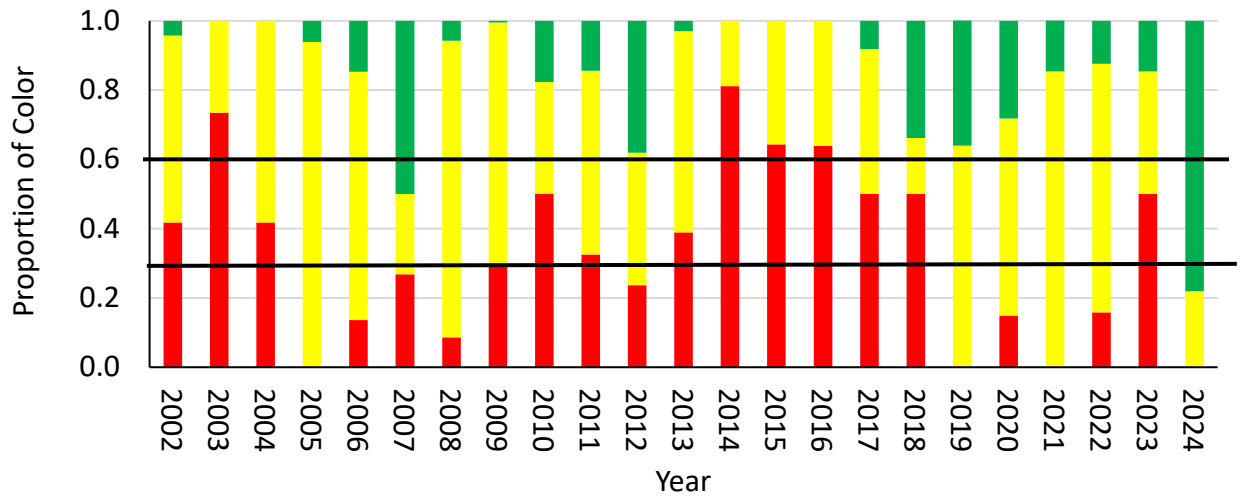

Figure 3. Annual TLA for adult (age 1+) spot abundance metric in the Mid-Atlantic (NJ-VA; NEFSC and ChesMMAP) from 2002-2024 using a 2002-2012 reference period.

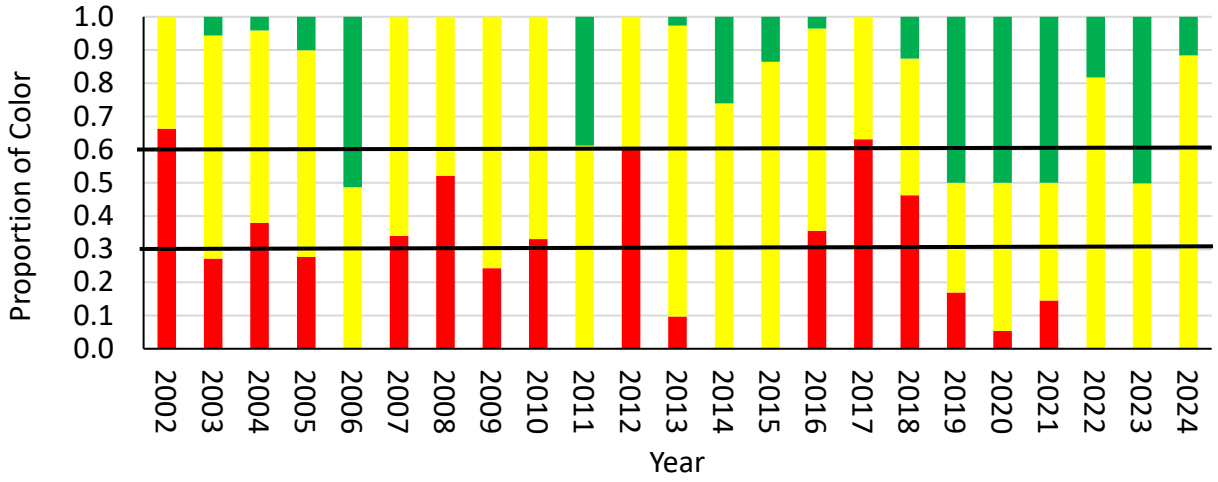

Figure 4. Annual TLA for adult (age 1+) spot abundance metric in the South Atlantic (NC-FL; SEAMAP and NCDMF Program 195) from 2002-2024 using a 2002-2012 reference period.

Table 1. Traffic light analysis results for the Mid- and South Atlantic regions for 2022-2024. 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 two of the three terminal years within either region.*

TLA Metric	Spot			2024 TLA Status
	2022	2023	2024	
Mid-Atlantic Harvest*	45% red	74% red	45% red	Tripped*
South Atlantic Harvest*	53% red	81% red	68% red	
Mid-Atlantic Adult Abundance	16% red	50% red	0% red	Not Tripped
South Atlantic Adult Abundance	0% red	0% red	0% red	
Overall				Not Triggered

* Harvest metrics cannot be interpreted as a trigger mechanism in the TLA if the triggered status remains and there are current catch restrictions to lower harvest in place. However, the previous TLA indicated that spot was no longer in a triggered state. Therefore, the harvest metric can once again be used as a trigger mechanism.