

CHESAPEAKE BAY FOUNDATION

Environmental Protection and Restoration
Environmental Education

Senate Bill 1053

Fisheries - Striped Bass - Closed Season

Date: February 27, 2024 Position: **Favorable with Amendment**

To: Senate Education, Energy, & Environment Committee From: Allison Colden

MD Executive Director

Chesapeake Bay Foundation (CBF) **SUPPORTS** SB 1053 **WITH AMENDMENTS**. SB 1053 would prohibit the targeting of striped bass for either catch-and-release fishing or harvest from March 1 through May 15 in any year that the Department of Natural Resources (DNR) does not allow a spring trophy season for striped bass.

Striped bass are an iconic species in the Chesapeake Bay region and the state fish of Maryland, a designation that reflects the cultural foundation it provides to Maryland fisheries and its important biological connection to Maryland waters. Chesapeake Bay striped bass spawning areas and nursery habitat produce more than 70 percent of the coastal migratory striped bass population.

Unfortunately, the latest stock assessment for striped bass indicates the stock is overfished and mortality rates are too high. Excessive mortality rates of adult fish have coincided with five consecutive years of below-average recruitment in Maryland, as measured by the State's juvenile index. Reducing fishing mortality and improving survival in Chesapeake Bay will be critical to the long-term viability of the population coastwide. Maryland must get this right.

SB 1053 would close catch-and-release fishing in March in years when the trophy season is closed. While well-intentioned, this bill will likely do little to reduce recreational fishing mortality. **The Committee should instead consider limiting targeting of striped bass during the summer months when water quality conditions and warm water temperatures lead to increased mortality.**

Catch-and-release mortality of striped bass in the spring when temperatures range from 57-59° F is estimated at 1.6%, which is further reduced to <1% with the use of circle hooks. In summer, when temperatures exceed 95° F, mortality increases to more than 17%.² Increased water temperatures, combined with seasonal low oxygen and poor water quality causes physiological stress which leads to increased mortality.

Climate change is likely to exacerbate the impact of catch-and-release fishing in the summer. Average Bay water temperatures have already increased more than 2°F, impacting many facets of the Bay ecosystem,

¹ https://www.cbf.org/news-media/newsroom/2023/all/chesapeake-striped-bass-survey-results-show-recruitment-failure.html

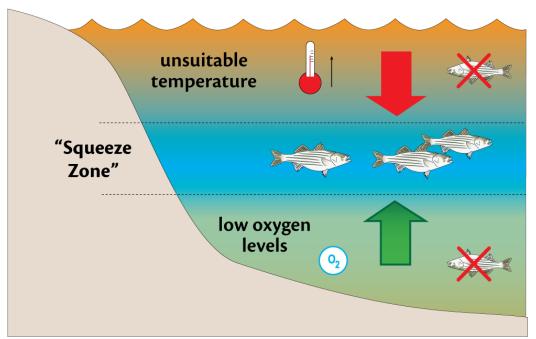
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The Chesapeake Bay Foundation (CBF) is a non-profit environmental education and advocacy organization dedicated to the restoration and protection of the Chesapeake Bay. With over 200,000 members and e-subscribers, including 71,000 in Maryland alone, CBF works to educate the public and to protect the interest of the Chesapeake and its resources.

² https://dnr.maryland.gov/fisheries/documents/crsb.pdf

including striped bass.³ For example, warmer water holds less oxygen than cooler water, making hypoxic conditions worse and "squeezing" striped bass into stressful conditions where they are more susceptible to mortality and disease. This has resulted in a significant decrease in the availability of summer habitat for juvenile and young (age 1-4) striped bass between 1996 and 2019.⁴

Squeeze Zone for Striped Bass



Conceptual diagram illustrating the compressed habitat of the striped bass from the low oxygen levels from the bottom, and the unsuitable unsuitiable tempatures on the top waters.

Diagram courtesy of the Integration and Application Network (ian.umces.edu), University of Maryland Center for Environmental Science. Source: Boesch, D.F. (editor). 2008. Global Warming and the Free State: Comprehensive Assessment of Climate Change Impacts in Maryland. Report of the Scientific and Technical Working Group of the Maryland Commission on Climate Change. University of Maryland Center for Environmental Science, Cambridge, Maryland. This report is a component of the Plan of Action of the Maryland Commission on Climate Change, submitted to the Governor and General Assembly pursuant to Executive Order 01.0.2007.07.

Given the environmental challenges and mortality risk to striped bass are far greater during the summer than in the period proposed by SB 1053, we recommend amendments to the bill that would prohibit the targeting of striped bass from July 5 to Labor Day annually. This closure would help address the significant increase in mortality in the summer months while preserving fishing opportunities during the four summer federal holidays (Memorial Day, Juneteenth, Independence Day, Labor Day).

CBF urges the Committee's FAVORABLE report WITH AMENDMENTS on SB 1053.

For more information, please contact Matt Stegman, Maryland Staff Attorney, at mstegman@cbf.org.

³ https://www.sciencedirect.com/science/article/abs/pii/S0272771409004582?via%3Dihub

 $^{^4\,\}underline{\text{https://d18lev1ok5leia.cloudfront.net/chesapeakebay/documents/c_sb_habitat_assessment_sfgit_july_2022.pdf}$