**SenatorBailey\_FAV\_SB711.pdf** Uploaded by: Jack Bailey Position: FAV

JACK BAILEY Legislative District 29 Calvert and St. Mary's Counties

Budget & Taxation Committee



THE SENATE OF MARYLAND Annapolis, Maryland 21401 Annapolis Office James Senate Office Building 11 Bladen Street, Room 401 Annapolis, Maryland 21401 410-841-3673 · 301-858-3673 800-492-7122 Ext. 3673 Jack.Bailey@senate.state.md.us

District Office Dorsey Professional Park 23680 Three Notch Road, Unit 101 Hollywood, Maryland 20636 240-309-4238

February 27, 2024

#### Senate Bill 711 – Fisheries – Striped Bass or Rockfish – Juvenile Survey

Dear Chairman Feldman and Members of the Committee,

I am writing to introduce Senate Bill 711. This bill would expand the scope of the annual young-of-theyear juvenile survey of striped bass by requiring this survey to be conducted in the central region of the Maryland waters of the Chesapeake Bay.

Each year, the Department of Natural Resources conducts young-of-the-year surveys that provide important data on juvenile fish in our State's waterways. This data is critical to measuring the success of Maryland's striped bass stocks and is used by DNR as part of setting the State's fishery management policies and regulations.

DNR has conducted this survey annually since 1954. This data is currently taken at sites in the Susquehanna Flats in the northern portion of the Chesapeake Bay and at several tributaries in the southern part of the Bay, namely the Chaptico, Nanticoke, Potomac, and Patuxent Rivers. These have been the locations where fish spawning has traditionally occurred.

However, no surveys are currently performed in the center of the Bay. We know that spawning patterns have changed since these original survey sites were established. Changes in the water level as well as the presence of invasive species have had a significant impact on the ecosystem of the Bay.

Senate Bill 711 will give us more data to better inform our State's decision making with regards to striped bass. This will give our State a fuller picture of fish spawning activity in the Chesapeake Bay by including data from all regions of the Bay. These sites are intended to be supplemental to, and not supplant or change, the current sampling sites. The bill requires between 12 and 20 new sampling sites in the central region of the Bay. These can be located in the Magothy River, the Severn River, the Chester River, the South River, the West River, Eastern Bay, or the Miles River.

I respectfully request a favorable report on Senate Bill 711. Thank you for your consideration.

Sincerely,

Senator Jack Bailey 🧹

**SB 711 - CBF - FWA.pdf** Uploaded by: Allison Colden Position: FWA



Environmental Protection and Restoration Environmental Education

Senate Bill 711

Fisheries - Striped Bass or Rockfish - Juvenile Survey

Date:	February 27, 2024	Position:	Favorable with Amendments
To:	Senate Education, Energy & Environment Committee	From:	Allison Colden
			MD Executive Director

Chesapeake Bay Foundation (CBF) **SUPPORTS SB 711 WITH AMENDMENTS.** SB 711 would require the Maryland Department of Natural Resources (DNR) to include additional sampling locations in its annual juvenile striped bass survey within the central portion of Chesapeake Bay and its tributaries. CBF requests amendments that would instead require DNR to evaluate and report on any recommended changes to the striped bass juvenile survey following consultation with academic and regional management partners.

Maryland's <u>striped bass juvenile survey</u> annually samples 22 fixed locations using a seine net. Each location is sampled multiple times, resulting in 132 samples collected each year. The data from this survey is used to determine the state's "juvenile index" which tracks the relative abundance and trends in juvenile striped bass. This survey, which has run continuously since 1954, is a critical source of data for the Atlantic States Marine Fisheries Commission's striped bass stock assessment and the longest running dataset included in the assessment (see table below).

Chesapeake Bay is the most important spawning ground for striped bass along the East Coast. More than 75% of all striped bass coastwide are spawned in Chesapeake Bay; therefore, the ability to monitor the spawning success and survival of young striped bass accurately and effectively in Maryland is critical for managers working to sustainably manage this iconic species.

SB 711 proposes adding several new sample sites to existing survey locations. While shifts in sampling locations and the inclusion of auxiliary sample locations have occurred in the past, changes to this long-running dataset should not be made lightly. To maintain the integrity of the long-term dataset, robust comparison tests and calibration are required when making changes to survey protocols. For example, DNR was recently forced to shift to a new material for gill nets used in the striped bass gill net survey due to lack of availability. To calibrate the survey, 144 additional paired gill net samples were required, a significant investment of time and resources.

That said, we acknowledge that periodic evaluation of the efficacy and accuracy of these surveys, particularly in light of climate-induced changes in environmental conditions, is a wise and warranted exercise. Therefore, we request the Committee instead direct DNR to comprehensively review its current survey methods and recommend any needed changes to timing, geography, or sampling protocols prior to the start of the 2025 legislative session. This would afford DNR the opportunity to confer with academic

Maryland Office • Philip Merrill Environmental Center • 6 Herndon Avenue • Annapolis • Maryland • 21403

partners on the latest striped bass science and vet any proposed survey changes with technical staff and partners at the Atlantic States Marine Fisheries Commission to ensure there would be no detrimental effects of changing the current survey design.

### CBF urges the Committee's FAVORABLE report WITH AMENDMENTS on SB 711.

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

			Time of		
Index Name	Index Metric	Design	Year	Years	Age
MRIP Total Catch Rate Index	Total catch per unit effort	Stratified random	Mar-Dec	1982-2021	1+
Connecticut Long Island Sound Trawl Survey (CTLISTS)	Mean number per tow	Stratified random	Apr-Jun	1984-2021	1+
New York Ocean Haul Seine (NYOHS)	Geometric mean per haul	Fixed station	Sep-Oct	1987-2006	1+
New York Young-of-the-Year (NYYOY)	Geometric mean per haul	Fixed station	Jul-Nov	1985-2021	YOY
New York Western Long Island Beach Seine Survey (NY Age-1)	Geometric mean per haul	Fixed station	May-Aug	1984-2021	1
New Jersey Bottom Trawl Survey (NJTRL)	Stratified mean per tow	Stratified random	April	1990-2018	1+
New Jersey Young-of-the-Year Survey (NJYOY)	Geometric mean per haul	Fixed station	Aug-Oct	1982-2021	YOY
Delaware Spawning Stock Electrofishing Survey (DESSN)	Geometric mean per tow	Fixed station	Apr-Jun	1996-2021	1+
Delaware 30' Bottom Trawl Survey (DE30)	Geometric mean per tow	Fixed station	Nov-Dec	1990-2021	1+
Maryland Spawning Stock Survey (MDSSN)	Selectivity- corrected CPUE	Stratified random	Mar-May	1985-2021	1+
Maryland Young-of-the-Year and Yearlings Surveys (MDYOY and MD Age-1)	Geometric mean per haul	Fixed station	Jul-Sep	1954-2021	0-1
Virginia Young-of-the-Year Survey (VAYOY)	Geometric mean per haul	Fixed station	Jul-Sep	1980-2021	YOY
Chesapeake Bay Multispecies Monitoring and Assessment Program (ChesMMAP)	Stratified mean per tow	Stratified random	Mar-Nov	2002-2018	1+

Summary of surveys used in the Atlantic States Marine Fisheries Commission's coastwide Atlantic striped bass stock assessment. Note Maryland's Young-of-the-Year survey is the longest running survey included in the assessment. Source: <u>2022 Atlantic Striped</u> <u>Bass Stock Assessment Update Report Including May 2023 Supplemental Report</u>.

# Senate Bill 711\_CCAMD\_FINAL.pdf Uploaded by: David Sikorski

Position: FWA



### *Ensuring the health and conservation of our marine resources and anglers' access to them*

#### 2/27/2024

To: Honorable Senator Brian J. Feldman, Chair Honorable Senator Cheryl C. Kagan, Vice Chair Honorable Members of the Senate Education, Energy & Environment Committee

Re: Senate Bill 711 - Fisheries - Striped Bass or Rockfish - Juvenile Survey

#### Position: Favorable with Amendments

Senate Bill 711 would expand the scope of the annual Young of Year (YOY) survey aka: Juvenile Abundance Index. (JAI).

As anglers, and avid users of our natural resources, CCA Maryland members work hard to promote sensible science-based management measures to support sustainable fisheries for the benefit of the general public, and the long-term health of the Chesapeake Bay. For this reason, we have a long standing record of supporting the further analysis of fishery resources through robust data collection, and provide our general support of the concept introduced by Senate Bill 711.

As one of the longest standing surveys for striped bass and other valued species in the Bay, the YOY/JAI provides an important view to compare each year to the next, but not provide a direct determination of population levels or overall abundance in the Chesapeake Bay. Other surveys and sampling by the Department of Natural Resources(DNR) and partner states, agencies and academics support additional understandings of fish abundance, growth rates, etc. throughout the year and life cycles of the fish. This is done throughout the Chesapeake and the range of important species like striped bass, and all supports the science based assessment of the species.

Recognizing the concerns that many have related to invasive species, range changes and expansions of some species, habitat changes, and other climate related impacts to fisheries management, we recommend the following general changes to this legislation:

- Asking DNR to identify science and research priorities to support state, regional and coastwide fishery management plans for striped bass and other ecologically or economically important species.
- Asking DNR to identify a potential timeline and fiscal requirements of any prioritized plans and returns on investment in research or data for any specific actions when possible.
- Implementation of recommendations from the Recreational Fishing Data Collection & Licensing Task Force created by legislation in 2022, and delivered to General Assembly leaders, the Governor and DNR on Dec. 1, 2022. (full report available @ ccamd.org/data)

For these reasons, we respectfully offer that amending SB 711 or identifying a pathway forward to implement additional research and science priorities may better serve the collective goals. The additional JAI/YOY sites required by this bill may provide improved understanding of striped bass abundance, but may not be the most important science priority of DNR at this time, as there is no guarantee that additional surveys will be suitable for improving current fisheries management plans.

In conclusion, CCA Maryland enthusiastically supports improving our overall scientific knowledge of living resources in the Chesapeake Bay, and improved capacity at DNR to better assess our most valued species. Doing so should also provide additional stakeholder engagement and opportunity for advancing our collective understanding of balancing access and sustainability for our shared public resources.

For further discussion regarding this important matter, please contact CCA Maryland Executive Director, David Sikorski – (443)621-9186 – david@ccamd.org

# SB0711\_DNR\_SWA\_EEE-2-7-24.docx.pdf Uploaded by: Kristen Fidler

Position: FWA



Wes Moore, Governor Aruna Miller, Lt. Governor Josh Kurtz, Secretary David Goshorn, Deputy Secretary

February 27, 2024

BILL NUMBER: Senate Bill 711 – First Reader

**SHORT TITLE:** Fisheries – Striped Bass or Rockfish – Juvenile Survey

DEPARTMENT'S POSITION: SUPPORT WITH AMENDMENT

### EXPLANATION OF DEPARTMENT'S POSITION

The Department supports Senate Bill 711 with the proposed amendment.

The existing Striped Bass Young-of-Year (YOY) Survey results have been proven scientifically valid and are mirrored by similar surveys in Maryland and other states along the Atlantic Coast. Although the Department opposes this bill in its current posture, because current surveys are established in accurately detecting the year class strength of striped bass, the Department is committed to ensuring that current surveys are adequate for detecting emerging population trends in the face of changing climate conditions. To that end, the Department is working with partners, including ASMFC to conduct a thorough review of currently conducted Bay surveys for striped bass, of which there are many. It is critical that any changes to survey design (scope, location, time of year) be thoroughly discussed with academic partners to ensure continuity, integrity of findings, and rigor in the collected data. The Department is concerned that specifically legislating how scientific surveys are conducted could remove any flexibility the Department would have to further modify, enhance or extend surveys based on emerging scientific recommendations. The Department offers the proposed amendment to require DNR to study the Survey and report back on any necessary changes to incorporate the changing climate seen in the Bay.

For further background and context on the Department's position, there seems to be a misconception that the relative abundance of older striped bass is assessed by the Juvenile Index survey. The juvenile survey does *not* study fish "approximately 18 inches in length" as stated in SB 711. A fish measuring at this size would be approximately 4 years old; and not considered a juvenile relative to the Juvenile Index Survey. Instead, this annual analysis focuses on striped bass that measure approximately 2 inches long in July, having hatched from eggs from the recently passed spring spawning season in April – May. They are referred to as the young-of-year (YOY) or age-0 striped bass.

The JI study, which specifically targets and gathers data on YOY striped bass, has been conducted since 1954 and is accepted by the Atlantic States Marine Fisheries Commission (ASMFC) as a reliable index of future striped bass abundance. Survey results have been reviewed and validated several times by such institutions as the University of Maryland and the Virginia Institute of Marine Sciences (VIMS) and the ASMFC. This survey has been determined to be a reliable indicator of annual spawning success.

Contact: Dylan Behler, Director, Legislative and Constituent Services dylan.behler@maryland.gov ♦ 410-260-8113 (office) ♦ 443-924-0891 (cell)

Striped bass spawning locations were first delineated in the 1950s by documenting the presence of striped bass eggs. Eleven spawning areas were identified: Upper Bay, Potomac River, Choptank River, Nanticoke River, Patuxent River, Wicomico River, Blackwater River, Pocomoke River, Transquaking River, Chester River, Manokin River. Rivers sampled that did not produce striped bass eggs at that time were the Big Annemessex, Bush, Gunpowder, Miles, Severn, and Wye East Rivers.

The current survey includes 22 sites, which are located in the four largest spawning areas: Upper Bay, Potomac River, Choptank River, Nanticoke River. Eleven auxiliary survey sites are located in the Upper Bay (5 auxiliary sites) and Patuxent River (6 auxiliary sites). The 7 other spawning areas each compose less than 1% of the total spawning area in Maryland's Chesapeake Bay.

The strength of the survey data is the consistent methods over a long time period. The survey results are a qualitative measure of striped bass spawning success. Results indicate if annual reproduction was average, above-average, or below-average. This is important to fisheries managers because striped bass populations are historically dependent on occasional years of above-average reproduction. Consistent methods allow year-to-year comparisons. Adding new survey areas will not allow valid comparisons to previous years.

Limited survey data already exists from the rivers listed in Senate Bill SB 711. Survey methods were similar to those of the Striped Bass YOY survey. Results from Chester and Patapsco Rivers offer the most complete time-series and closely resemble trends documented by the Striped Bass YOY Survey. Data from the South, West, and Miles rivers is much more limited but appears to show strong reproduction in 2003 and poor reproduction in 2022-2023 just as the Striped Bass YOY survey does. YOY surveys in the Hudson River, Delaware River and Virginia's Chesapeake Bay show trends similar to those documented in Maryland.

#### BACKGROUND INFORMATION

No similar bills have been proposed previously.

#### **BILL EXPLANATION**

The bill requires the Department to add up to 20 additional survey sampling sites for the young-of-the-year juvenile striped bass survey in certain state waters.

# BY:

(To be offered in the Education, Energy, and the Environment Committee)

# AMENDMENTS TO SENATE BILL 711 (First Reading File Bill)

# AMENDMENT NO. 1

On page 1, in line 2, after "**Survey**" insert "<u>Study</u>"; strike beginning with "expanding" in line 3 down through "sites" in line 8 and substitute "<u>requiring the Department of Natural Resources to study the sampling program for the annual young-of-the-year juvenile survey of striped bass or rockfish; requiring the Department to consult with certain entities; authorizing the Department to consult with certain entities; authorizing the Department to the to consult with certain entities; authorizing the Department to the to the General Assembly on or before a certain date"; and strike in their entirety lines 10 through 14, inclusive.</u>

# AMENDMENT NO. 2

On pages 1 through 2, strike in their entirety the lines beginning with line 15 on page 1 through line 15 on page 2, inclusive, and substitute:

# "<u>SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF</u> <u>MARYLAND, That:</u>

(a) <u>The Department of Natural Resources shall study the sampling program for</u> <u>the annual young-of-the-year juvenile survey of striped bass or rockfish,</u> <u>including sampling sites, river systems, and the timing of the survey.</u>

(b) In conducting the study, the Department:

(1) <u>Shall consult with the Sport Fisheries Advisory Commission and the</u> <u>Tidal Fisheries Advisory Commission; and</u>

(2) May consult with other regional partners including the National Oceanic and Atmospheric Administration's Chesapeake Bay Office, the Atlantic <u>States Marine Fisheries Commission, and the Virginia Marine Resources</u> <u>Commission.</u>

(c) On or before December 31, 2024, the Department shall report to the Senate Education, Energy, and the Environment Committee and the House Environment and Transportation Committee, in accordance with § 2–1257 of the State Government Article."