RESILIENT & HEALTHY FISHERIES

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WHY IT MATTERS

Healthy fisheries are vital to Virginia's economy, ecosystems, and outdoor traditions. They support a wide range of livelihoods—from commercial watermen and seafood processors to charter captains and tourism businesses. Just as important, recreational fishing is part of Virginia's cultural identity, connecting generations of residents to the Chesapeake Bay, coastal waters, and rivers across the Commonwealth. Chesapeake Bay recreational and commercial fishing generates billions of dollars and tens of thousands of jobs, but the Bay's ecosystems and fisheries face growing pressure from pollution, outdated management, scientific gaps, and climate change.

Several iconic Chesapeake Bay species, such as striped bass, American shad, and river herring, are struggling or worse. With climate change, warmer waters allow other species to move into the Bay and further disrupt the ecosystem (*see Rethinking Water Withdrawals, page 7*). Striped bass spawning rates have been weak for seven consecutive years, raising concerns about the long-term health of the coastwide population; roughly 80% of striped bass are born in the Bay. Further still, nearly two decades with commercial fishing moratoriums in place have not restored American shad or river herring fisheries.[1] In the James River, American shad have remained at 0% of their management goal for five years running.[2]

Blue catfish, a non-native species introduced to the James River in the 1970s, have spread throughout Virginia's tidal rivers and Chesapeake Bay tributaries, where they disrupt native food webs and put additional pressure on already stressed ecosystems.[3] Further, concerns about the long-term sustainability of Atlantic menhaden, a key forage species in the Chesapeake Bay have intensified. Their abundance is critical for productive fisheries and a thriving Bay ecosystem which supports coastal communities.

CURRENT LANDSCAPE

Fisheries management in Virginia is at an inflection point. As Bay ecosystem conditions and fish population dynamics rapidly evolve, Virginia's policy, data collection, and regulations require adaptation to keep pace. The V**irginia Marine Resources Commission (VMRC)**[4] and the **Department of Wildlife Resources (DWR)**[5] are the state agencies responsible for managing the state's fisheries. These chronically underfunded agencies (*see Virginia's Natural Resource Agencies Under Stress, page 125*), in coordination with **Virginia Institute of Marine Science (VIMS)**,[6] are responsible for the research studies that provide the scientific basis for fisheries management decisions. Investment is needed to develop and implement a comprehensive fisheries climate adaptation plan that identifies adaptive management strategies and research priorities to safeguard Virginia fisheries from climate-driven impacts.

Scientific information on Chesapeake Bay-focused menhaden populations remains "woefully inadequate,"[7] according to VIMS. While Congress appropriated $2.5 million[8] and Virginia $2 million for Chesapeake Bay menhaden research, the funds have yet to be released to a research institution and will take years to produce actionable information. As warning signs and Bay stressors intensify and research struggles to get off the ground, the safest course of action is to pause **reduction fishing** inside the Chesapeake Bay until science can inform future sustainable management.

Efforts to boost the blue catfish harvest in Virginia waters continue, including investments to expand processing capacity and the signing of an MOU between DWR and VMRC to create fisheries management plans. However funding is needed to strengthen public education, and market the species as a wild-caught Chesapeake Bay delicacy. At the same time, watermen lack centralized collection points for harvested blue catfish which helps improve transport to market. These collection points should be coordinated with working waterfront areas. While recreational harvest limits have been removed in most of Virginia's main rivers—eliminating a symbolic barrier for this invasive species—additional work is needed to ensure the public is aware of fish consumption advisories in some waterbodies.

OPPORTUNITIES

Menhaden are essential to a healthy Chesapeake Bay ecosystem and to the fisheries and communities that depend on thriving fish populations. As coastwide management progresses, Virginia has an opportunity to support conservation-minded approaches that protect both the Bay and local economies. Managers cannot control environmental factors like climate change, but they can directly control when, where, and how many fish are harvested while additional scientific research is conducted to protect our vulnerable ecosystem. The safest course of action is to pause industrial menhaden fishing inside the Bay until science can guide future decisions, while still allowing this industry to operate in the ocean.

There is also an opportunity to create a unified invasive blue catfish strategy. Stock assessments for the Rappahannock, York, and James Rivers completed by DWR can be used to inform VMRC fisheries man-

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agement plans. A unified strategy can also include standardized guidance on recreational creel limits, fish consumption advisories, and commercial fishing practices. It could also integrate existing frameworks, such as Virginia's coastal resilience and working waterfront plans, with grant programs that support infrastructure for emerging commercial operations.

For American shad and river herring, Virginia looks to VIMS' ongoing study of the cumulative impacts of surface water intakes, which have outsized effects on these vulnerable species (*see Rethinking Water Withdrawals, page 7*).[9] Additionally, the *2023 A Framework for the Recovery of American Shad (Alosa sapidissima) in the James River*, Virginia identified 18 essential projects, research needs, and data gaps necessary for species recovery. To date, only a preliminary habitat assessment and one identified project have advanced. To help shad now, Virginia can deliver by prioritizing projects within the existing

TOP TAKEAWAYS

Migratory fish, like American shad, river herring, Atlantic menhaden, and striped bass, are at risk or already depleted, and require action now.

Virginia needs a centralized, unified, and resourced strategy for managing invasive blue catfish.

A comprehensive fisheries climate adaptation plan that identifies adaptive management strategies and research needs to safeguard Virginia fisheries from climate-driven impacts.

ENDNOTES

1. *A Framework for the Recovery of American Shad (Alosa sapidissima) in the James River, Virginia.* RD587. (2023, November). Virginia Institute of Marine Science. https://rga.lis.virginia.gov/Published/2023/RD587
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9. Shen, X. (2026, January 23). *VIMS/DEQ water intake study: Particle model approach* [Conference presentation]. Virginia Alosine Task Force.

Fishing buddies in Cape Charles, VA
Photo by Marina Pierce