November 17, 2022

Scott Doney
Assistant Director for Ocean Science and Policy
White House, Office of Science and Technology Policy
Eisenhower Executive Office Building
725 17th St. NW
Washington, D.C. 20503

Re: Ocean Climate Action Plan, 87 Fed. Reg. 60228 (Oct. 4, 2022)

Dear Mr. Doney:

The Chesapeake Bay Foundation (CBF), a 501(c)(3) non-profit organization with over 200,000 members, appreciates the Biden administration's commitment to develop a U.S. Ocean Climate Action Plan (OCAP), as well as a National Strategy for a Sustainable Ocean Economy (National Strategy), and submit the following comments for consideration.

1. Background Information on the Chesapeake Bay Foundation

The CBF's mission is to restore and protect the ecological health of Chesapeake Bay, the nation's largest and one of its most vital estuaries. The Chesapeake Bay watershed is home to roughly 18 million people and spans six states and the District of Columbia. The watershed is already affected by climate change in a variety of ways – from sea level rise and warmer waters, to increased precipitation and flooding resulting in more polluted run-off, to droughts and heatwaves. Thus, CBF works, using restoration, advocacy, litigation, and education, to reduce nitrogen, phosphorus and sediments to the Chesapeake Bay which also reduce greenhouse gases and works to make the region more resilient to a changing climate.

Specifically related to ocean-based climate solutions, CBF (1) works with partners to protect, create, and enhance living shoreline habitats that reduce erosion, attenuate coastal flooding and minimize sea level rise impacts, (2) creates oyster habitat near shorelines, using the reefs' vertical growth, to slow wave energy and enhance the health and productivity of the Bay's low lying areas, (3) advocates for resources and requirements that promote nature-based adaptation and resiliency solution, and (4) works with vulnerable communities to address their needs related to impacts of climate changes like urban tree plantings and living shorelines for flood protection.

2. Critical Actions

As outlined above, CBF advocates for nature-based solutions to address climate mitigation and adaptation including living shorelines, oyster restoration, and tree plantings, and urge the Biden Administration to continue pushing for sustained funding, personnel, and regulatory certainty to ensure these efforts span decades.[1] These actions already happen on the state and local level, and it would behoove the federal government to work with its state and local partners to bolster these efforts. Additional coordination and technical assistance from federal partners would allow for

[1] See, e.g., White House Fact Sheet: Biden-Harris Administration Announces Roadmap for Nature-Based Solutions to Fight Climate Change, Strengthen Communities, and Support Local Economies (Nov. 8, 2022), available at https://www.whitehouse.gov/briefing-room/statements-releases/2022/11/08/fact-sheet-biden-%e2%81%a0harris-administration-announces-roadmap-for-nature-based-solutions-to-fight-climate-change-strengthen-communities-and-support-local-economies/.

protection of larger swaths of coastal habitats and provide the opportunity to implement a landscape-scale approach to climate mitigation. Implementing projects and programs at a meaningful scale will be critical to our success in addressing global climate change. For instance, in the Chesapeake Bay region, the following are already happening on the state level:

- The Commonwealth of Virginia mandates the use of living shorelines in place of hardened structures like riprap and bulkheads for shoreline management, unless the best available science shows that it would not be suitable on site.[2]
- In Pennsylvania, CBF and more than 130 partners are working to plant 10 million trees in priority landscapes by the end of 2025 to help minimize flooding and reduce urban heat island.[3]
- Maryland was the first Chesapeake Bay state to require living shorelines as a preference over hard armoring or bulkheads based on demonstration pilot projects from CBF leading to advocacy for the change in law. CBF also participates in a state/federal/NGO partnership to incorporate resilient design elements into the congressionally authorized Mid-Bay project which beneficially uses dredged material to create offshore islands in the bay.
- The Lynnhaven River Ecosystem Restoration Project is a state-federal partnership focused on restoring multiple habitats in the Lynnhaven River in Virginia. By restoring salt marshes, oyster reefs, and seagrasses together, this project harnesses the facilitative relationships of each habitat to maximize climate mitigation outcomes. Oyster reefs buffer marsh-lined shores from erosion and improve water clarity for underwater grasses, while marshes and seagrasses alter water chemistry, buffering oysters from the challenges of ocean acidification.

We urge the administration to create an OCAP that emphasizes that ecosystem-based, landscape-scale management is necessary when addressing how to protect our ocean and coastal resources as they know no political boundaries.

2. Knowledge, Science and Technology

There is no reason to reinvent the wheel and the federal government should work to incorporate scientific and policy recommendations already published about ocean-based climate solutions.[4] Also, there has already been incredible work done by federal partners to assess the vulnerabilities of natural resources and the communities who rely on them, due to a changing climate.[5] For instance, the National Oceanic and Atmospheric Administration developed Climate Vulnerability Assessments "assess the vulnerability of fish stocks, protected species (mammals, sea turtles),

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[2] *Va. Code §28.2-104.1;* see, e.g., Virginia Institute of Marine Science, Center for Coastal Resources Management, Living Shorelines examples throughout Virginia.

[3] See also, Pennsylvania Department of Environmental Protection, Pennsylvania Climate Action Plan 2021 (outlining in part adaptation strategies for priority climate change hazards).

[4] See, e.g., Blueprint for Ocean Climate Action, Recommendation for the Ocean Policy Committee (June 2022); Large-Scale Marsh Persistence and Restoration in the Chesapeake Bay (Oct. 6, 2022); Chesapeake Bay Scientific and Technical Advisory Committee brings partners across the watershed together to provide independent scientific and technical advice on numerous issues, including coastal resiliency.

[5] See, e.g., United States Army Corps of Engineers, Norfolk Coastal Storm Risk Management Study (a comprehensive investigation of flood-risk management problems and accessibility of system-wide solution or feasibility of site-specific solutions including natural and nature based features).

habitats and fishing communities to changing climate and ocean conditions, to better prepare the many diverse people and businesses that depend on them."[6] This work needs to continue.

There needs to be greater research into the socio-economic impacts of a changing climate so they can be mitigated. For instance, due to warming waters fish stocks are shifting and productivity is changing so how do we address the sunken capital and existing seafood industry infrastructure going forward.

Increased and sustained monitoring throughout our ocean and coastal regions are necessary to understand the impacts of climate change and evaluate whether ocean-based climate solutions are having the intended mitigation and resiliency impacts, which requires funding. More specifically, additional ecological and mechanistic modeling is needed to help managers understand the important thresholds or tipping points to be able to better predict species and habitat responses to climate change impacts and incorporate that type of risk assessment into the decision-making process. For example, the Atlantic States Marine Fisheries Commission is currently developing a risk and uncertainty policy which considers biological, ecological, and social scores to determine an acceptable level of risk in decision-making. This work should continue.

Resources are needed to help managers process the information and understand how to apply the predictions to their management decisions.

4. Environmental Justice, Diversity, Equity and Inclusion

Many communities within the watershed have borne the brunt of rapid development and discriminatory policies in fisheries and other sectors, and as a result are bearing a disproportionate burden of environmental harm. In addition, many African Americans in the watershed have well-established cultural and economic connections to the Chesapeake Bay and its tributaries. Unfortunately, historically numerous barriers were placed upon these people and their communities which reduced their economic success and eventually drove many of them off the water and resulted in significant economic harm to their communities.[7]

CBF is actively working to prevent and address environmental injustices that cause disproportionate pollution and harm to the communities of color, and economically under-resourced communities, dismantle unfair systems, and support communities working to lead and participate in the decision-making processes that affect their environmental and social well-being. For instance, CBF is working with the Turner Station community in Baltimore County, who classified as economically disadvantaged after the closing of Bethlehem Steel, to design and build a shoreline resilience project that will restore access to the waterfront, rebuild eroded marshes and extend the useful life of a popular park from impending sea level rise. Through litigation and legal advocacy, CBF has also advocated for holistic, fact-based approaches to permitting to prevent the siting of poorly regulated and harmful facilities in low-income and BIPOC communities. CBF also recently provided comments to the U.S. Army Corps of Engineers in response to the Corps' planned Baltimore Coastal Storm Risk Study which failed to incorporate environmental justice communities in Baltimore City.

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[6] https://www.fisheries.noaa.gov/national/climate/climate-vulnerability-assessments.

[7] See, e.g., Jon A. Mueller & Taylor Lilley, *Forty Years of Environmental Justice: Where is the Justice?*, 25 RICH. PUB. INT. L. REV. 75 (2022), available at: https://scholarship.richmond.edu/pilr/vol25/iss3/4.

Additionally, communities in Norfolk and Portsmouth are on the frontlines of climate change while also confronting the potential health impacts or legacy pollutants in the region. Portsmouth is expected to experience approximately 4.8 feet of sea level rise by 2100, with the potential for at least one flood exceeding 9 feet in that time frame. These impacts would affect at least 34 listed EPA sites and approximately 3,000 individuals within a high social vulnerability population.[8] There are numerous resources available that offer guidance on increasing just outcomes, including Restore America's Estuaries Inclusive Coasts Initiative aimed at improving diversity, equity, inclusion, and justice in grantmaking, project designing and implementation in the coastal center.[9] There are also groups, like Azul[10], who are leading the charge on centering the voices of underserved and excluded communitities on ocean climate action. These groups are great resources to help ensure diverse voices are engaged and have a seat at the table.

To foster a life-long appreciation and stewardship for ocean and coastal resources, there needs to be public access to water as connections are built through experiences. Underserved communities have been denied the ability to make those connections. For 50 years, CBF's education department has worked to educate tens of thousands of students, teachers, and school administrators each year through immersive field experiences and professional development courses to foster a lifelong connection to the watershed. A quarter of the schools we work with are under-resourced. CBF's Environmental Protection and Restoration department also works to foster relationships and build coalitions of diverse partners through dedicated advocacy and the development of restoration projects and opportunities. The Biden administration should lean on partners who already have these programs and can help bolster them, in addition to providing more public access to our oceans and coasts.

5. Partnerships and Collaboration

In 2014, the Chesapeake Executive Council, with representatives from seven federal agencies and from the states in the watershed as well as the District of Columbia, signed the Chesapeake Bay Watershed Agreement.[11] In the Agreement, the partners recognized that "[c]hanging climatic and sea level conditions may alter the Bay ecosystems and human activities …"[12] Moreover, the partners included as one of ten goals the following related to climate resilience: "increase the resiliency of the Chesapeake Bay watershed, including its living resources, habitats, public infrastructure and communities, to withstand adverse impacts from changing environment and climate conditions."[13] Thus, from early on, the partners working to restore the Chesapeake Bay, including those like CBF who are not formal partners to the Agreement, have been working to enhance climate resiliency in the watershed. This agreement only highlights the breadth of partnerships required to commit to restoring a watershed. The OCAP will need this type of broad partnership to make our nation's oceans and coastal ecosystems more resilient and adaptable to

[8] Climate Central Report.
[9] See also, Ocean Justice Forum: An Equitable and Just Ocean Policy Platform (Sept. 2022); Johri, S.; Carnevale, M.; Porter, L.; Zivian, A.; Kourantidou, M.; Meyer, E.; Seevers, J.; and Skubel, R., Pathways to Justice, Equity, Diversity, and Inclusion in Marine Science and Conservation, Front. Mar. Sc.i., 23 Dec. 2021; Bennett, N.; Alava, J.; Ferguson, C.; Blythe, J.; Morgera, E.; Boyd, D.; Côté, I., Environmental Justice in the Ocean (2022); Latino Climate Justice Framework (2022).
[10] https://azul.org/en/.
[11] https://d18lev1ok5leia.cloudfront.net/chesapeakebay/documents/FINAL_Ches_Bay_Watershed_Agreement.withsignatures-HIres.pdf (amended Jan. 24, 2020).
[12] Id. at 14.
[13] Id.

climate change. Thus, the federal government should lean on existing broad partnerships, like the one in the Chesapeake Bay watershed, to help develop and implement the OCAP.

Furthermore, as highlighted in the sources cited above, there are already existing policy solutions related to ocean and coastal adaptation and resiliency and/or diversity, equity, inclusion, and justice in the ocean and coastal conservation space, that were developed outside of the federal government that should be considered and incorporated into the OCAP and the National Strategy.

We would recommend that the federal government lean on CBF and other partners who have been working on-the-ground with communities for decades to help disperse information regarding federal opportunities for funding, training, technical assistance, etc., but more importantly that the federal government use existing partners to connect the administration with communities that do not typically have access to federal decision-makers. These communities need to have the opportunity to have their voice heard and seat at the table and one of the ways to make this connection is through existing partners.

Additionally, the federal government must recognize that working with communities cannot be seen in terms of years but rather must be seen as a long-term partnership that should be sustained, even if federal funding lapses. This means setting communities up with the tools to obtain funding and work past a date certain.

6. Additional Comments

While we recognize the scope of this information requestion is focused on ocean, coastal, and Great Lakes regions, we urge the federal government to recognize that the impacts of mitigation and adaptation strategies upland from these resources are necessary to help reduce the impacts downstream. This effort to create impactful adaptation and resiliency solutions for our oceans and coasts must be a whole-of-government approach, that requires climate-smart practices to be adopt throughout the ecosystem.[14]

Thank you for consideration of our comments and we look forward to the release of the OCAP and National Strategy.

Sincerely,

Keisha Sedlacek
Interim Federal Director
Chesapeake Bay Foundation

[14] See, e.g., Agricultural Conservation Practices: Clean Water and Climate Smart Investments (calculates that for every dollar spent helping farmers adopt practices that improve water quality in the Bay and its tributaries, the Bay region would $1.75 in higher sales and earnings and support an average of 6,673 full-time, part-time, and seasonal jobs a year through 2025); Farm Forward (examines the practices that reduce pollution, combat climate change, improve soil health and farmers' bottom lines, and boost local economies); Bay Restoration leaders Welcome New USDA Funds for Conservation (USDA announced $22.5 million to be used this year to help farmers in the watershed adopt conservation practices that improve water quality in the Bay and its tributaries).