ROY COOPER
Governor

DIONNE DELLI-GATTI
Secretary

JOHN G. BATHERSON
Acting Director

Comments

Section 216(c) of the President's Executive Order (EO) 14008, entitled "Executive Order on Tackling the Climate Crisis at Home and Abroad," requires the Secretary of Commerce, through the Administrator of the National Oceanic and Atmospheric Administration (NOAA), to initiate efforts to collect input from fishermen, regional ocean councils, fishery management councils, scientists, and other stakeholders on how to make fisheries and protected resources more resilient to climate change, including changes in management and conservation measures, and improvements in science, monitoring, and cooperative research. To assist NOAA's efforts to collect input on how best to achieve the objectives described in EO 14008, the North Carolina Department of Environmental Quality, Division of Marine Fisheries (DMF) provides the following comments regarding North Carolina's efforts to develop and implement strategies to address impacts from climate change on the state's coastal habitats and fisheries. Information is also provided summarizing additional resources needed to help carry out these strategies. DMF appreciates the opportunity to comment on this significant climate change issue.

The North Carolina Climate Risk Assessment and Resilience Plan 2020 (Resilience Plan) reflects a framework to guide state action, engage policymakers and stakeholders, and facilitate collaboration across the state and focus the state's attention on climate resilience actions and address underlying stressors such as the changing climate, aging infrastructure, socio-economic disparities, and competing development priorities. The Resilience Plan describes next steps for implementing and updating resilience initiatives and builds upon North Carolina's ongoing work in this area and establishes the North Carolina Resilience Strategy. This strategy includes four elements: (1) the North Carolina Climate Science Report; (2) State Agency Resilience Strategies; (3) Statewide Vulnerability Assessment and Resilience Strategies; and (4) the North Carolina Enhanced Hazard Mitigation Plan.

The Resilience Plan and resultant Resilience Strategies Report (2021) identify numerous approaches that the North Carolina Department of Environmental Quality (DEQ) and DMF are continuing to develop and implement to address impacts from climate change. Climate change impacts such as salinity changes and saltwater intrusion, increasing water temperatures, shifts in currents and tides, decreased water quality from increased storm runoff, and sea level rise all impact North Carolina's coastal habitats and marine organisms. Other threats from climate change include wetland loss due to sea level rise/development impacts which effects wetland migration, fisheries, water quality, and stormwater buffering capacity.

To make fisheries and coastal resources more resilient to climate change, DMF manages coastal habitats in conjunction with fisheries. DMF staff, working with the Albemarle-Pamlico National Estuary Partnership (APNEP) and other DEQ divisions, is currently working on the 2021 Coastal Habitats Protection Plan (CHPP) Amendment including five issue papers with resulting recommended resilience strategies to better manage for the continuing impacts from climate change. The 2021 CHPP Amendment will offer tools to begin addressing several recommended strategies outlined in several chapters of the Resiliency Plan.

To make fisheries more resilient to climate change, DMF is taking measures to better understand, manage and anticipate impacts from climate change and increases in variability of ecosystem factors

impacting the distribution of fish species and resulting management. These measures include developing fishery management strategies that are flexible and support easier entry into new fisheries and exit out of declining fisheries. Such action prevents overfishing and supports interstate and federal cooperative management, stock assessments, and fishery management plan guidelines through incorporation of climate change considerations in vision statements and/or strategic plans and fishery management plans. The DMF also maintains and restores oyster reefs. These reefs increase coastal resilience by helping protect critical wetlands through provision of habitat and displacement of wave energy which reduces shoreline erosion, increasing shoreline resiliency, and improves water quality through filtration.

Expanded submerged aquatic vegetation (SAV) monitoring can also help gauge overall ecosystem health. SAV is a critical habitat to many important fishery species and is also an ideal indicator habitat for water quality and climate changes because its distribution is highly responsive to changes in salinity, temperature, and water clarity. The expected changes to water conditions due to climate change are likely to result in reduced abundance of SAV. Regular monitoring to assess change in distribution and composition to address potential impacts to dependent fish species is critical to SAV assessment. Mapping SAV on a regular basis has been difficult due to the lack of dedicated funding.

The following are the recommended strategies outlined by applicable Chapters in the Resiliency Plan that may be germane to EO 14008 section 216(c) objectives. These strategies may be employed to make fisheries and coastal resources more resilient to climate change, including changes in management and conservation measures, and improvements in science, monitoring, and cooperative research.

I. Chapter 5C - Coastal Resources and Infrastructure

A. Coastal Habitat Protection - the CHPP can be used to better outline the effectiveness of the actions in sequestering carbon, improving resilience of coastal habitats through restoration and protection of coastal habitats, and improving resilience of coastal communities and ecosystems.

B. Coastal Habitat Conversation and Restoration - help facilitate coastal habitat restoration by assisting state, federal, and local governments with incorporating climate change considerations into their planning processes to increase resilience. Help build understanding of the benefits of protecting and restoring coastal habitats to help ensure stakeholders and the public are aware of the importance of these actions including resilient ecosystems and communities.

C. Map, Assess, and Monitor - the extent and condition of coastal habitats should be mapped to inform models and enable detection of change over time, and to provide the best available scientific information for formulating actionable conservation, protection, and restoration strategies.

D. Natural and Nature-based Solutions - nature-based solutions, such as living shoreline, have the potential to restore coastal ecosystems and increase resilience to natural disasters and should be used whenever possible.

E. Climate Change Integration - review existing guidelines and strategic plans to develop and integrate climate change adaptation and resiliency strategies within these documents and continue to monitor rule making authority for species of fish that may become more abundant in our waters as the ocean continues to get warmer.

II. Chapter 5F - Ecosystems

A. Mapping and Monitoring - monitoring will help detect change over time, provide the scientific basis for future projections, and help inform management, restoration, and conservation strategies.

B. Water Quality Improvement and Protection - degraded water quality is the leading driver of SAV habitat loss. Protecting and preserving the water quality of the rivers and sounds of North Carolina will directly benefit the SAV as well as other coastal habitats.

C. Translocation and Propagation - restoration of populations to places where they have been lost but which remain or have returned to suitable habitat can improve resilience to a species as a whole.

III. Chapter 5K - Water and Land Resources

A. Stormwater Control Measures – where there are issues with sanitary sewer overflows, implementation of distributed stormwater control measures can help reduce occurrence and severity of overflows.

IV. Appendix B - Natural and Working Lands Action Plan 3.6.1 Protect Coastal Habitats

Protect Strategy 1 - Provide incentives to stakeholders for coastal habitat protection.

Protect Strategy 2 - Facilitate migration of coastal habitats through protection of migration corridors.

Restore Strategy 1 - Prioritize climate change and sea level rise in coastal habitat restoration planning.

Robust monitoring programs are a necessary to enhance the science required to understand and adapt to changes in the timing of fish species presence and new species entering coastal waters as well as assess changes in coastal habitat distribution and density. Resources for monitoring programs in North Carolina have been reduced over the last several years. Human and budgetary resources are currently utilized at near maximum capacity. Federal funding could help support and expand coastwide habitat and fish monitoring programs in North Carolina.

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

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Melvin Bell, Chair | Stephen J. Poland, Vice Chair
John Carmichael, Executive Director

April 20, 2021

Dr. Paul Doremus
Acting Assistant Administrator
NOAA Fisheries
1315 East West Highway
Silver Spring, MD 20910

Dear Dr. Doremus,

The South Atlantic Fishery Management Council (Council) appreciates this opportunity to comment on Section 216(c) of the *Executive Order on Tackling the Climate Crisis at Home and Abroad* (EO 14008) issued on January 27, 2021. Ensuring resilient fisheries requires managing fish stocks at sustainable levels, as the Council does now when setting catch limits consistent with the existing provisions of the Magnuson Stevens Act (MSA). However, the term "fisheries" encompasses more than just fish stocks; it also includes the harvesters and users of those stocks and their communities. Ensuring resiliency of the fishery overall requires the Council to balance social and economic considerations of our constituents with the biological considerations of our managed fish stocks. The following comments focus on information (and governance changes) the Council considers critical to achieving this balance.

Considerable improvement in basic scientific information is required in the South Atlantic Region to ensure resilient fisheries. This includes catch monitoring, population surveys, and social and economic characterizations of the fisheries. More timely analysis of data, such as stock assessments, is needed along with distribution of information to the Council through SAFE reports. Compatibility across NOAA Fisheries regions of basic fishery statistics and population surveys is critical to identifying and responding to climate change. Since a full accounting of data deficiencies is beyond the scope of this letter and these deficiencies have been addressed by the Council in previous letters as well as in the Research and Monitoring Plans submitted to NOAA Fisheries as required by MSA, only a few examples will be provided here.

Despite recreational activities being a large component of our fisheries, the Marine Recreational Information Program's (MRIP) estimates of catch for most species managed by the Council fail to meet MRIP's own standards for reliability. Excessive uncertainty and estimation error may very well mask subtle short-term indications of long-term phenomena such as climate change. Different NOAA Fisheries Regions can apply different methods to estimate essential parameters such as such as recreational landings weight, resulting in incomparable values for what is supposedly the same information. This too may mask climate change effects, while also creating

unnecessary challenges when managing stocks that cross regional boundaries and undermining constituent confidence in both science and management activities. NOAA Fisheries should complete the work of the MRIP Rare Event estimation group and implement changes to improve estimation of rare event species and resolve regional differences in calculating recreational statistics.

Reliable surveys of population abundance are only available for a handful of the 64 species managed by the Council. Research needs identified through the SEDAR assessment program indicate that available surveys suffer from inadequate effort and incomplete coverage over both time and space. Experiences assessing and managing stocks that cross the boundaries of Councils and NOAA Fisheries Regions, such as Blueline Tilefish, have revealed incompatibilities between survey efforts in the different regions that hinder assessment and management efforts. Despite the documented need for increased survey effort and importance of survey information to reliable stock assessments, funding continues to be an impediment in the Southeast. NOAA Fisheries should ensure compatibility of its surveys to ensure changes in stock distribution can be observed and detected. NOAA Fisheries should fully fund the Southeast Reef Fish Survey and restore full MARMAP funding to increase survey effort and coverage. NOAA Fisheries should increase funding available for Cooperative Research and direct it to support population monitoring to help address declining survey resources.

Ecosystem level impacts from climate change could include shifts in stock distribution and changes to underlying population parameters including natural mortality, recruitment, and growth. Therefore, estimates of fundamental MSA criteria such as Maximum Sustainable Yield (MSY), that typically rely upon long-term historical conditions, may not be valid under an altered climate. Setting harvest levels above long-term expected conditions may not be overly risky for a stock that is thriving or expanding its range due to climate change. NOAA Fisheries should re-evaluate guidance on MSY and associated catch levels to ensure Councils can respond to current stock conditions that may be different from historic trends. In particular, the influence of the earliest years in a time series used to estimate MSY should be critically evaluated if a stock shows signs of climate related change.

The MSA established the Regional Fishery Management Councils to enable constituent participation in Fishery Management Plan development and to account for social and economic needs of the States. Fish have never recognized political boundaries, so there are numerous examples of multiple Councils working together for the good of the resource and their constituents. Despite the best efforts of Councils to work together, issues can arise when states and constituents feel they are inadequately represented when a Council from another area imposes regulations on species in their area. Climate change will likely increase the need for inter-Council cooperation and expand the range of constituent voices a Council may need to include in its process. NOAA Fisheries should work with the Councils, within regions and nationally through the Council Coordination Committee, to identify and resolve governance restrictions that hinder inter-Council decision making and result in constituents feeling disenfranchised.

Ensuring adequate fishery monitoring, survey coverage, and compatible monitoring and survey efforts across regional boundaries will be critical to evaluating stock distribution changes in the

future. It will be exceedingly difficult for Councils to address distribution changes if perceived changes are not supported by the Best Scientific Information Available.

The comments included in this letter were discussed by the Council at its meeting devoted to this topic on March 29, 2021. The Council will continue to discuss this topic at its regularly scheduled meetings and may choose to submit additional comments, consistent with the statement, in your March 1, 2021 email announcing the comment period, that indicated NOAA Fisheries would continue to obtain input throughout 2021.

Sincerely,

Melvin Bell

SAFMC Chair

cc: Council Members & Staff
Monica Smit-Brunello, NOAA GC

LN#202104

U.S. Regional Fishery Management Councils

March 12, 2021

006924MAR2021

The Honorable Deborah Haaland
Presumptive Secretary of the Interior
Department of the Interior
1849 C Street NW
Washington, DC 20240

The Honorable Gina Raimondo
Secretary of Commerce
Department of Commerce
1401 Constitution Ave NW
Washington, DC 20230

Dear Ms. Haaland and Ms. Raimondo:

The Council Coordination Committee (CCC) appreciates the opportunity to provide our perspective on Section 216(a) of Executive Order (EO) 14008 on Tackling the Climate Crisis at Home and Abroad. The CCC consists of the senior leaders of all eight Regional Fishery Management Councils (RFMCs; Councils), and, as such, represents the RFMCs.

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) is the foundation that guides the use of U.S. marine and anadromous fishery resources. The MSA gives the U.S. the strongest statutory framework in the world for the management of sustainable fisheries and associated ecosystems and the U.S. is recognized as a world leader in marine conservation and sustainable fishery management. The MSA charges the nation's eight RFMCs with the responsibility of achieving its goals and objectives, which are closely aligned with those of the Executive Order.

Section 216(a) of the EO directs you to submit a report to the National Climate Task Force by April 20 recommending steps to work with State, Tribal, and Territorial governments, fishermen, and other key stakeholders to achieve the goal of conserving at least 30 percent of our lands and waters by 2030. We believe the RFMCs have already made significant progress in achieving this goal and can be a valuable resource for advancing this and other goals of the EO for the following reasons:

- The RFMCs have been managing and conserving marine resources, including fish stocks and benthic habitats, as directed by the MSA, for over 40 years. As a result, the U.S. is widely recognized as a leader in sustainable fishing practices.
- RFMCs use a public, collaborative process to engage State and Federal agencies, Tribal representatives, fishermen, and other key stakeholders in the conservation and management of living marine resources using the best scientific information available.
- RFMCs are at the forefront of coping with climate change, adapting management to conserve resources while continuing to provide significant economic benefits and domestic food security to the nation.

- Ecosystem considerations are routinely used to inform management decisions, acknowledging the complex interactions between habitat, fishery resources, and human communities.

Section 216(a)(ii) requires the report to the Task Force to propose guidelines for determining whether lands and waters qualify for conservation, and to establish mechanisms to measure progress toward the 30 percent goal. As explicitly stated by the title of our authorizing legislation, the function of the RFMCs is to conserve fishery resources. Specifically, the MSA requires each Council:

- To have conservation and management measures to prevent overfishing, rebuild overfished stocks, and to protect, restore, and promote the long-term health and stability of fisheries.
- To describe and identify Essential Fish Habitat (EFH), minimize fishing impacts to EFH, and identify actions to encourage conservation and enhancement of EFH.

To achieve these conservation and management objectives, the Councils use a wide range of management tools, including ecosystem-based fishery management, management strategy evaluation, and climate change scenario planning, in addition to more traditional spatial management approaches. For example:

- More than 1,000 individual spatial habitat and fisheries conservation measures have been implemented, protecting more than 72 percent of the nation's ocean waters from fishing impacts, which helps to ensure preservation of ecosystem functions.
- All Councils use annual catch limits to prevent overfishing and achieve optimum yield from managed fisheries to achieve the greatest overall benefit to the nation.
- Every Council has or is developing a fishery ecosystem plan(s) to monitor ecosystem functions, incorporate ecosystem science into fishery management decisions, and identify research priorities to advance ecosystem management.

These provisions and examples of implementation of the MSA are entirely consistent with the following dictionary definition of conservation: controlled use and systematic protection of natural resources (Webster). Council management meets this definition[1] by managing for optimum yield and protecting habitats from fishing impacts. Therefore, the entire Exclusive Economic Zone (EEZ) under authority of the MSA should be classified as a conservation area for marine fishery resources, and at least 72 percent of that area should be classified as protected.

In summary, we submit that the MSA and its implementation through the RFMC process, as a measure of progress, already conserves and protects more that 30 percent of marine fishery resources and habitats. The MSA not only works well but is the gold standard worldwide for sustainable fishery conservation programs. Based on the success of the MSA, U.S. participation in Regional Fishing Management Organizations is helping other nations

[1] Other definitions relevant to conservation of marine resources include those in the MSA Section 3(5), the IUCN category VI, and UNCLOS Article 119.

recognize and make progress toward science-based conservation objectives consistent with the EO.

Further, should any additional needs for conservation of marine fishery resources be identified as part of the process of implementing this EO, they should be authorized only through the robust, open public process established by the MSA, which has been successfully used for over forty years to conserve and protect habitat, conserve fishery resources, and protect marine mammals and other listed species through sustainable, science-based management.

Thank you again for considering our comments; we hope they will be helpful in developing your report to the Task Force. Please feel free to contact Mr. Chuck Tracy, Pacific Fishery Management Council, Executive Director, and 2021 CCC coordinator, or any of the undersigned, for questions or clarifications. We welcome further engagement on this or other issues related to implementing the Executive Order.

Sincerely,

Marc Gorelnik, Chair
Pacific Fishery Management Council

Mike Luisi, Chair
Mid-Atlantic Fishery Management Council

Taotasi Archie Soliai, Chair
Western Pacific Fishery Management Council

Marcos Hanke, Chair
Caribbean Fishery Management Council

Dr. John Quinn, Chairman
New England Fishery Management Council

Melvin Bell, Chair
South Atlantic Fishery Management Council

Simon Kinneen, Chair
North Pacific Fishery Management Council

Dr. Thomas Frazer, Chair
Gulf of Mexico Fishery Management Council

cc: Mr. Thomas J. Vilsack, Secretary of Agriculture
Ms. Brenda Mallory, Presumptive Chair of the Council on Environmental Quality
Mr. Scott De la Vega, Acting Secretary of the Interior
Dr. Paul Doremus, Acting NOAA Assistant Administrator for Fisheries

Enclosure

Enclosure:

The following sections provide additional details regarding RFMC responsibilities and achievements relevant to Section 216(a) and other topics addressed in the Executive Order.

RFMCs have been effectively conserving marine resources for over 40 years.

The MSA includes 10 National Standards to guide management of our nation's marine fishery resources that require the RFMCs, in addition to preventing overfishing and rebuilding overfished stocks, to minimize bycatch and provide for the sustained participation of fishing communities. The National Standard guidelines require Councils to manage for optimum yield, which is a precautionary approach to ensure harvest does not exceed maximum sustainable yield.

More specifically, the RFMCs develop and implement fishery management and ecosystem plans for marine waters of the U.S. EEZ that:

- Establish conservation objectives and associated management measures for managed fish stocks
- Identify and protect habitat for managed fish species, coral reef, and deep sea coral ecosystems
- Describe and monitor marine ecosystem functions, and apply them in management
- Support coastal economies and communities, including disadvantaged, minority cultures and communities
- Conserve, manage, and protect forage fish for the benefit of marine mammals, birds, and ecosystem functions
- Establish conservation objectives and associated management measures that minimize bycatch of non-target species, including fish, marine mammals, and marine species listed under the Endangered Species Act
- Support U.S. engagement in Regional (international) Fishery Management Organizations (RFMOs)
- Provide a sustainable supply of seafood and fishing opportunity for U.S. citizens and contribute to domestic food security.

Most stocks are managed on annual or biennial regulatory cycles supported by ongoing scientific surveys to support stock assessments. Councils are also required to periodically review and update their fishery management and ecosystem plans, habitat protection plans, stock assessment and fishery evaluation reports, and their research and data needs reports. Each Council has a Scientific and Statistical Committee to independently review scientific information and methodologies to ensure conservation and management measures are based on the best scientific information available.

Fishery management plans and implementing actions address not only the MSA requirements, but also other statutes and EOs[2], and multi-lateral RFMOs[3]. All actions taken by the Councils are reviewed by, and if approved, implemented by the Department of Commerce to ensure compliance with other applicable law. These actions are also required under the MSA to have mandatory public review comment periods noticed in the *Federal Register*.

Ecosystem considerations are routinely used to inform management decisions.

The Councils understand that conserving marine ecosystems is essential to achieving our mandate under the MSA. In working towards this goal, the Councils have become pioneers at implementing ecosystem-based management, tailored to the needs of the unique ecosystems that each Council manages. within the EEZ.

Ecosystem-based management also involves managing the human element of the ecosystem, not just the 'natural' elements. The Councils manage commercial and recreational fishermen, and even though we do not manage for subsistence users, we recognize their importance and that their usage has been an element of these ecosystems for millennia. This process also fulfills another objective of the EO: to spur economic growth by sustainable practices, as evidenced by nearly a million jobs and $56 billion in value-added economic impact supported by the commercial, recreational, tribal and subsistence fisheries.

RFMCs are at the forefront of coping with climate change.

Our incorporation of ecosystem-based management places the Councils at the forefront of society's response to climate change. Fishermen are well aware that warming ocean temperatures are changing the distribution of fish and affecting their productivity - they see it every day in their catches. The RFMCs are actively adapting to the rapidly changing conditions caused by global warming. This response is essential if the benefits of sustainable fisheries are to be realized by future generations. Because of our experience, we are uniquely positioned to evaluate what is needed to achieve the goals of the EO.

RFMCs use a public, collaborative process in the conservation of living marine resources.

The RFMCs accomplish these functions through a process that is open to the public, inclusive of all stakeholders, fair, and with balanced representation. Council members include representatives from state fishery management agencies, National Marine Fisheries Service, U.S. Fish and Wildlife Service, treaty Indian Tribes, territories, U.S. Coast Guard, Department of State, and Department of Commerce-appointed stakeholders representing commercial and recreational fishing interests, environmental organizations, and academics. All Council meetings are noticed in the *Federal Register*, open to the public, and provide extensive opportunity for public comment.

[2] Including the Administrative Procedure Act, Coastal Zone Management Act, Endangered Species Act, Information Quality Act, Marine Mammal Protection Act, National Environmental Policy Act, National Marine Sanctuaries Act, Paperwork Reduction Act, Regulatory Flexibility Act and Executive Orders 12630, 12866, 12898, 13089, 13132, 13158, 13175, 13272.

[3] Including the Western and Central Pacific Fisheries Commission, Inter-American Tropical Tuna Commission, North Pacific Fisheries Commission, Pacific Salmon Commission, Northwest Atlantic Fisheries Organization, and others.