



North Pacific Fishery Management Council

Simon Kinneen, Chair | David Witherell, Executive Director
1007 W. 3rd Avenue, Suite 400, Anchorage, AK 99501
Phone 907-271-2809 | www.npfmc.org

March 24, 2021

Benjamin Friedman
Deputy Under Secretary for Operations and
Acting Administrator
National Oceanic and Atmospheric Administration
Via Email: benjamin.friedman@noaa.gov and OceanResources.Climate@noaa.gov

Dear Acting Administrator Friedman:

The Executive Order (EO) 14008 section 216(c) *Conserving Our Nation's Lands and Waters* states that “The Secretary of Commerce, through the Administrator of the National Oceanic and Atmospheric Administration, shall initiate efforts in the first 60 days from the date of this order 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.” On behalf of the North Pacific Council, I am writing to provide you with initial comments on this section, and an update of our current and future efforts to make fisheries and protected resources more resilient to climate change.

The regional fishery management council process established by the Magnuson-Stevens Fishery Conservation and Management Act is the most effective mechanism for ensuring that fisheries and protected resources are resilient to climate change. For the North Pacific, NOAA should 1) continue to support the North Pacific Council’s proactive efforts to incorporate climate resiliency into our conservation and management process, and 2) provide consistent funding and support for the multiple fisheries and ecosystem surveys that form the fundamental basis of fisheries management in the North Pacific.

The North Pacific Council develops conservation and management measures for the fisheries operating in the EEZ off Alaska; the stated foundation for our fishery management is preservation of the healthy, productive marine ecosystems in our EEZ, even in the face of climate change. The EEZ in our region is expansive, covering over 1 million square nautical miles, and includes the large marine ecosystems of the Gulf of Alaska, Bering Sea, Aleutian Islands, and the Arctic. These areas support subsistence, sport, and commercial fisheries, and subsistence harvests of marine mammals. The Council develops management plans under an explicit, approved vision statement to achieve ecosystem-based management goals and envisions sustainable fisheries that provide benefits for harvesters, processors, recreational and subsistence users, and fishing communities, which (1) are maintained by healthy, productive, biodiverse, resilient marine ecosystems that support a range of services; (2) support robust populations of marine species at all trophic levels, including marine mammals and seabirds; and (3) are managed using a precautionary, transparent, and inclusive process that allows for analyses of tradeoffs, accounts for changing conditions, and mitigates threats.

The North Pacific Council has a successful record of science-based, sustainable fisheries management, including identifying and managing thousands of nautical miles of conservation areas. Critical to our success has been identifying a specific conservation objective and tailoring a closure or restriction to that particular objective, while analyzing and considering the tradeoffs to the affected fishing community.

We adopted the above ecosystem policy, including the ecosystem vision statement in 2014, and ecosystem considerations are incorporated into the analysis and development of all fishery management measures.

The North Pacific Council has invested in this approach and process while continuing to support the fishermen, processors, and communities dependent on fisheries under its jurisdiction. Nearly all of the fisheries in the North Pacific are certified as sustainable by the Marine Stewardship Council and the Responsible Fisheries Management Certification Program. Each year, vessels homeported in coastal communities in Alaska, Washington, and Oregon harvest over 2,200,000 metric tons of groundfish in the North Pacific, worth approximately \$2.5 billion first wholesale. This is a fraction of the biomass that could be harvested sustainably in the Alaska EEZ. Fish harvests off Alaska annually account for about 60% of the total U.S. catch, and are critical to ensuring food security for the nation. These fisheries support over 90,000 jobs and provide economic opportunities in coastal communities that are particularly vulnerable to the effects of climate change. The abundance of groundfish stocks is high, and most stocks are well above the abundance levels that produce maximum sustainable yield. In the past 40 plus years, no groundfish stocks have been overfished or have been subject to overfishing.

To achieve this conservation success, the Council relies on a mix of conservation and management tools that provide resilience and flexibility, which marine scientists have noted many times are critical to adapting to climate change. Some of the major tools include:

- Precautionary harvest limits – Scientifically established annual limits on harvests that incorporate ecosystem concerns and provide food security and economic activity for the long-term, while protecting marine ecosystems from adverse impacts. The total annual catch of all species in the Bering Sea is also capped as an ecosystem conservation measure.
- Ecosystem policy – An explicit policy that fisheries management take into account environmental variability and uncertainty, changes and trends in climate and oceanographic conditions, and fluctuations in productivity for managed species and associated ecosystem components, such as habitats and non-managed species, and relationships between marine species.
- Conservation areas – Over 65% of the Alaska EEZ is closed to some or all fisheries to conserve habitat, sustain fisheries and coastal communities, and protect marine mammals. These closures were carefully established through the Council’s public process to protect ecosystem productivity and integrity while still providing for sustainable fisheries and viable coastal fishing communities. These areas can be modified as new scientific information becomes available, fish stocks shift their distribution, the environment changes, or other reasons as needed to adapt to unforeseen events.
- Effective monitoring, accounting, and enforcement – A comprehensive observer and electronic monitoring system ensures that all harvesters follow the requirements for fishing in areas protected by Council action, catch is accounted towards the annual catch limits to prevent overfishing, and potential impacts on seabirds and marine mammals are monitored.
- Strong scientific base and adherence to scientific advice – Scientific information underpins all management decisions. Fisheries surveys and environmental data collection are critical and used for stock assessments and development of models to understand, prepare for, and be resilient to climate change in the North Pacific.

In addition to these management tools, the Council and the NOAA Alaska Fishery Science Center have already enacted a number of procedures, research and monitoring activities, and management actions to make our fisheries more resilient to climate change. Each year, scientists from the Science Center working with cooperating agencies, produce an Ecosystem Status Report for each major fishery management region, which provides status and trend information for ecosystem components and ecosystem-level attributes, with indicators of current ecosystem conditions and an assessment of how fish stocks might respond to these conditions. The Council and its advisory bodies review the Ecosystem Status Report, and adjust annual catch limits and targets should the information indicate additional caution is warranted. The Ecosystem Status Report information is also used in environmental assessments that evaluate proposed changes to fishery regulations. All of the information used to produce the Ecosystem Status Report requires continued major investments in scientific research surveys and analysis.

Fish populations, including important fishery resources with the highest biomass, are expanding into the northern Bering Sea and the high Arctic as a direct response to climate change. These regions are under surveyed and will require our focus as climate change continues and gets more pronounced in the Alaska region. As the resource expands, the Council also needs data from our international partners to better understand how climate change is affecting our cross-boundary stocks (e.g., Alaska pollock). There is also the need for increased focus on expanded at-sea fisheries and ecosystem surveys to support management approaches that consider climate change, so vulnerabilities can be identified and addressed. Examples of climate-based vulnerabilities include monitoring the ecosystems services that support key commercial fisheries. For example, environmental monitoring and modeling revealed that the recent marine heatwaves in the Gulf of Alaska drastically reduced the forage base available to Pacific cod, a vitally important fishery resource in Alaska. Additionally, we now understand that the loss of sea ice can greatly impact the distribution and production of Pacific cod and Alaska pollock. These examples illustrate the importance of continued support for scientific surveys, environmental monitoring and modeling to understand, mitigate, and anticipate the impacts of climate change.

In cooperation with the NOAA Alaska Fishery Science Center, the Council is further evaluating 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. We approved a Bering Sea Fishery Ecosystem Plan in 2018 and one of the first significant efforts under that plan is our Action Module for Climate Change. The goal of the Climate Change Module is “to facilitate the Council’s work toward climate-ready fisheries management that helps ensure both short-term and long-term resilience for the coupled social-ecological system of the Bering Sea.” As a first step to achieve this goal, the Council established a Climate Change Taskforce, consisting of federal and non-federal scientists (including social science, biological, ecological and marine mammal specialists), fishing representatives, tribal organizations, NGOs, and research organization representatives, to collect input from a diverse group of stakeholders and develop tools to make fisheries more resilient to climate change. The Climate Change Taskforce workplan spans the next five years, and builds a process for operational delivery of climate-informed and ecosystem-based management decision support tools for the management of living marine resources in the Bering Sea. We believe that this process and workplan could provide a model for other regions in addressing emergent climate change impacts and planning for fisheries.

The Climate Change Taskforce aims to build a three-step process (i.e., collect, synthesize, communicate) to operationalize the delivery of climate change information to the Council and address the intent of EO 14008 including summarizing climate change information, tools, and providing recommendations to improve fisheries resiliency to climate change in all aspects of our management process. Through the course of the 5-year work plan, the Climate Change Taskforce will also create a regular process for the synthesis and delivery of management strategy evaluations of measures that can:

a) help preserve livelihoods, economies, health and well-being across fisheries and dependent coastal communities; b) support near- and long-term adaptation to climate change; and c) ensure the continued productivity and sustainability of the Bering Sea system.

Increasingly, the Council recognizes that management of commercial fisheries in federal waters is linked at an ecosystem level with the subsistence fisheries of the coastal communities that border these four large marine ecosystems. In recognition of this overlap of interest and dependency on healthy ecosystems, another focus of the Bering Sea FEP is formation of a Traditional Knowledge/Local Knowledge Task Force with the objective of incorporating the long time series of observations of our marine ecosystems that is held by the indigenous peoples and the knowledge of experienced commercial fisher with the NOAA survey efforts to expand our understanding of the impacts of climate change. The Council also established the objective of establishing communication with subsistence dependent communities, so both the communities and the Council can share, in real time, concerns about the impacts of climate change on our respective stakeholders and seek to avoid creating problems for each other as we adapt to climate change impacts. The Council is excited about this effort, and believes that it merits support from NOAA.

We appreciate that NOAA and the Alaska Fisheries Science Center are collaborating with the Council on our effort to improve and provide climate resilient fisheries management. NOAA can best carry out the goals of the EO by continuing to participate in these Council efforts rather than focusing resources on development of additional regulatory and administrative requirements that have less meaningful impact. Continued scientific, financial, and management support from NOAA will be necessary to advance this work. One of the most crucial aspects of continued climate resiliency that NOAA can directly provide is long-term, consistent funding and support for the multiple fisheries and ecosystem surveys that form the fundamental basis of fisheries management in the North Pacific. However, NOAA should also recognize that while climate is an important driver, it should not become the singular management consideration. Other biological, social, and economic factors that directly impact fish and protected species abundance may be more immediate than climate change impacts and should be addressed by resource managers as needed.

Thank you for the opportunity to provide initial comments on the EO section 216(c) regarding approaches to make fisheries and protected resources more resilient to climate change. We are already working hard to meet this shared goal and have committed significant time and resources to a comprehensive approach. We look forward to continuing this dialog as you receive additional input, and we welcome any opportunity to provide more detail on our approach.

Sincerely,



Simon Kinneen
Council Chair

cc: Mr. Paul Doremus, Acting Administrator, NOAA Fisheries
Dr. James Balsiger, Assistant Administrator, NOAA Fisheries Alaska Region
Dr. Bob Foy, Director, NOAA Fisheries Alaska Fisheries Science Center