



**Western
Pacific
Regional
Fishery
Management
Council**

March 31, 2021

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

RE: Climate: Recommendations for Fisheries and Protected Resources

Dear Secretary Raimondo,

The Western Pacific Regional Fishery Management Council appreciates the opportunity to provide recommendations to the National Oceanic and Atmospheric Administration (NOAA) regarding Section 216(c) of Executive Order 14008 on making fisheries and protected resources more resilient to climate change. The Council's Coral Reef Fishery Management Plan was implemented in 2004. The FMP applied an ecosystem approach to manage the coral reefs in the Western Pacific incorporating effects of climate change. The FMPs for bottomfish, crustacean, precious corals, coral reef, and pelagics transitioned to Ecosystem Plans.

Climate change has been a major consideration developing the FEPs and Council management priorities under the Magnuson-Stevens Fishery Conservation and Management Act (MSA). NOAA/NMFS should work closely with the Regional Fishery Management Councils to utilize the transparent, science-based adaptive management process envisioned under the (MSA) to address climate change resiliency in the nation's fisheries.

Examples of the Council's efforts to address climate change resiliency include the following:

- The Council established the Climate Change Committee whose members developed the Climate Change Modules for the Stock Assessment Fishery Evaluation (SAFE) Annual Report. Oceanographic parameters such as atmospheric CO₂, oceanic pH, El Niño Indices, Pacific Decadal Oscillation, sea surface temperature anomalies, chlorophyll-a anomalies, and sea-level rise are summarized in the SAFE Report. The Council is presently developing a data integration module by combining fisheries data with environmental information. The goal of this effort is to account for effects of climate change within the specification of annual catch limits, implementation of vessel prohibited areas, and area-based management.
- The Council, in partnership with the FAO, developed and hosted an International Workshop on Area-Based Management of Blue Water Fisheries to link pelagic management objectives with appropriate area-based management tools, including adaptive management to face shifting environmental baselines due to climate change.

- The Council's MSA Five-Year Research Priorities include climate related projects and activities aimed to re-evaluate management measures in the context of a changing marine ecosystems.
- The Council's Three Year Scientific and Statistical Committee (SSC) Research Plan include pelagic fishery priorities focusing on shifting species distribution and dynamic spatial management to minimize non-target catch while optimizing targeted fishery performance.
- Nearshore ecosystems are most vulnerable to direct impacts from climate change (e.g. sea level-rise, ocean acidification, and coral bleaching). Nearshore fisheries depend on the productivity of these ecosystems to be sustainable. The Council is working with Arizona State University to evaluate several ecosystem indicators (e.g. herbivore fish biomass, coral cover, chl-A concentration, sea surface temperature etc.) and to develop thresholds for fishery and ecosystem managers to use as triggers for management actions.
- The Council is collaborating with NMFS and the University of Florida to develop an ecosystem model that incorporates fisheries, protected species, oceanographic and socioeconomic data. This model will provide a tool to understand patterns and trends of ecosystem impacts and evaluate potential impacts from climate change.

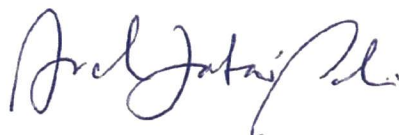
The efforts by the Council to address climate resiliency in archipelagic fisheries is challenged by limited and poor quality data situation. The NMFS should assess their data collection systems to develop a program that will collect, analyze, and produce information appropriate for the management of these fisheries in the Western Pacific region. Data and data products should include:

- In situ current speed at depth which could explain fish behavior and shifting benthic habitat distribution;
- Finer scale oceanographic data to calibrate the satellite derived products;
- Integration of environmental data with fishery dependent data set to better inform stock assessments. Climate informed assessments will provide fishery managers future projections of biomass accounting for climate effects. Spatial shifts in productivity are important for driving the spatial distribution of the fishing fleet.
- Ecosystem models that are linked to federal conservation and management measures so that the management decision is in the context of the state of the ecosystem;
- Dynamic harvest control rule that is adaptive to allow flexibility for Councils to adjust harvest based on the prevailing environmental condition;
- Mechanistic relationships of target and prey species (e.g. forage fish and meso-pelagic or nektonic plankton) and their distributions linked to satellite derived oceanographic features are needed to be discerned so that they may validate or improve modeling platforms that use remote sensing information to project future fishery distributions into the future. Changes in prey species abundance over time and space due to climate change is a major driver in terms of target species distribution and fishery dynamics.

The Council's Scientific and Statistical Committee will advise and assist the council on determining additional improvements in science, monitoring, as well as redirecting cooperative research to make fisheries and protected species more resilient to climate change. These recommendations will be provided to NMFS.

The Council has a unique role, linking the diverse fishing communities of the US Pacific islands and the federal government through the fishery management process of the MSA. The indigenous people of our islands bring their culture and traditional ecological knowledge to the table as the Council deliberates on fisheries and protected species issues. They inform the Council on how climate changes adversely impact their small and vulnerable islands and work with the Council to address issues and impacts based on their history of stewardship which goes back Millennia.

Based on our continuing innovative approaches to conserving and sustaining fisheries in the Western Pacific region, we look forward to working with the Administration to ensure our nation's fisheries and protected resources are climate resilient and continue to provide opportunities for American fishermen.



Taotasi Archie Soliai
Chairman

Sincerely,










Kitty M. Simonds
Executive Director

Cc: Honorable Debra A. Haaland, Secretary, U.S. Department of Interior
Benjamin Friedman, NOAA Administrator
Paul Doremus, Acting Assistant Administrator for NOAA Fisheries
Ralph D.L.G.Torres, Governor, commonwealth of the Northern Mariana Islands
Lemanu Peleti Mauga, Governor, Territory of American Samoa
Lourdes Aflague Leon Guerrero, governor, Territory of Guam
David Y. Ige, Governor, State of Hawaii



Attached: Map of the US EEZ Regulated Areas within the Western Pacific Region

US EEZ Regulated Fishing Areas, Western Pacific Region

Magnuson-Stevens Act

-  Longline fishing prohibited (1991 - 92, 2011)
-  Large Vessel Prohibited Area (2002)
-  False Killer Whale Southern Exclusion Zone (2012)
-  Guam No Anchor Zone (2004)
-  Bottomfish/Groundfish fishing prohibited (1986)
-  Bottomfish Vessels \geq 50 ft prohibited (2006)
-  US EEZ: trawling, drift gillnets, poisons and explosives prohibited (1986 - 2004)

Antiquities Act

-  Marine National Monument (2006 - 2016)
-  Closed to all commercial fishing

