WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

Council Policy on Marine Planning and Climate Change
(version 2015.03.16)

I. Background

This Policy on Marine Planning and Climate Change (MPCC) for the Western Pacific Regional Fishery Management Council (Council) has been developed to help guide the Council as it implements and amends its Fishery Ecosystem Plans, programs and other activities. The development of the MPCC Policy is in response to federal directives; the stated needs and desires of the fishing communities of Hawai`i, American Samoa, Guam and the Commonwealth of the Northern Mariana Islands (CNMI); and the growing importance of marine planning and climate change in the region.

A. Federal Directives

Under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the Council has "authority over the fisheries in the Pacific Ocean seaward of such states and of the Commonwealths, Territories, and Possessions of the United States in the Pacific Ocean area." One of the 10 National Standards within the MSA to which the Council must adhere is to "take into account the importance of fishery resources to fishing communities by utilizing economic and social data that [are based upon the best scientific information available] in order to (A) provide for sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities."

The Council's efforts to incorporate marine planning in its actions began in response to Executive Order (EO) 13547, Stewardship of the Ocean, Our Coasts, and the Great Lakes, issued by President Barack Obama on June 19, 2010. EO 13547 adopted the recommendations of the Interagency Ocean Policy Task Force and directed executive agencies to implement those recommendations as the National Ocean Policy. A third of the Task Force document addressed coastal and marine spatial planning (CMSP).

Likewise, the Council's efforts regarding climate change were motivated, in part, by the convening in 2009 of the Interagency Climate Change Adaptation Task Force, co-chaired by the White House's Council on Environmental Quality (CEQ), the Office of Science and Technology Policy (OSTP) and the National Oceanic and Atmospheric Administration (NOAA), and including representatives from more than 20 federal agencies. On October 5, 2009, President Obama signed an executive order directing the Task Force to develop a report with recommendations for how the federal government can strengthen policies and programs to better prepare the nation to adapt to the impacts of climate change.

Additionally, the National Ocean Policy, implemented in 2010, identified Resiliency and Adaptation to Climate Change and Ocean Acidification as one of the nine National Priorities, specifically "Strengthen resiliency of coastal communities and marine

and Great Lakes environments and their abilities to adapt to climate change impacts and ocean acidification."

On October 28, 2011, the Task Force released its Interagency Climate Change Adaptation Progress Report outlining the federal government's progress in expanding and strengthening the nation's capacity to better understand, prepare for, and respond to extreme events and other climate change impacts. The report provides an update on actions in key areas of federal adaptation, including building resilience in local communities, safeguarding critical natural resources such as freshwater, and providing accessible climate information and tools to help decision-makers manage climate risks.

B. Community Needs and Desires

The Council develops and amends fishery ecosystem plans using a bottom-up approach. As required under the MSA, the Council has advisory bodies to assist in the collection and evaluation of information relevant to the development of any fishery management plan or plan amendment. Public hearings are conducted at appropriate times and in appropriate locations in the geographical area concerned, so as to allow all interested persons an opportunity to be heard in the development of fishery management plans and amendments to such plans, and with respect to the administration and implementation of the provisions of the MSA. To help ensure that informed decisions are made, the Council also regularly conducts outreach activities, such as Fishers Forums and community workshops. Since 2010, CMSP and climate change have been the focus of several advisory body meetings and outreach activities, during which fishermen, community members and the public have voiced their appreciation and support for Council's undertaking and working with communities on these topics.

- 2010 Fishers Forum on CMSP in Honolulu
- 2011 community workshop on CMSP in Honolulu with participants from throughout the Western Pacific Region
- 2013 community workshop on CMSP in Saipan, CNMI
- 2013 Fishers Forum and community workshop on CMSP in American Samoa
- 2013 Hawai`i Regional Ecosystem Advisory Committee meeting on climate change and ocean acidification, resulting in nearly two dozen recommendations, which were subsequently adopted with some modifications by the Council

During this time, the Council also began transforming its Marine Protected Area Committee first into a CMSP Committee and then into the current Marine Planning and Climate Change Committee. The Council used the term "Marine Planning" instead of CMSP based because the Implementation Plan for National Ocean Policy, released by the Obama Administration on April 16, 2013, did not include references to CMSP but rather to marine planning.

C. Growing Importance of Marine Planning and Climate Change

Marine planning is a key component of the National Ocean Policy and is a key tool being utilized regionally, nationally and globally to identify and address issues of multiple human uses, ecosystem health and cumulative impacts. Changing climate is already adversely impacting island communities, ecosystems, resources, cultures and economies. Both factors—marine planning and climate change—are anticipated to be more prominent in the not so distant future as the human population and associated maritime activities, such as alternative offshore energy and offshore aquaculture, continue to increase.

The Pacific Islands Regional Planning Body (RPB) was established April 2013 in response to the call for CMSP in the National Ocean Policy. The Pacific Islands RPB members are resolved to work together to develop a regional plan for the balanced, sustainable management of the coastal and marine areas of the Pacific Islands region using guidance from the National Ocean Council, the National Ocean Policy, Implementation Plan and Marine Planning Handbook. The Pacific Islands RPB is comprised of 17 members from both federal and state/territorial government agencies, as well as the Regional Fishery Management Council.

Increasing pressures on valuable marine and coastal habitats and resources due to changing demands for food, energy, economic growth and community sustainability make climate change an issue of community, national and regional security. In addition to economic considerations such as commercial fisheries, Pacific Island communities must address threats to culturally important species and places as well as community health and food security. Ultimately, for many low-lying coral atoll nations, climate change is a direct threat to national security as rising sea level and changes in the availability of freshwater may make at least some of those nations uninhabitable. To escape these impacts, human migration is anticipated.

The *Executive Summary of the 2012 Pacific Islands Regional Climate Assessment* (PIRCA) notes that the indicators of climate change suggest multiple concerns for human and natural communities in the Pacific Islands region: decreased freshwater supplies, especially on atolls and low-lying islands; increased coastal flooding and erosion; increased coral bleaching; unknown, negative consequences for the entire marine ecosystem; declines in open-ocean fisheries; increased risk of species extinctions; threats to the traditional lifestyles of indigenous communities making it difficult for Pacific Island communities to sustain their connection with a defined place and their unique set of customs, beliefs, and languages; and human migration from low islands to high islands and continental sites.

According to the Department of Homeland Security's *Climate Change Adaptation Roadmap* (June 2012), "Climate change represents a complex homeland security challenge with strategic implications for the Department. The risks posed or exacerbated by a changing climate—such as intensifying and more frequent extreme weather events, natural disasters, and sea ice changes in the Arctic—may either directly or indirectly affect core homeland security missions."

The President's State, Local and Tribal Task Force on Climate Preparedness and Resilience, established by Executive Order 136531 on November 1, 2013, was charged with providing recommendations on how the federal government can respond to the needs of communities nationwide that are dealing with the impacts of climate change. The Task Force recommended a) Building Resilient Communities; b) Improving Resilience in the Nation's Infrastructure; c) Ensuring Resilience of Natural Resources; d) Preserving Human Health and Supporting Resilient Populations; e) Supporting Climate-Smart Hazard Mitigation and Disaster Preparedness and Recovery; f) Understanding and Acting on the Economics of Resilience; and g) Building Capacity for Resilience.

Tribal leaders on the President's State, Local, and Tribal Leaders Task Force on Climate Preparedness and Resilience provided Supplemental Recommendations that encompassed four overarching themes: 1) provide better access to data and information, as well as federal programs, and to begin and improve inter-jurisdictional coordination; 2) promote full Tribal inclusion and participation within every decision-making activity with regard to preparation for or recovery from the effects of climate change, as well as for long-term community planning, so that Tribal governments are the main decision-makers for their communities; 3) address the lack of institutional capacity to undertake comprehensive planning programs; and 4) improve education for children, college students and community members on climate change and its effects and community planning. The report noted, "The needs of native communities in relation to climate change are urgent and significant. The time to act to protect and assist our communities is now."

The similarities among the plight of US Pacific Islanders, Alaskan Natives and Native Americans in addressing climate change has been formally recognized since at least 2012, with the establishment of First Stewards, Inc. The resolution from the 2012 First Stewards *Coastal Peoples Address Climate Change Symposium* in Washington, DC, noted that these aforementioned peoples "were and are the First Stewards of the lands and waters of North America, Alaska and the Pacific Islands" and "have experienced changes, including the deterioration of their culture, language, values and land tenure systems, that have resulted in over-development of the coastlines, alteration of freshwater streams and lakes, destruction of life-giving watersheds, decimation of reefs, and the decline of marine and terrestrial species" and that "these changes to the natural world have been exacerbated by climate change and jeopardize the very fabric of indigenous societies."

II. Definitions

A. Climate Change

For the purposes for the MPCC Policy, the Council has adopted the definition of climate change used by the Intergovernmental Panel on Climate Change (IPCC) to include natural climate variability such as El Nino Southern Oscillation (ENSO) and other patterns of natural variability as well as long-term changes in climate associated with anthropogenic (human) influence on greenhouse gases and other aspects of the

Earth's climate system. The definition of climate change in this policy also includes ocean acidification.

B. Climate Change Impacts

In the Pacific Ocean, anticipated climate change impacts include ocean acidification; changing migratory patterns of tuna, other commercially valuable stocks and protected species, among other species; changes in coastal and marine habitats with associated changes in socially, culturally and economically valuable coastal fisheries and other sources of ocean economy; changing patterns of El Niño and other patterns of climate variability; changes in water level including, but not limited to sea level change, increased severity of extreme weather, coral reef changes; and human migration, among others. The 2012 Pacific Islands Regional Climate Assessment (PIRCA) identified several important indicators of climate change in the region, including the rising of sea surface temperature, sea level, carbon dioxide concentrations, ocean heat content and surface air temperature; changing of rainfall, winds and waves, extreme events, ocean chemistry and habitats and species distributions; and decreases in base flow in streams.

C. Marine Planning

Marine planning is defined in the National Ocean Policy Implementation Plan (released April 2013 by the National Ocean Council) as follows:

> Marine planning is a science-based tool that regions can use to address specific ocean management challenges and advance their economic development and conservation objectives. Marine planning will support regional actions and decision-making and address regionally determined priorities, based on the needs, interests, and capacity of a given region. Just as federal agencies work with States, tribes, local governments, and users of forests and grasslands, among other areas, marine planning will provide a more coordinated and responsive federal presence and the opportunity for all coastal and ocean interests in a region to share information and coordinate activities. This will promote more efficient and effective decision-making and enhance regional economic, environmental, social, and cultural well-being. In turn, regional actions will support national objectives to grow the ocean economy, increase regulatory efficiency and consistency, and reduce adverse impacts to environmentally sensitive areas. The scope, scale, and content of marine planning will be defined by the regions themselves, to solve problems that regions care about in ways that reflect their unique interests, capacity to participate, and ways of doing business. Marine planning should build on and complement existing programs, partnerships, and initiatives. The intent is to ensure that a region can develop an approach that it determines works best. This approach balances regional and national interests and recognizes that actions commensurate with regional interests and capacities will provide the most immediate regional benefits. Knowledge and experience will build over time and contribute to achieving national objectives.

D. Traditional Knowledge

For the purposes of this MPCC Policy, traditional knowledge refers to native generational and observational knowledge implemented in site specific, methods, concepts and techniques that have not been influenced from modern scientific research and data. This instinctive natural and cultural knowledge is site specific as in an island, region or traditional boundary. The application of traditional knowledge to manage resources is not driven by economic and sociological purposes. Rather, it is influenced by customary traditional practices and subsistence needs that enhance future use and provision.

The MPCC Policy also acknowledges the definition of "traditional knowledges" [sic] expounded in the *Guidelines for Considering Traditional Knowledges in Climate Change Initiatives*, Version 1.0 - September 2014, put forth by the Department of the Interior Advisory Committee on Climate Change and Natural Resource Science (ACCCNRS), Climate and Traditional Knowledges Workgroup (CTKW):

> As with all societies, indigenous peoples rely on complex knowledge systems to support the continuance of the ways of life that matter to their communities. These systems often involve interconnected webs of environmental, moral, social, political, and spiritual knowledges. These webs express bonds among humans of different generations who play different roles in their communities, plants and animals, non-human entities (such as spirits), and collectives (such as forest landscapes). Terms like TKs refer to various facets of these knowledge systems. Because many indigenous peoples continue to live their lives closely connected to the earth, TKs are derived from the relationships indigenous peoples have with landscapes, waterscapes, plants, animals, and ecological processes. Indigenous peoples have used TKs to adapt and utilize resources derived from ecosystems of which they are also a part. Indigenous peoples respond to meta-scale forces such as ecological variations or ecological impacts resulting from political or economic decisions. TKs will continue to figure crucially in indigenous adaptive governance to current and forecasted climate change.

E. Responsible Fisheries

This MPCC Policy utilizes the definition of "responsible fisheries" as proposed by the United Nations Food and Agricultural Organization and contained in the NOAA Fisheries Glossary (revised June 2006):

> The concept of responsible fisheries encompasses the sustainable utilization of fishery resources in harmony with the environment; the use of capture and aquaculture practices which are not harmful to ecosystems, resources, and their quality; the incorporation of added value to such products through transformation processes meeting the required sanitary standards; the conduct of commercial practices so as to provide consumers access to good quality products.

III. Policy Statement

The Western Pacific Regional Fishery Management Council has adopted this Marine Planning and Climate Change Policy to help it coordinate development and amendment of its fishery ecosystem plans, programs (including, but not limited to, research and outreach/education) and other relevant activities.

The Council's Policy on Marine Planning and Climate Change was developed by its advisory Committee on Marine Planning and Climate Change (MPCC). In developing the policy, the MPCC Committee considered the Council's Guiding Principles, the National Standards of the Magnuson-Stevens Fishery Conservation and Management Act, the National Ocean Policy Implementation Plan and the Council's Policies on Marine Protected Areas, Aquaculture, Essential Fish Habitat and Vessel Monitoring System.

A. Overarching Principles

1. Climate change in Pacific Islands is a security issue that requires that climate considerations be integral parts of addressing today's problems while planning for the future.

2. Development and evaluation of amendments to the Council's Fishery Ecosystem Plans (FEPs) should include consideration of climate change and the fiscal and human resources in the Western Pacific Region needed to implement the FEPs.

3. Marine planning is an appropriate approach to effectively address issues of intersecting human uses, ocean resources and ecosystem health at multiple geographic scales. This approach can be applied by the Council as a tool to align regional interests, determine ocean management priorities across jurisdictions and identify common objectives.

4. The value of indigenous and local traditional knowledge of past and current marine, coastal, land and human activities is significant and can help the region understand and adapt to changes in those systems. In this context, this MPCC Policy recognizes that traditional resource management systems such as the ahupua`a system in Hawai`i and Fa`a Samoa in American Samoa can provide valuable insights to guide adaptation to a changing climate and provide an appropriate context for marine planning.

5. Marine protected areas (MPAs) can and should be utilized for climate change reference research and documenting and understanding impacts on fisheries and ecosystems of both climate change and changing demands on coastal and marine habitats and resources.

6. The Council will remain cognizant of changes in national policies and pursue funding opportunities in partnership with territories, state and/or commonwealth as appropriate.

7. Collaboration with local, territorial and national governments, regional organizations, academia, the private sector and non-government organizations is essential to near- and long-term success.

8. All Council policies, programs and advisory bodies should consider the MPCC Policy.

B. Marine Planning and Climate Change Policy

This MPCC Policy uses the Council's Guiding Principles as a framework structure. Below each principle are specific policies for the Council, its advisory bodies and its staff to consider and incorporate so as to address marine planning and climate change considerations in the Council's FEPs, programs and other actions.

1. Support quality research and obtain the most complete scientific information available to assess and manage fisheries.

a. The Council will leverage existing organizations and collaborate with them in climate change data and information collection, dissemination and outreach including the establishment of operational guidelines and systems for acquisition and access for use by jurisdictions, the Council and others.

b. The Council will work with jurisdictions and subject matter experts to develop and apply short- and long-term indicators of a changing climate and associated impacts in development of jurisdictional plans and in providing fishery management guidance to the Secretary of Commerce.

c. The Council will work with the NOAA Pacific Islands Fisheries Science Center as well as scientific agencies within jurisdictions to encourage the use of current and emerging information about the impacts of climate change on ecosystems and incorporate that climate-ecosystem information in conducting stock assessments and developing management policies and guidance.

Promote ecosystem approach in fisheries management, including reducing waste and minimizing impacts on habitat and impacts on protected species.

a. The Council will recognize the importance of both the pelagic and archipelagic resources as they apply to the regional, international and locally based fishing communities.

b. The Council will address the distinct threats and capabilities of each jurisdiction and the importance of flexible and adaptive, locally managed strategies.

c. The Council will acknowledge that addressing changing climate should be done in the context of inter-related factors, e.g., cumulative impacts.

d. The Council will carefully consider the impact on fisheries and fishery resources when addressing marine planning for activities such as offshore energy development.

3. **Conduct education and outreach** to foster stewardship principles and public participation in the Council's decision making process.

a. The Council will recognize the importance of community-based management and will inform communities and respond to their concerns.

b. The Council will seek collaboration with the private sector, local agencies, and other partners and funding agencies.

c. The Council will leverage existing organizations and collaborate with them in data and information collection and dissemination as well as outreach related to climate change and marine planning.

4. **Recognize importance of island cultures and traditional fishing practices** in managing fishery resources and foster opportunities for participation.

a. The Council will encourage site-specific adaptation management strategies that are culturally sensitive and appropriate.

b. The Council will incorporate traditional knowledge and practices of affected indigenous cultures to understand and respond to climate change and utilize marine planning to address overlapping interests.

c. The Council will consider the impact on traditional fisheries, traditional fishery resources, traditional knowledge and traditional fishing rights when addressing marine planning for activities such as offshore energy development.

5. **Promote environmentally responsible fishing** and utilization of sustainable fisheries that provide long-term economic growth and stability.

a. The Council, when implementing projects, will ensure they are environmentally responsible to minimize environmental footprints and/or mitigate for impacts to the environment.

b. The Council will review and make recommendations for and participate in the development of regional marine planning for the Pacific Islands Region so that fisheries and fishery resources are

included as a component of the Pacific Islands Regional Planning Body's Ocean Plan and Guidance document and associated products.

6. **Promote regional cooperation** to manage domestic and international fisheries.

    a. The Council will continue efforts to ensure that changing climate conditions and needs of Council jurisdictions receive due consideration in the development of and amendments to regional and international fisheries policies that affect the resources of the Western Pacific.

    b. The Council will encourage collaboration with and among state and jurisdictional government agencies and universities conducting research on climate change and utilizing regional marine planning in the Pacific.

    c. The Council will encourage and support participation in jurisdictional, regional and international climate change assessment activities including but not limited to the US Pacific Islands Regional Climate Assessment and the Intergovernmental Panel on Climate Change.

    d. The Council will encourage and facilitate collaboration among Council jurisdictions to share lessons learned and knowledge gained in individual fisheries and ecosystems monitoring, research and management activities.

7. **Encourage development of technologies** and methods to achieve the most effective level of monitoring control and surveillance and to ensure safety at sea.

    a. The Council will encourage active participation in the Pacific Islands Regional Planning Body and facilitate access to and use of marine planning approaches, tools and techniques applicable to the region, including training and support for marine planning dialogues, workshops and other participatory approaches.

    b. The Council will work with jurisdictions and regional partners to identify locally and regionally appropriate indicators/indices of changing ecosystem and fisheries health and resilience in the face of changing climate and changing pressures on marine and coastal habitats and species.