

NORTHWESTERN HAWAIIAN ISLANDS CORAL REEF ECOSYSTEM RESERVE
RESERVE ADVISORY COUNCIL

Non-Government (Voting) July 26, 2017

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The Honorable Secretary Wilbur Louis Ross Jr.
1401 Constitution Ave., N.W.
Washington, DC 20230


RE: Executive Order 13795 - Implementing an America-First Offshore Energy Strategy.

Dear Secretary Ross,

The Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council (RAC) appreciates the opportunity to provide comments to Executive Order 13795 - Implementing an America-First Offshore Energy Strategy and more specifically Section 4(b). The RAC is composed of engaged stakeholders who provide advice and recommendations to the Office of National Marine Sanctuaries, NOAA, regarding the management of the Papahānaumokuākea Marine National Monument (PMNM) and the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve (NWHICRER). Council members represent conservation, research, education, Native Hawaiian, recreational and commercial fishing and ocean-related tourism interests, as well as the State of Hawai'i and the community at large. Since it was established by EO 13178 on December 4, 2000, the RAC has played a key role in the development and implementation of the NWHICRER Operations Plan, as well as the inaugural Monument Management Plan when the Reserve became part of the PMNM in 2006.

The Council hereby submits the following comments pertaining to EO 13795 - Section 4(b) of that order that affects marine national monuments that have occurred since April 28, 2007. We would like to provide the following information pertaining to the PMNM that may inform the three criteria in Section 4(b)(i) of EO 13795. In sum, there are no known petroleum, natural gas, or coal reserves in the EEZ surrounding the Northwestern Hawaiian Islands where PMNM is located. Nor are there any economically significant mineral resources due to the high opportunity costs. The Council remains strongly opposed to any executive action that would reduce or rescind the Marine National Monument created in 2006 and expanded in 2016.

Sincerely,



Timothy Johns, Chair
NWHI Coral Reef Ecosystem Reserve Advisory Council

The Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council (RAC) hereby submits the following response to the Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) on the three criteria outlined in Executive Order 13795-Implementing an America-First Offshore Energy Strategy as it relates to the Papahānaumokuākea Marine National Monument ("PMNM") expansion. This supplements our comments submitted to the Department of the Interior in response to EO 13792 on July 10, 2017.

(A) An analysis of the acreage affected and an analysis of the budgetary impacts of the costs of managing each National Marine Sanctuary or Marine National Monument designation or expansion.

The PMNM was designated by President George W. Bush in 2006, and expanded by President Barack Obama in 2016. The expansion is comprised of approximately 1,146,743 square kilometers. The value of the resources in the expanded area is well described in the attached RAC comment letter on Executive Order 13792.

(B) An analysis of the adequacy of Federal, State and tribal consultations conducted before the designations or expansions.

On April 23, 2008, two years after the PMNM was designated, the Draft Monument Management Plan and its associated Environmental Assessment were released for public review and comment. An initial 75-day review period was provided, during which nine public meetings in Hawai'i and one in Washington, D.C. were held. Upon request, the comment period was extended to 90 days, ending on July 23, 2008. More than 6,400 comments were received from across the nation (See Volume 5 of the Monument Management Plan available at:

http://www.papahanaumokuakea.gov/new-about/management/pdfs/vol5pt1_resp_mmp08.pdf
http://www.papahanaumokuakea.gov/new-about/management/pdfs/vol5pt2_resp_mmp08.pdf)

When expansion of the PMNM was proposed in 2016, Hawai'i's residents generally voiced strong support through petitions, public meetings, and letters. In August, 2017, NOAA Regional Director, Office of National Marine Sanctuaries, Allen Tom and U.S. Fish and Wildlife Service Regional Director Robyn Thorson hosted meetings on the islands of Oahu and Kauai to listen, learn and understand the local vision for the proposed expansion. There were over 500 participants in attendance at the two meetings, and over 6,800 comments were submitted on the expansion proposal, with most comments in favor of the expansion.

U.S. Senator Brian Schatz (Hawai'i) promoted the expansion, stating: "Expanding Papahānaumokuākea makes a definitive statement about Hawai'i's and the United States' commitment to ocean conservation. By adopting my proposal to expand the monument, President Obama has created a safe zone that will replenish stocks of tuna, promote biodiversity, and fight climate change, and he has given Native Hawaiians a greater voice in managing this precious resource." In addition, Hawai'i Governor David Ige wrote a letter in support of the expansion to President Obama in which he stated: "There has been a tremendous debate locally on this issue, and I have met with both proponents and opponents listening closely to the concerns of both. While the expansion to the 200-mile EEZ boundary will present some challenges in the short term,

it carefully balances the very real human needs of today with the future health of the ecosystem that sustains life in these precious Hawaiian Islands.”

It was members of the Native Hawaiian community who proposed the idea of the PMNM expansion to the White House in January 2016. Continued involvement and participation by the Native Hawaiian community includes representation on the RAC, consultation with OHA's Native Hawaiian Cultural Working Group, and the addition of the Office of Hawaiian Affairs (OHA) as a PMNM Co-Trustee. In a letter to the RAC dated June 7, 2016, OHA emphasized the pivotal role the Native Hawaiian community played in the expansion and stated: “This continued the advocacy efforts of Native Hawaiian community leaders, practitioners and kupuna who joined with other stakeholders to establish the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve in 2000 and PMNM in 2006.” Both the Hawaii Department of Land and Natural Resources and OHA consider Native Hawaiian cultural practices, and rights during their agency reviews of PMNM permits applications.

(C) The opportunity costs associated with potential energy and mineral exploration and production from the Outer Continental Shelf, in addition to any impacts on production in the adjacent region.

Hawai'i has no known petroleum, natural gas, or coal reserves (Energy Information Administration 2016). However, the Hawai'i EEZ seabed has deep-sea mineral deposits called ferromanganese crusts at depths between 800 and 2,500 meters. They are most common on the flanks and summits of seamounts that rise hundreds of meters above the ocean floor.

NOAA and partners initiated in 2015 the Campaign to Address Pacific Monument Science, Technology, and Ocean Needs (CAPSTONE), a major multi-year science effort focused on collecting baseline information in deep-water areas of the central and western Pacific U.S. marine protected areas. The CAPSTONE expedition in 2015 and 2016 conducted by the NOAA Ship *Okeanos Explorer* focused on discovering and characterizing vulnerable deep-water habitats in the PMNM, particularly high-density deep-sea coral and sponge communities. To date, the expedition has mapped three previously unknown seamounts and recorded hundreds of species that were either new to science or not known to exist in Hawai'i (NOAA 2016). Recent age growth studies of newly-discovered species of deep-water black coral in the Monument reveal that the corals are over 4,000 years old, which places them among the longest-living organisms (NOAA 2016).

The Western Pacific Regional Fishery Management Council (WPRFMC) has designated the water column down to 1,000 meters that lie above all seamounts and banks within the Western Pacific Region EEZ shallower than 2,000 meters as Habitat Areas of Particular Concern (HAPC) for tuna and other pelagic species. (WPRFMC 2009) A HAPC is a fish habitat area that meets one or more of the following criteria: (1) ecological function provided by the habitat is important; (2) habitat is sensitive to human-induced environmental degradation; (3) development activities are, or will be, stressing the habitat type; or (4) the habitat type is rare.

According to the WPRFMC, localized areas of increased biological productivity are associated with seamounts, and many seamounts are important grounds for commercial fishing in the Western Pacific Region (WPRFMC 2009). Recent research suggests that seamounts generate conditions

such as increased vertical nutrient fluxes and material retention that promote productivity and fuel higher trophic levels, resulting in “hotspots” of pelagic biodiversity. (Morato et al. 2010) The WPRFMC notes that there have been proposals to mine the ferromanganese crusts on the summits of seamounts in the EEZ around Hawai‘i. Given the economic and socio-cultural importance of tuna and other pelagic fisheries in the Western Pacific Region, the WPRFMC has expressed concern about the possible adverse impacts of this proposed activity on fishery resources. (WPRFMC 2009)

The complexity of the potential environmental impacts of seabed mining contributes to great uncertainty. For example, even if knowledge of the ecology of a particular deep-sea mine site might advance to the point where the local impact can be predicted with some confidence, uncertainties may remain regarding the geographical distribution and temporal extent of the harm as well as the cumulative effects. (Jaeckel and Rayfuse 2017) It has been postulated that the areas likely to be affected by deep-sea mining would be widespread, ranging from the ocean surface and water column due to particles discharged during lifting, at-sea processing, and transportation to the seafloor where the minerals will be separated from the associated substrate, leading to resuspension and redistribution of bottom sediments. (Sharma 2017) According to one estimate, an area of 300 to 600 square kilometers would be disturbed for every 1.5 to 3 million tons of deep-sea mineral deposits mined. (Sharma 2015)

In conclusion, the opportunity costs associated with the exploration and mining of ferromanganese crust deposits in the PMNM are high to the extent that minerals development has an adverse impact on deep-water habitat and the wide array of benthic and pelagic species this habitat supports. On-going research has already revealed that deep-water habitats in and around the PMNM support high-density and diverse biological communities. Aside from the scientific value of these communities to our understating of marine ecosystems, their uniqueness and potential vulnerability to irreversible harm suggests they hold a high amount of what economists term existence value, i.e., the value that society gains simply from knowing that an environmental amenity is being protected and preserved for both current and future generations. In addition, it has been established that seamounts are areas of special interest for management of tuna and other pelagic species of substantial commercial and socio-cultural value. The potentially high opportunity costs of minerals mining in the PMNM implies that the “safe minimum standard” should be applied. This decision rule requires policy makers to preserve sufficient area of habitat to conserve a species or ecosystem unless the costs of doing so are unacceptably large (Bishop 1978).

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