

NORTHWESTERN HAWAIIAN ISLANDS CORAL REEF ECOSYSTEM RESERVE  
**RESERVE ADVISORY COUNCIL**

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William Ailā, Jr. (Chair)  
*State of Hawai'i*

Linda Paul (Vice Chair)  
*Conservation*

Rick Gaffney (Secretary)  
*Recreational Fishing*

Pelika Andrade  
*Native Hawaiian*

Vacant  
*Native Hawaiian*

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*Citizen-at-Large*

Mark Hixon  
*Research*

Bonnie Kahapea-Tanner  
*Education*

Solomon Pili Kaho'ohalahala  
*Native Hawaiian Elder*

Richard Lee  
*Ocean-Related Tourism*

Audrey Newman  
*Conservation*

Don Schug  
*Research*

Vacant  
*Conservation*

Vacant  
*Commercial Fishing*

Vacant  
*Commercial Fishing Alternate*

Vacant  
*Native Hawaiian Elder Alternate*

Vacant  
*Citizen-at-Large*

Vacant  
*Native Hawaiian*

**Government (Non-Voting)**

Athline Clark  
*Papahānaumokuākea MNM*

Kate Thompson  
*HIHW National Marine Sanctuary*

Brandon Jim On  
*NOAA Office of Law Enforcement*

Maile Norman  
*U.S. Coast Guard*

Janice Fukawa  
*U.S. Department of Defense*

Joshua DeMello  
*WPRFMC*

Jared Underwood  
*U.S. Fish and Wildlife Service*

Malia Chow  
*NOAA Fisheries PIRO*

Na'u Kamali'i  
*Office of Hawaiian Affairs*

Vacant  
*Marine Mammal Commission*

Meeting January 12, 2022  
9:00 a.m. – 1:00 p.m.  
Via GotoWebinar Teleconference  
Meeting Minutes

**ATTENDEES:**

RAC Voting Members Present: William Ailā (Council Chair), Audrey Newman (Conservation), Don Schug (Research), Neal Langerman (Research Acting Primary), Mark Hixon (Research), Rick Gaffney (Secretary and Recreational Fishing), Richard Lee (Ocean-Related Tourism Acting Primary), Linda Paul (Vice-Chair and Conservation), Bonnie Kahapea-Tanner (Education Primary), Bill Walsh (Research Acting Primary), Solomon Kaho'ohalahala (Native Hawaiian Elder Primary), and Thorne Abbott (Conservation Acting Primary).

RAC Voting Members Absent: Pelika Andrade (Native Hawaiian), and Judith Cucco (Citizen-at-Large).

RAC Non-Voting Members Present: Athline Clark (Office of National Marine Sanctuaries, Papahānaumokuākea Marine National Monument), Eric Roberts (ONMS, PMNM), Janice Fukawa (Department of Defense, U.S. Navy), Brandon Jim-On (NOAA Office of Law Enforcement), Na'u Kamali'i (Office of Hawaiian Affairs), Zach Yamada (Western Pacific Regional Fishery Management Council), Dan Polhemus (U.S. Fish & Wildlife Service [Ecological Services]), Cynthia Vanderlip (State of Hawai'i), Malia Chow and Richard Hall (National Marine Fisheries Service), Peter Thomas (Marine Mammal Commission), Cindy Among-Serrao (ONMS/Hawaiian Islands Humpback Whale National Marine Sanctuary), Heather Howard (Education alternate), Haunani Kane (Research alternate), Robert Leinau (Conservation alternate), Paul Badgley (Ocean-Related Tourism alternate), and Jeannine Rossa (Acting State Co-Manager- HIHWNMS).

RAC Non-Voting Members Absent: Maile Norman (U.S. Coast Guard), Jared Underwood (U.S. Fish and Wildlife Service, Refuges), Kate Thompson (ONMS/Hawaiian Islands Humpback Whale National Marine Sanctuary), Joshua DeMello (Western Pacific Regional Fishery Management Council), Brian Neilson (Administrator, Department of Land and Natural Resources Division of Aquatic Resources).

ONMS Leadership and Staff: Kristina Kekuewa (ONMS Regional Director – Pacific Islands Region). Staff: Malia Evans, Justin Umholtz, Alyssa Miller and Camille Jones.

**Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve**  
**ADVISORY COUNCIL MEETING**

**Welcome (Ailā, Jr.)**

The meeting opened with a welcome by Chair Ailā, and an opening protocol conducted by Malia Evans.

**Roll call, Introductions, Review and Approval of Agenda (Ailā Jr.)**

Roll call was taken by Camille Jones.

Review and approval of the agenda was conducted by Chair Ailā. Representative Paul moved to accept the agenda, and Representative Gaffney seconded the motion. The agenda was adopted unanimously.

**Review & approval of December 15, 2021 Meeting Minutes (Ailā Jr.)**

Review and approval of the meeting minutes were conducted by Chair Ailā. Representative Paul moved to accept the minutes as amended, and Representative Gaffney seconded the motion. The minutes for the December 15 meeting were adopted unanimously.

**Review & Summary of Previous Issues, Action Items and Status (Clark)**

1. State of Hawai‘i Action: Keep RAC informed on 30x30 Initiative (Rossa)
  - No updates
2. ONMS Action: Keep RAC informed of NFWF funding and activities (Clark)
  - NFWF released a new RFP for funding. NFWF has recruited a donor to provide \$1m per year in support of marine debris initiatives.
3. NMFS Action: Keep RAC informed of any changes to the Magnuson-Stevens Fishery Conservation and Management Act.
  - There are presently three bills under discussion, proposing changes to MSFCMA.
4. ONMS Action: Keep RAC informed of Sanctuary designation process (Clark).
  - NOAA is in the scoping phase of sanctuary designation. Public comments period is open through January 31<sup>st</sup>.
  - Mahalo to co-managers and RAC members for attending the public meetings. The public meetings were attended by 143 people. Nine verbal comments were received.
  - Comments may be submitted via *Regulations.gov*. Most comments so far have been positive and supportive of a sanctuary. After all comments are received and analyzed, the content will be used to inform the next phase (draft EIS and draft sanctuary plan phase).
  - National Historic Preservation Act Section 106 consultation is also in the process as part of scoping.
  - NMSA Section 304(a)(5) process with WESPAC is in process
5. Fall 2021 Recruitment Update
  - Applicant information going out to the RAC Selection Committee this week for their recommendations prior to review and final approval by ONMS HQ. No applications were received for commercial fishing or Native Hawaiian elder alternate seats

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**Research Subcommittee Presentation (Clark, Hixon, Schug, Langerman)**

Background on NEPA/HEPA and NMSA (Clark)

A single, joint state-federal EIS will be produced. NOAA and DLNR are managing the NEPA/HEPA processes in parallel for the EIS, in cooperation and collaboration with the Monument's other co-managing partners. NMSA triggers NEPA, and HEPA is triggered by the inclusion of state waters.

- The EIS analyzes a range of all reasonable alternatives. One of these is (always) a no-action alternative
- As part of the current scoping process, ONMS asks the public for input on potential boundaries, resources to be protected, issues NOAA would consider and any information that may be included in the EIS.

Presentation on Marine Larval Dispersal Between the MHI and the PMNM (Hixon)

- See the annotated bibliography by Bill Walsh on this topic
- Mark Hixon's presentation covered seamounts, and specifically research on Deep 7 bottomfish larval dispersal. Dispersal is how marine populations are replenished (seeding effect). There are two larval dispersal patterns:
  - 1) connectivity; 2) local retention and self-recruitment.
  - Assessment and mapping of dispersal are done through three methods: 1) biophysical models (relatively inaccurate); 2) studies of gene flow among islands and locations (semi-accurate); and 3) parentage analysis/matching genetic relationships/parentage (most accurate, *but* zero parentage analysis has been done in the NWHI).
  - Findings to date: Studies indicate the dominant direction of larval dispersal is from MHI to PMNM because main ocean flows/currents are from the MHI to the NWHI, so most larval dispersal is from MHI to NWHI. However, there are a lot of eddies so flow can go in almost any direction. Some dispersal is possible from PMNM to MHI ('opihi for example). Also, there are documented zones/regions of larval retention in the Monument for some species. These zones pretty much repopulate themselves. There is a possible Middle Bank link between MHI and PMNM. A modeling study done on opakapaka (*Pristipomoides filamentosus*) indicates larvae at Middle Bank could possibly bridge between O'ahu, Kaua'i and NWHI.

Presentation on Seamounts and Pelagic Species (Schug)

- Seamounts are undersea volcanic mountains that don't reach the ocean's surface.
- Shallow seamounts (less than 400 m deep) are areas of increased primary and secondary productivity.
  - Productivity 'hotspots' effects can extend 30-40 km from the seamount.
- Seamounts are important feeding ground for seabirds, marine mammals, and predators such as tuna and billfish.

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- Seamounts also serve as breeding and resting grounds for multiple species. Example: Cross Seamount SW of Kaua‘i is an important tuna aggregating site.
- PMNM seamounts are few, but important to consider in the sanctuary designation process, due to their potential to enhance pelagic biodiversity.

Presentation on Seamounts and Humpback Whales (Langerman)

- Seamounts are globally important for humpback whale migration/navigation, feeding and breeding.
  - Use of seamounts by humpback whales for feeding is supported by the currents NE to SW.
  - Middle Bank is used by whales in migration and is essential habitat for humpback whales.

**PESS Sanctuary Boundary Recommendations Discussion**

The PESS provided seven items for the RAC’s discussion and decision regarding inclusion as sanctuary scoping recommendations to ONMS.

A. PESS Consensus Recommendations on Sanctuary Boundaries (Ailā, Jr.)

The PESS put forth four boundary options for EIS inclusion. The PESS reached consensus on these items.

1. No action (no sanctuary, no boundary).
2. Only the original Monument area waters, no state waters (& not Midway).
3. Original Monument area waters plus state waters (& not Midway).
4. Original Monument area waters plus state waters plus MEA (& not Midway).

B. PESS Non-Consensus Items Related to Sanctuary

There were 3 discussion items that the PESS put forth for the RAC’s consideration; that the PESS had not achieved consensus on.

5. Original area, state waters, MEA (& not Midway), and some larger portion of Middle Bank.
6. Recommendation that the biological, cultural & historic significance of Middle Bank be explored and documented by the Co-Trustees and appropriate partners to develop clear recommendations for effective management of important Middle Bank resources.

The RAC revised item 6 as follows:

*The RAC further recommends that the biological, cultural & historic significance of each option be explored and documented by the Co-Trustees and appropriate partners, to develop clear recommendations for effective management of important resources.*

7. While recognizing Midway is not eligible for inclusion in a sanctuary, we strongly recommend that sanctuary planning examine opportunities for comprehensive management inclusive of Midway due to its connections as a critical part of the ecosystem and archipelago.

The RAC revised item 7 as follows:

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*The RAC recommends that sanctuary planning examine opportunities for comprehensive management inclusive of Midway due to its connections as a critical part of the ecosystem and archipelago, and explore the feasibility of including Midway in the new sanctuary.*

The RAC decisions on all items, and final text to be included in the scoping recommendations to ONMS, can be found in the Wrap Up/Decision-making section below.

**Public Comment**

1. Chris Kelley- Mr. Kelley provided a partial summary of his written comments focused on potential sanctuary boundaries as they relate to fisheries. He stated that the current Middle Bank (MB) boundary is not a good boundary. Larval transport is happening both ways between the Main Hawaiian Islands and the Northwestern Hawaiian Islands, and MB is right in the middle, so it is a critical location. The fishery is unmonitored and unenforceable due to remoteness and vagueness of the current boundary. The Monument could be improved by extending the boundary to include the whole of MB. This would provide a buffer and maintain connectivity via larval recruitment. Middle Bank is at risk of being fished out quickly because of its small size. It is a stepping stone for connectivity, and a critical one for fisheries. Kelly doesn't want to hurt fishers or the fisheries but thinks a boundary that encompasses MB would be worthwhile.
2. Ana Vaz- Has conducted connectivity studies for the archipelago. Middle Bank is an important stepping stone between the MHI and NWHI, facilitating larval transport. It is an important ecological corridor. Protecting it would protect fecundity and replenishment of resources.

**Wrap Up, Decisions (Ailā, Jr.)**

Decision-making on content of RAC letter to ONMS, regarding scoping recommendations.

- Motion to support items 1-4 by Paul was seconded by Gaffney, and unanimously passed.
- Motion to approve item 7 (as revised) by Gaffney was seconded by Paul, and unanimously passed.
- There was extensive discussion on item 5, with multiple dissenting opinions. Since the RAC could not reach consensus, a roll call vote on item 5 was taken, resulting in approval by a vote of: YES - 5: NO – 4.
  - Motion to support item 6 (as revised to remove specific mention of Middle Bank) by Gaffney was seconded by Paul, and unanimously passed.

**Summary of Decisions:**

The final content to be included in the scoping recommendations letter to ONMS is as follows: The RAC recommends that the following boundary options be considered in the sanctuary scoping process:

1. No action alternative (no sanctuary, no boundary).
2. Original Monument area waters, no state waters (& not Pihemanu/Midway)
3. Original Monument area waters plus state waters (& not Pihemanu/Midway).
4. Original Monument area waters plus state waters plus MEA (& not Pihemanu/Midway)

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5. Original Monument area, state waters, MEA (& not Midway), and some larger portion of Middle Bank. (It will be noted in the letter that there was no consensus on this item, which passed by a 5:4 majority vote).

The RAC further recommends that the biological, cultural & historic significance of each option be explored and documented by the Co-Trustees and appropriate partners to develop clear recommendations for effective management of important resources.

The RAC strongly recommends that sanctuary scoping and planning examine opportunities for comprehensive management inclusive of Pihemanu/Midway Atoll due to its biological and cultural connections to the archipelago, and explore the feasibility of including Pihemanu/Midway Atoll waters in the new sanctuary.

**2022 RAC meeting planning (Paul)**

The following were discussed. Leadership will send out proposed dates to all.

- April 13<sup>th</sup>
- June 16<sup>th</sup> or June 29<sup>th</sup>
- September (TBD)
- December (TBD)