# NORTHWESTERN HAWAIIAN ISLANDS CORAL REEF ECOSYSTEM RESERVE

# RESERVE ADVISORY COUNCIL

#### Non-Government (Voting)

Timothy E. Johns (Chair) State of Hawai'i

Linda Paul (Vice Chair)
Conservation

Kem Lowry (Secretary)
Citizen-at-Large

Vacant

Native Hawaiian Elder

Pelika Andrade Native Hawaiian

Rick Gaffney Recreational Fishing

Bill Gilmartin Research

Vacant

Commercial Fishing

Gail Grabowsky Education

Tammy Harp
Native Hawaiian

Cindy Hunter Research

Richard Lee Ocean-Related Tourism

Don Schug Research

Laura Thompson Conservation

Jessica Wooley Conservation

### **Government (Non-Voting)**

Athline Clark

Papahānaumokuākea MNM

Malia Chow

HIHW National Marine Sanctuary

David W. Laist

Marine Mammal Commission

Michael Lesser

National Science Foundation

Eric Roberts
U.S. Coast Guard

Janice Fukawa

U.S. Department of Defense

Kitty Simonds WESPAC

Barry Stieglitz

U.S. Fish and Wildlife Service

Samantha Brooke NOAA Fisheries PIRO

Meeting May 12, 2016 9:00 a.m. – 4:00 p.m.

NOAA/Inouye Regional Center, 1845 Wasp Blvd., Bldg. 176, Honolulu, HI Koʻolau Haka Conference Room

# **Meeting Minutes**

### ATTENDEES:

Voting Members: Bill Gilmartin (Research); Gail Grabowsky (Education); Tammy Harp (Native Hawaiian); Cindy Hunter (Research); Tim Johns (State of Hawai'i, Chair); Richard Lee (Ocean-Related Tourism); Kem Lowry (Citizen-at-Large, Secretary); Linda Paul (Conservation, Vice-Chair); Don Schug (Research, by phone); Bonnie Kahapea-Tanner (Native Hawaiian); Jessica Wooley (Conservation); Rick Gaffney (Recreational Fishing)

Non-Voting Members: Judith Cucco (Conservation); Eric Roberts (U.S. Coast Guard [USCG]); Joshua DeMello (Western Pacific Regional Fishery Management Council [WPFMC]); Janice Fukawa (Department of Defense); Athline Clark (Office of National Marine Sanctuaries [ONMS]/Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve [CRER]); Samantha Brooke (National Marine Fisheries Service [NMFS]); Malia Chow (Hawaiian Islands Humpback Whale National Marine Sanctuary [HIHWNMS], part day)

Absent: Laura Thompson (Conservation); Michael Lesser (National Science Foundation)

Papahānaumokuākea Marine National Monument Staff: Maria Carnevale, Alton Miyasaka, and Cynthia Vanderlip (State of Hawai'i, Department of Land and Natural Resources [DLNR]); David Swatland, Alyssa Miller, Kalani Quiocho, Kelly Keogh, Daniel Wagner, Allison Ikeda (ONMS/CRER); Keola Lindsey (Office of Hawaiian Affairs [OHA]); Matthew Brown (U.S. Fish and Wildlife Service [FWS])

Members of the Public, Non-Member Agency Representatives, and Presenters: Brandon Jim On (Office of Law Enforcement [OLE]); Hoku Kaʻaekuahiwi (NMFS); Mark Marini, Todd Wimmer (USCG); Matt Neal (Element Environmental); Teresa Dawson (Environment Hawaiʻi); Kekuewa Kikiloi; Robert Richmond; Sol Kahoʻohalahala; Charles Kaaiai; Luka Naeole; Hinaikawaihiilei Keala; Duke Quitevis; Kino Carillo; Eryn Opie, Andy Hoskins (State of Hawaiʻi)

# I. CALL TO ORDER (Johns)

Mr. Tim Johns called the meeting to order at 9:20 a.m.

## II. REVIEW OF AGENDA AND APPROVAL OF MINUTES (Johns)

The RAC reviewed the agenda. Ms. Linda Paul strongly felt that a greater amount of time should be allotted for discussion of the presentation on the Monument's expansion proposal. The RAC agreed and decided to postpone some of the afternoon discussions if the presenters arrived early. The agenda as amended was approved.

The RAC reviewed and approved the minutes of the January 25, 2016 meeting.

#### III. REVIEW OF ACTION ITEMS AND STATUS

- 1. Web page for school requests (Clark): Ms. Athline Clark noted that in response to the RAC's request at the last meeting to have a page for schools to request visits from Monument staff, an email was sent to the group list with a link to the web page with current contact information for school visits (http://www.papahanaumokuakea.gov/education/).
- 2. ESA listing information for sharks and rays (Clark): As a follow-up to the presentation at the last meeting by Patrick Opay on the Endangered Species Act (ESA), information on ESA actions pertaining to sharks and rays found in Hawai'i was emailed to the RAC shortly after the meeting.
- 3. Management plan analysis in light of Hawaiian humpback whale ESA status (Clark): A review confirmed that the delisting of Hawaiian humpback whales does not affect the PMNM management plan.
- 4. Native Hawaiian and Commercial Fishing seats on the RAC: Ms. Clark announced that applications had been posted on the PMNM website for the following seats:
  - Native Hawaiian (alternate)
  - Native Hawaiian Elder (primary and alternate)
  - Commercial Fishing (primary and alternate)

Mr. Johns asked if the Commercial Fishing primary and alternate had resigned or been removed. Ms. Clark responded that they both had indicated no interest in continuing to be on the RAC and had officially resigned.

5. Lobbying rules (Paul): Ms. Paul explained to the RAC that the conclusion of her discussions with the ONMS staff is fairly simple: RAC members can lobby *as individuals*, as part of their constitutional rights, but they cannot lobby *as RAC members*. Mr. David Swatland added that if members are asked, they may acknowledge that they are members of the RAC, but they should specify that they are speaking as individuals.

#### IV. MONUMENT CO-TRUSTEE/MANAGEMENT AGENCY UPDATE/HIGHLIGHTS

1. NOAA/ONMS report (Clark): Ms. Clark indicated that more would be heard about the *Okeanos Explorer* expedition in a later presentation, but it should be noted that it generated a lot of media coverage, and the Discovery Channel interviewed some of the crew and will be featuring some of the video. Tia Brown was invited to speak at a conference for emerging environmental leaders in Fiji. She also is leading the 'opihi cruise that departs today and will spend two weeks in the Monument conducting intertidal monitoring. The bio-geo cruise departs in about a week for the annual mesophotic research effort.

PMNM participated in a World Wildlife Day event at the Honolulu Zoo, and PMNM will have a booth and several sessions at the upcoming International Coral Reef Symposium (ICRS). Also in June, thanks largely to the efforts of State Co-Manager Ms. Maria Carnevale, on June 15<sup>th</sup>, the ten-year anniversary date of the Monument, the governor will issue a proclamation to make it Papahānumokuākea Marine National Monument Day. In August the Bishop Museum will debut a special exhibit on the Monument, on which all the MMB members have been working. The International Union for the Conservation of Nature's World Conservation Congress (WCC) is in September.

There has been a lot of activity at the Mokupāpapa Discovery Center (MDC), including more than 10,000 visitors since the last RAC meeting. PMNM is working with the Office of Coastal Management (OCM) on the Bay Watershed Education and Training (B-WET) program. Members of the Suquamish tribe of Washington visited the Inouye Regional Center (IRC) as part of a B-WET grant they received, which allowed them to form a "pen pal" arrangement with some students in Hawai'i and then come to meet them in person.

Ms. Clark showed two video clips to the RAC, one combining several brief bits of news footage of the tenth anniversary celebration at the governor's house in January, and one a draft version of the tenth anniversary video. (speaking portion 21:03 - 29:54)

2. State of Hawai'i report (Carnevale, Vanderlip): Ms. Carnevale gave highlights of the State's written report for the RAC. The Department of Land and Natural Resources (DLNR) did not receive the specifically designated funding for PMNM staff they had requested from the State, but they will try again next year. Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS) and PMNM will be under one Memorandum of Agreement (MOA) in the next fiscal year, and it currently is under review. Ms. Paul asked what the RAC can do to support the State in their efforts to secure funding. Ms. Carnevale replied that they can offer testimony when the bill comes up again.

Ms. Cynthia Vanderlip provided updates on the Kure Atoll program. A new round of camps is up there now, with 17 people. Ms. Eryn Opie and Mr. Andy Hoskins took over the last round of camps for Ms. Vanderlip when she had a family emergency.

The Laysan ducks had good survival through March. Since March they have had some losses, first from a severe El Niño draught and then from botulism. Ms. Paul asked what the water situation is now. Ms. Vanderlip stated that there are two seeps and three catchments, and they don't think the botulism came from any of the tanks. Ms. Paul then asked what they feed on, and Ms. Vanderlip replied that they eat seeds and insects. Ms. Vanderlip added that with continued restoration efforts and a little more rain, the situation should get better.

They have been approached by IMAX to do a marine debris-focused film on Midway Atoll and Kure. The IMAX people just turned in their education permit to go up to look around. Ms. Paul thought this was a great idea and advised that on the business end, the State and the Monument should get a cut of the profits. (?? - 1:02)

3. USFWS report (Brown): Mr. Matt Brown reported that the Deputy Manager position for Midway is open now. A while back they received a report from the U.S. Coast Guard (USCG) of

oil in water near the Atoll, but it turned out to be whale oil. They have gotten ahead of the mouse issue; they have been trapping the mice, and there has been no attack since mid-February. They will be in meetings next week to discuss who is responsible for cleaning up Tern Island. Wisdom's chick, Kukini, has hatched and is doing great. Ms. Paul asked Mr. Brown to send her a picture of Wisdom with her new chick, as the Hawaii Audubon Society is looking to replace its current albatross picture. They are moving ahead with work on Midway House, the last historic housing not yet restored. They are ramping up for the 75<sup>th</sup> anniversary of the Battle of Midway next year. The Pearl Harbor event (December 7, 2017) will lead up to a Midway event, which the Navy will live stream to a few locations. (?? – 1:09)

# 4. OHA report – None

5. Update on enforcement activities (JimOn, Roberts): Mr. Brandon JimOn stated that there are no major updates from the Office of Law Enforcement. Regarding the case that was still pending at the last meeting, it has been determined that the vessel crew caught three fish in the Monument, and they will be fined \$16,000 per fish. (1:09 - 1:10)

Mr. Eric Roberts provided highlights of the USCG report. The USCG put in over 200 hours to support Operation Kohala Guardian, the patrol of the HIHWNMS waters. In their patrols of the waters surround the NWHI, there was no perceived activity within the Monument, so most of their efforts turned to monitoring long-line fishing vessels within the Exclusive Economic Zone (EEZ). In April, they moved seven monk seals from Kona to Oʻahu, then to the Monument, and the seals slept the whole way.

Ms. Paul asked if there is information about vessel transit in the particularly sensitive sea area (PSSA). Mr. Swatland answered that there is data, and they indicate that about 50 - 120 vessels a year transit that area, mostly in the winter, and most of them are container ships. Mr. Roberts added that there seem to be two popular routes: north of Kure and below Midway. Ms. Paul asked if we have to go through the International Maritime Organization (IMO) again if the Monument expands. Mr. Roberts and Mr. Swatland responded that the PSSA is unlikely to be expanded if the Monument expands. (1:10 - 1:18)

#### V Presentations

1. Okeanos Explorer expedition (Wagner): Dr. Daniel Wagner briefly presented highlights of the two Okeanos Explorer expeditions in the NWHI in the last year. The Okeanos Explorer is the only vessel in the NOAA fleet with two dedicated ROVs, as well as a sonar system for mapping the sea floor. All data from the missions are streamed real time, which is especially great for connecting with schools and scientists.

In the first expedition they focused on researching high-density biological communities. The Monument has some of the highest density communities in the world, and these are highly vulnerable communities. Besides researching what is in the Monument, on both cruises they also looked at what is not in the protected areas but is in the Prime Crust Zone, an area rich in cobalt/manganese deposits adjacent to the Monument. Because the area is a prime target for manganese mining, the crew was gathering more data toward a larger research goal of figuring out where the most important and sensitive areas are—and, therefore, which areas should be avoided when mining.

They have found that all high-density communities are on steep ridges, and the largest known community in the world is on Pioneer Bank. Six dives were conducted in the 50 - 200 mile area outside the Monument; five were close to the Monument and one was near the edge of the EEZ. More than 50% of their total dive time was done at depths greater than 3,000 meters. The first *Okeanos* expedition marked the first time specimens were collected at this depth. Approximately 450 animals were imaged, and about 25% of them are new species. Within the Monument, the largest known sponge in the world was found, and it is about the size of a minivan.

Ms. Clark asked how many new seamounts have been found among the two *Okeanos* expeditions and the *Falkor* expedition conducted by Schmidt Ocean Institute. Dr. Wagner replied that about 20 have been found in the three expeditions, which indicates there are about 40 within the Monument and probably as many or more in the 50 - 200 mile area outside of it. These seamounts are hotspots of biological diversity and are often prime targets for the fishing industry. He noted that birds often aggregate around seamounts, too. Ms. Judith Cucco asked if there is any data on how these kinds of surveys affect sea life. Dr. Wagner replied that the low-level frequency of the multi-beam sonar is perceptible by both marine mammals and humans, but there was no literature available before the expedition documenting any adverse effects on marine mammals. Ms. Paul asked if false killer whales have been seen in the Monument. Dr. Wagner confirmed this and noted that there is a *Falkor*-based paper on this.

2. Maritime heritage (Keogh): Dr. Kelly Keogh provided an update on maritime heritage activities within the Monument in the past year. A four-person maritime heritage team was on the 2015 RAMP (Reef Assessment Monitoring Program) cruise, with Jason Raupp as the lead.

The 500-ft *Mission San Miguel* oil tanker, the largest recorded shipwreck in the Monument, was found on Maro Reef in about 80 feet of water. At the time of the impact, oil was lost, but it is not leaking anymore. On the first day, the team found part of the stern and bow, enough to determine they had found the *San Miguel*. The wreck had been high on NOAA's RULET (Remediation of Underwater Legacy Environmental Threats) database list of environmental threats within sanctuary waters, but when they communicated their findings to NOAA headquarters, it was reassessed as a low threat.

A new WWII-era plane wreck also was discovered at Midway Atoll, just outside the southwest side of the reef. Like many such sites, it was broken apart into many pieces, and the pieces are crusted over, which makes identification a challenge. The identification was made largely based on the plane's tail and propeller, indicating the plane is a Corsair. It is only the 4<sup>th</sup> plane documented at Midway, although 70 are known to have gone down in that area.

On December 9<sup>th</sup>, PMNM hosted a film screening event featuring *In the Heart of the Sea*, a Warner Bros. feature film, and *Lightning Strikes Twice*, a NOAA documentary on the whaling ship the *Two Brothers*. The documentary also is included on the DVD of *In the Heart of the Sea*. In news pieces on the DVD, critics give the documentary rave reviews, so this is a nice way to get the story of maritime heritage in the Monument out to the public. The next step for the *Two Brothers*: ONMS is working to get the site named to both the National and State Registers of Historic Places.

Mr. Rick Gaffney asked if there are any Japanese plane wrecks in the Monument. Dr. Keogh responded that there are, but none have been documented. (1:58-2:15)

### VI. PUBLIC COMMENT

There was no public comment.

VII. PRESENTATION OF *VOYAGE: INTO THE DEPTHS OF KANALOA* (Kahapea-Tanner) (2:22 – 3:37)

Ms. Bonnie Kahapea-Tanner introduced the documentary *Voyage: Into the Depths of Kanaloa*, which was based on an expedition to the Monument as part of the Hālau Holomoana maritime training program of the Kānehūnāmoku Voyaging Academy. The program uses the vessel operation and traditional navigation training to get students interested in careers in the maritime industry. Students from the first cohort in 2014 (Ms. Luka Naeole, Ms. Hinaikawaihiilei Keala, Mr. Duke Quitevis, and Mr. Kino Carillo) also were present for the screening of the film.

After the film, RAC members asked Ms. Kahapea-Tanner and the students several questions (a few below):

- How long is the training program? About nine months, generally one weekend a month.
- Who are the program's sponsors? The first two years were funded through a grant from the Office of Hawaiian Affairs (OHA). Currently, they are operating under a three-year federal education grant.
- Do the students have the opportunity to meet with professionals beyond the maritime industry but related to it, such as ocean conservation? Yes, they took a field trip to Kaneohe to do the Super Sucker (a suction device hooked to a small pontoon barge that is used to remove invasive algae from reefs; the algae removed is given to local farmers to use as fertilizer). They also went to the Nature Conservancy and met with researchers at the University of Hawai'i and Hawai'i Pacific University.
- What were some things you did to get over sea sickness? Dumping a bucket of water on Ms. Naeole really helped. Mr. Carillo found that focusing on the horizon worked.
- Did you bring any electronics? Only cameras. No other electronics were allowed. They disconnected to reconnect.

#### VIII. LUNCH

# IX. Presentations (Continued) (4:16-4:44)

Presentation on Kure Atoll remediation (Marini): Mr. Mark Marini, the Environmental Protection Specialist for the USCG's Civil Engineering Unit in Honolulu, provided a brief remediation plan for Kure Atoll. He was joined by Commanding Officer Todd Wimmer and the Project Manager with Element Environmental, Matt Neal.

In the 1960s, the USCG set up a LORAN (LOng Range Aid to Navigation) station at Kure Atoll, which operated from the '60s into the early '90s, then closed due to the availability of GPS technology. For a time, because of Kure's remoteness, the standard ways of dealing with trash included burning or burying it. After the closure of the station, the USCG and the U.S. Army Corps of Engineers (USACE) in 1991 and 1992 started doing sampling, and they found two main

contaminants of concern: lead and PCBs (polychlorinated biphenyls, which were banned in 1979 due to environmental and human health concerns). In 1993, the USCG did an initial remedial action of removing about 800 cubic yards of contaminated soil from the scrap metal dump. Depending on the level of contamination, the soil was either removed from the island or reburied further inland. Later sampling revealed that contamination was still an issue.

In 2008 – 2012, another site investigation was conducted to delineate areas of contamination. Because removing all contaminated soil would be cost prohibitive, an analysis was done to examine alternatives. In 2012, the CG determined that the best alternative was to do another removal of soil from the scrap metal dump area in order to rebury the soil at an inland location, this time having the reburial pit lined with a barrier to prevent contaminants from leaking out, and a bioremediation agent added in to help break down the PCBs.

In 2014, a private contractor conducted a treatability study. The CG just recently got the results, which indicate that a carbon-activated barrier is the best choice for the reburial pit lining, and a naturally occurring microorganism on Green Island was the best bioremediation agent for PCB breakdown.

The USCG is working on a draft work plan. They estimate removing 300 – 400 cubic yards of contaminated soil. The new reburial pit will be about 15 feet wide and 250 feet long. After digging this pit, they will put all the clean soil aside and put in the carbon-activated barrier. Then they will remove the non-contaminated top layer of soil at the scrap metal dump and excavate the contaminated soil. This will be placed in the lined reburial pit, with the bio-remediation agent added as the soil is loaded, along with a liquid that acts as a kind of "food" for the bioremediation agent. When all contaminated soil is loaded, a non-permeable layer or cap will be placed on top of the mostly-filled lined pit, and then about two feet of clean soil will be placed on top of that cap. The clean soil that was removed to make the reburial pit and then set aside will be used to fill in the hole left by excavating the contaminated soil at the scrap metal dump. As this soil is loaded into that hole, they will add some of the same bioremediation agent to help break down any contaminants that might be accidentally left behind. Then they will do plant restoration in the disturbed areas. The work is scheduled for Aug-Sep 2016. After this work is done, the USCG will do monitoring and periodic sampling for five years.

Mr. Gaffney asked for a more detailed description of the material comprising the carbon-activated liner, whether a layer of impermeable plastic, a layer of loose particles, or something else. Mr. Marini responded that it is two layers of geo-membrane, a kind of porous fabric, with granular carbon between them. Mr. Gaffney then asked if it's true that carbon can eventually "max out" on its ability to absorb. Mr. Neal replied that the bio-remediation agent speeds up breakdown, and the study factored that in and determined that an inch-thick layer of carbon would be necessary to avoid having to re-dig in the future.

Ms. Paul asked what will happen to the reburied material when the sea level rises. Mr. Neal replied that the carbon liner will cover the bottom, sides, and top of the contaminated soil, like a "big burrito," and they will install monitoring wells for periodic sampling to be sure nothing is seeping. Mr. Brown asked if the reburial pit will be above the water table and, if so, how far above. Mr. Marini replied that it will be about two feet above the water table. Mr. Brown followed by asking, as part of the 100-year contingency, if the water table rises, what will

happen when water enters the carbon filter? Mr. Marini assured the RAC that whatever goes in via the filter, the PCBs will not come out. Mr. Brown then asked for confirmation that the USCG will be responsible for a new burial pit if one is ever needed, in perpetuity. Mr. Marini confirmed that unless another agency takes on responsibility, yes, the responsibility remains with them.

Mr. Gaffney said he is very concerned about other elements being introduced to the atoll as all the people and equipment are brought in to do this work. Ms. Vanderlip explained that all of this will go through the State's quarantine and decontamination (cleaning, freezing, etc.) system. Nonetheless, there is always a risk. Mr. Gaffney said he is also concerned about disturbing the PCB pool on the island, and he asked if any of the birds, especially the ducks, will be monitored for PCB contamination. Ms. Vanderlip responded that there is a small possibility of ducks feeding on wood roaches and other creatures that eat organic matter and might ingest PCBs. Mr. Neal stated that the PCB contamination is about five feet underground, and the ducks and other animals will stay far away from the work and all the commotion. Mr. Gaffney responded that his point is that the excavation will disturb the PCBs that are now underground and potentially bring them to the surface. Ms. Vanderlip added that the ducks and seals actually will be attracted to the work, rather than staying away from it. However, the biologists on Kure will work to keep the animals away and minimize harm and potential contamination. Mr. Marini said they will work with Ms. Vanderlip and the State to include safety precautions in their work plan. Dr. Bill Gilmartin said he felt the remediation plan should include longer-term monitoring of the animals, not just safety precautions during the work. Mr. Marini said the normal every-five-years sampling will continue, but they test soil, water, and fish, not birds, but he confident that the contamination risk is only while they are working, and they will be careful to keep away the animals

Dr. Cindy Hunter asked if any studies have been done on how the microbes respond to the element the USCG will "feed" them to enhance their performance. Mr. Neal said they base their understanding on the University of Maryland report, but the report is not yet published. Dr. Hunter asked if the report will be published, and Mr. Neal replied he is unsure. Dr. Hunter then asked if he could supply the report to the RAC, and he said yes, through the USCG. Mr. Roberts agreed to get the report and give it to Ms. Allison Ikeda to provide to the RAC.

# X. UPDATES, DISCUSSION, AND POTENTIAL ACTIONS (4:44 - ??)

1. Update on HIHWNMS management plan review (Chow): Dr. Malia Chow provided a brief update on the HIHWNMS Draft Management Plan and Environmental Impact Statement. Their draft management plan was released in March of 2015 and went through an extensive public comment period. At the end of the process, a series of memos was exchanged between the ONMS and the State Department of Land and Natural Resources (DLNR). The DLNR essentially stated that while they supported the shift to ecosystem-based management, they were uncomfortable with expanding the definition of a "sanctuary resource." The National Marine Sanctuaries Act says if a sanctuary resource is damaged, the sanctuary can pursue holding the responsible party liable for the damage. The State felt that this was an over-reach of federal jurisdiction and would prevent the State itself from recovering damages for violations to its own protective laws. The State was comfortable with adding other marine mammals, but NOAA said that their authority required them to protect habitat, also. At the end of the process, it was decided that HIHWNMS would remain a humpback whale sanctuary.

Mr. Gaffney asked for elaboration. It was his understanding that the Florida Keys National Marine Sanctuary had the same situation with the State of Florida, and they were able to come to an agreement. The same terms were presented to the State of Hawai'i, but the State would not agree. Dr. Chow explained that the State of Florida suggested establishing an MOA with the ONMS to determine who was responsible for what and had what authority. The State of Hawai'i was presented that as an option but did not accept it. Ms. Paul asked why the State would not agree to an MOA. Mr. Alton Miyasaka responded that he was not a party to the discussions with the Attorney General's office on the matter and could not present an explanation.

Mr. Johns said the question for him is "what's going forward"—what will happen in the process now? Dr. Chow responded that the HIHWNMS withdrew their proposed management plan. They will work with the State to determine what their priorities are going forward. Mr. Johns asked if this will lead to a new management plan. Dr. Chow explained that rather than revise the now somewhat outdated management plan, they are drafting a roadmap of future efforts they call a strategic plan. This will be presented at the sanctuary advisory council meetings but will not go through a public process. (4:44-4:54)

- 2. Management plan/update on the evaluation process: Postponed
- 3. Charter revision: Postponed
- 4. Proposal to expand the Monument (Richmond, Kikiloi, Kaho'ohalahala)

A. The cultural perspective: Dr. Kekuewa Kikiloi provided a brief overview of the individuals from diverse backgrounds who have coordinated to propose an expansion of the Monument. It is a community-driven process for greater ocean protection.

Dr. Kikiloi, an archaeologist, has been going up to the Monument for about 15 years, in which he has done about 11 research trips. He stated that when a biological system declines from climate change and anthropogenic impacts, there is also a loss of culture. Conversely, when a culture collapses from immigration of new people, homogenization of identity, and the introduction of new technologies, their traditional knowledge systems are not implemented to care for the environment. They face similar extinctions. As the two systems are symbiotic, the Monument is a model of how to restore both.

Native Hawaiians believe that the Monument is an intensely spiritual and cultural region, the sacred source of all life, the place where Hawai'i and Hawaiians began. In legends and genealogies like the *Kumulipo*, all organisms came before us, then came man. We have an environmental kinship, as well as an obligation to take care of our elders. Many people believe that everything "cultural" in the Monument is on the islands, but this reflects a very continental perspective, in which land is life. For an island people who live as part of the water, water is part of their identity and life; it is not an empty void.

The ocean is a cultural seascape. Dr. Kikiloi emphasized the idea of pu'uhonua (a place of refuge), a term used for the Monument by the late Louis "Uncle Buzzy" Agard, then a member of the RAC. For Native Hawaiian environmental management, this is a very different idea in scale from kipuka, the small protected places in lava that are tiny refuges of biodiversity, the places where seeds start and spread over other areas to restore life after a lava flow. At this

opposite end of the spectrum, there is now an opportunity to create a pu'uhonua, one of the largest protected areas in the world.

As a last point, Dr. Kikiloi advocated including OHA as a fourth co-trustee. He believes it is important to give indigenous people a role in managing their own place and resources. And he and the other supporters believe that OHA is the appropriate agency to fill that role. None of the current co-trustee agencies have as their primary purpose the well-being and interests of the Native Hawaiian people, but that is the primary purpose of OHA. Mr. Charles Kaaiai noted that the State is a co-trustee, and it is mandated to protect the rights and interests of Native Hawaiians. [Note: Dr. Kikiloi's PowerPoint presentation is available on the PMNM website.]

Mr. Tim Johns stated that because the RAC collectively has decades of experience with the Northwestern Hawaiian Islands (NWHI), they already know why the Monument is important in terms of culture and biodiversity. They are primarily interested in hearing from the presenters the terms of what they are proposing, so that the RAC can decide what they want to support or not. (4:57-5:14)

B. The scientific perspective: Dr. Bob Richmond began by listing the characteristics of an ideal marine protected area: location, content, size (bigger is better), remoteness, time for accumulating biodiversity, and compliance and enforcement. He believes the Monument has all the characteristics to make it an ideal marine protected area.

Species are safe within marine protected areas (MPAs). Fishermen know that the best place to pick up fish is along their migratory corridors, just outside of a protected area. By expanding the boundary from 50 - 200 miles, more of the species' corridors of connectivity are protected, making the protections more effective.

The Western Pacific Warming Pool is expanding, pushing migratory pelagic fish to the north. The NWHI are in a band of much cooler water, and protecting this area means protecting a spot in the ocean that seems to have greater resilience to climate change.

Researchers have discovered that BFFs (big fat females) produce more eggs. When the size of the fish is doubled, the fecundity of the fish increases a thousand-fold. A larger protected area allows more fish to live longer, which will lead to a higher number of BFFs, which will lead to an overall increase in fish populations.

The deeper waters away from the islands have higher levels of endemism. A larger area of protection would benefit a larger number of endemic species. In terms of both biodiversity and fish population size, to use economic terms, an increased area of protection increases not just the principal, but also the interest. [Note: Dr. Richmond's PowerPoint presentation is available on the PMNM website.]

C. The ocean heritage perspective: Mr. Sol Kahoʻohalahala noted that in the *Kumulipo*, land mother (Papahānaumoku) and sky father (Wākea) united to form life on earth, and the first life form was a coral polyp. That is our past. The question now is, "What are we leaving future generations?"

We need to pass on our sense of importance in caring for the land and ocean. Mr. Kahoʻohalahala is from the island of Lānaʻi. They maintain a sustainable lifestyle based on traditional practices. Scientists say that 30% of the ocean needs to be protected to ensure adequate resources for future generations. But the environment is being destroyed and the resources are declining. We are leaving a greater responsibility to future generations.

He thought of this recently when his granddaughter did not want to eat a crab they had caught on the beach. He hesitated to even have her try it. He thought, "Am I giving her a taste of something that will disappear in her lifetime? Am I setting her up to want a resource she won't have?" In the end, he gave her a taste of the crab, and she liked it, and it served as a reminder of why he and the rest of the people of Hawai'i need to work to ensure a lasting ocean heritage. [Mr. Kaho'ohalahala's PowerPoint presentation is available on the PMNM website.]

D. Discussion: Mr. Johns asked the group of presenters if he was correct in his understanding that they are proposing two things: an expansion of boundaries from 50 to 200 miles, and OHA as a fourth co-trustee. Mr. Kahoʻohalahala replied that that is correct, and that regarding the boundaries expansion, they are requesting to maintain the current southern boundary. Ms. Athline Clark asked the presenters what their desired action is. Mr. Kahoʻohalahala replied that they would like the RAC to send a letter to President Obama to show that the expansion is supported by the people of Hawaiʻi. He noted that the Native Hawaiian Cultural Working Group has already voted to support it and they have sent a letter to the President. [Note: The letter actually was sent to the Managing Director of the White House Council on Environmental Quality.]

Ms. Linda Paul asked if the group had asked for the boundaries of the Coral Reef Ecosystem Reserve (CRER) to be expanded as part of the Monument expansion. The presenters replied no, that had not considered that. Tim asked them which agency will be responsible for the management of the newly expanded boundary; if the CRER is expanded, likely the lead agency will be the Office of National Marine Sanctuaries (ONMS), but if not, it could be the National Marine Fisheries Service (NMFS). Mr. Kahoʻohalahala replied that he is open to hearing more about the issue. Ms. Paul said that the boundary issues will have to be sorted out at the presidential level, but she is very concerned about preserving the current southern boundary, which goes about half-way through Middle Bank, as Dr. David Laist has said that protecting half the Bank is like not protecting it at all. Dr. Richmond agreed that science would recommend that, but it is not practical to try to include all of Middle Bank in the current expansion proposal. He said Middle Bank is a compromise area, and they feel it is more important to create the largest MPA in the world than it is to protect a specific bank.

Dr. Cindy Hunter stated that she has been convinced by the *Kānehūnāmoku* documentary earlier that it is important to protect the navigation training area of the NWHI because the training needs to occur beyond visible land. And she has been convinced by Dr. Daniel Wagner's presentation on the *Okeanos Explorer* expedition that the ocean is not an empty void, that there are rich communities of marine life in the waters farther out. She asked what the current protections are for these waters beyond the current Monument boundaries. Ms. Paul explained that within the Exclusive Economic Zone (EEZ), no foreign underwater mining can be done, but some companies have leased land. For now, people have been "staking claims" outside the EEZ, but pulling out resources from the ocean floor releases pollutants for miles. Dr. Hunter asked if the

restrictions apply to only foreign companies, and Ms. Paul confirmed that domestic companies can do underwater mining outside the Monument but within the EEZ.

Mr. Joshua DeMello noted that the mining is managed by the Bureau of Ocean & Energy Management (BOEM), and he asked the presenters what problem they are trying to solve that needs expansion of the Monument as a solution. He posited that expansion will hurt the livelihoods of those in the fishing community. Mr. Johns asked if the Western Pacific Fisheries Management Council (WesPac) would support the expansion if fishing is allowed. Mr. DeMello felt that WesPac most likely would. Mr. Kahoʻohalahala described a circumstance in Lānaʻi in which one of their harbors was closed to fishing for safety reasons because there were too many fishing boat accidents. For 40 years, the only fishing allowed in the harbor has been hook-and-line fishing from shore. The State Department of Land and Natural Resources (DLNR), Division of Aquatic Resources (DAR) has been monitoring the fish stock levels in the harbor, and the number of fish there is "incredible." He affirmed that it is a benefit to all to have refuges.

Mr. Johns asked the presenters if they are advocating for additional resources for management if the boundaries are expanded. Mr. Richmond confirmed that they are discussing how increasing boundaries increases the need for protection capabilities. Ms. Paul asked Mr. DeMello how much fishing occurs annually in the 50 – 200 mile area beyond the Monument. He replied that he did not have the numbers at hand. Dr. Don Schug said there were 89 vessels fishing in the Monument in 2014. Dr. Schug then asked how the expansion effort would affect the sanctuary designation process. Mr. Johns responded that the President does not have the authority to designate a sanctuary, only to recommend that they go through the process. Ms. Athline Clark confirmed that sanctuary designation is a congressional act.

Returning to the fisheries question, Dr. Bill Gilmartin stated that the effect of long-line fishing is not just a matter of catch level; the issue of bycatch has not been addressed. Dr. Gail Grabowsky asked if it is possible that catch levels might actually go up? Dr. Richmond affirmed that they would, that with a greater level of protection in the managed area, the fish live longer and have higher reproductive rates, and the "spillover" from the managed area into the outer areas increases, which actually helps the long-line fisheries. He noted that in the Philippines, when they restricted the fishing area by 50%, their catch levels actually went up by 200%.

Mr. Eric Roberts stated that he was not aware of the Coast Guard being approached with questions, and he wanted to know if additional enforcement would be needed. Dr. Richmond replied yes, protection is only as good as enforcement. Additionally, in response to the earlier question of what problem they are aiming to solve, he said that the major threat is over-fishing, which has already occurred.

Ms. Tammy Harp felt that OHA as a fourth co-trustee warranted more discussion. Mr. Kaaiai stated that because OHA is a State agency, the State then would be represented twice. Mr. Rick Gaffney pointed out that currently the federal government is represented twice. Dr. Kikiloi added that OHA has been a co-manager since 2008 and has demonstrated its ability to cooperate with the other agencies. They also have financially supported many Native Hawaiian activities in the Monument. Mr. DeMello asked the presenters if they would consider recommending that the co-trustee be whatever independent Native Hawaiian government is established, with OHA as a "placeholder" until that establishment. Mr. Johns added that the Kaho'olawe Island Reserve

Commission (KIRC) is set up that way. Dr. Kikiloi felt that this arrangement is not necessary because when that independent government is established, all of OHA's resources will go to it.

The discussion had not finished, but Mr. Johns wanted to keep to the schedule to allow time for public comment, and the RAC agreed to continue the discussion afterward.

#### XI. PUBLIC COMMENT

Mr. Kaaiai stated that he is "a home rule guy." The proposal to the President was made by a group of Native Hawaiians, but their views do not represent that of all Native Hawaiians. As a Native Hawaiian, he is opposed to the expansion. The submerged lands of the EEZ are ceded lands (former lands of the Hawaiian monarchy, which were ceded to the U.S. government upon annexation, and which were later given back to the State to be held in trust for Native Hawaiians), and the expansion would be giving over more of them to the federal government. This flies in the face of the Hawaiian sovereignty movement. Moreover, the expansion would close more than 50% of State waters to fishing.

Mr. Johns asked if it has been established that the EEZ area is ceded lands. Mr. Kaaiai responded that it has not been legally decided; someone would have to submit a case to court for decision. Ms. Paul explained that if Hawai'i seceded, ceded lands would extend out 200 miles; while it is part of the U.S., ceded lands extend 3 miles into the water.

## XII. DISCUSSION (CONTINUED)

Discussion continued: Mr. Johns asked if the MMB supports having OHA as a fourth co-trustee; the RAC likely would support this if the MMB feels it aids in their management. Mr. Matt Brown responded that the Governor of Hawai'i sent a letter indicating he supports OHA becoming a forth co-trustee. The other agencies have not yet taken a position on the matter and cannot make a statement before that decision is made. Mr. Johns asked for the MMB to let the RAC know when it makes a decision, and Mr. Brown agreed.

Mr. Johns asked the RAC what they feel should be done at this point. Dr. Hunter felt that the RAC should say *something*, and she suggested a general statement about supporting an expansion of the Monument that preserves the three-way governance. Dr. Kem Lowry suggested leaving it more broad, perhaps supporting the expansion in a way that preserves the current management system. Ms. Jessica Wooley suggested taking action to support the general concept of expansion with the details to be worked out at a later time. Ms. Paul motioned to support expansion with further discussion on any issue on which the RAC could not reach consensus that day. All supported the motion. Mr. Johns suggested doing "straw poll" on several sub-items of expansion, and all agreed.

The general results of the straw poll are as follows, with earlier polls totaling 11, but the last poll totaling 10 because one member had to leave early [note: 8 are needed for quorum]:

1. Expand the boundaries from the current 50 miles to the 200-mile limit of the EEZ: 10 were in favor; one withheld support of the boundary expansion as proposed unless Middle Bank could be included, rather than preserving the current southern boundary.

- 2. Include OHA as a fourth co-trustee: 9 were in favor; one did not support the point; one supported it tentatively but wanted more discussion.
- 3. Expand the CRER with the Monument expansion: All 11 were in favor.
- 4. Accommodate discharge in the 50 200 mile area, as vessels could not avoid discharging while traversing such a large area: All 11 were in favor.
- 5. Increase management and enforcement resources with the expansion: All 11 were in favor
- 6. Accommodate long-line fishing in the 50 200 mile area: 4 were in favor, 4 were against, and 2 were not clearly for or against it.

Although it was not part of the straw poll, Ms. Paul indicated that she also wanted further discussion of the sanctuary overlay issue, perhaps with information on how it was handled in American Samoa, and the RAC agreed. Ms. Clark asked if there is general support on expansion. Mr. Johns affirmed that that had already been discussed and there is general support for expansion. Mr. Gaffney motioned to more specifically approve the general concept of expansion, as well as the three sub-points of consensus (expand the CRER, accommodate discharge, and increase management and enforcement capabilities); Dr. Hunter seconded the motion and all approved. Ms. Paul and Mr. Johns also indicated to Mr. Keola Lindsey that the RAC would appreciate if the OHA would formally support expanding the boundaries of the CRER with the Monument's expansion.

Items for the next meeting and next meeting date: The next regular meeting is July 28, 2016. The RAC requested a special ad hoc meeting sometime in June, exact date to be determined, to further discuss the four sub-points on which they did not reach consensus (the boundaries/Middle Bank, OHA as a fourth co-trustee, accommodation for long-line fisheries, and the added item of governance/sanctuary overlay). Although a letter can be drafted before the June meeting, it would be held until after the June meeting.

5. Letter regarding sanctuary designation process and Reserve/Monument protections (Paul, Johns): The RAC had agreed at the January 25, 2016 to revise the letter to Mr. John Armor of the ONMS regarding their questions on sanctuary designation process and any potential loss of protections with a sanctuary designation. The revised letter was included in the packet of documents for this meeting. Mr. Gaffney moved to accept the letter as submitted, Ms. Paul seconded the motion, and all were in favor.

XIII. ADJOURN

The meeting was adjourned at 4:40 p.m.