Ku'i Ka Lono - NEWS

'OKAKOPA - OCTOBER 2024





Homecoming! Field Season 2024

The Papahānaumokuākea signature coral reef monitoring cruise, the Reef Assessment and Monitoring Program (RAMP), spent 23 days at-sea aboard NOAA ship *Oscar Elton Sette* in September. The primary projects included documenting recovery of reefs at Lalo destroyed by Hurricane Walaka in 2018, documenting the recovery of corals at Kapou (Lisianski) in the wake of the 2015 mass coral bleaching event, closed-circuit rebreather diving to characterize deep mesophotic coral ecosystems, and continued research on the recently discovered invasive alga, *Chondria tumulosa*, at Manawai (Pearl and Hermes Atoll). Civil Beat reporter Nathan Eagle also sailed on the cruise, and has begun publishing a series of articles on Papahānaumokuākea.

NOAA ship *Okeanos Explorer* conducted the "Beyond the Blue: Illuminating the Pacific" campaign in 2024, with three cruises to the monument between June and October. *Okeanos*

conducted high resolution multibeam mapping of deepwater areas. Two berths onboard were also dedicated for Native Hawaiian cultural liaisons. Malia Evans, Oʻahu Outreach and Education Coordinator for Papahānaumokuākea, and University of Hawaiʻi at Hilo student Makoa Pascoe facilitated cultural protocols and reciprocal knowledge exchange.

To celebrate "Beyond the Blue: Illuminating the Pacific", NOAA ship *Okeanos Explorer* spent a week at the Hilo port on Hawai'i Island in September. The *Okeanos Explorer* education and research team hosted guided ship tours, educational workshops at Mokupāpapa Discovery Center, and an arts and science mural experience for school groups and the Hilo community. Collectively, these activities and experiences celebrated Papahānaumokuākea, uplifted the next generation of marine stewards, and brought communities together to learn more about deep sea exploration.

National Marine Sanctuary Designation for Papahānaumokuākea

The Designation Timeline

Step 1: Public Scoping

November 19, 2021 – January 1, 2022

Step 2: Review of Public Comments and Preparation of Draft Documents

January 2022-Spring 2024

Step 3: Release Draft Designation Documents and Provide for Public Comment Period

March 1 - May 7, 2024

Current Step: Prepare Final Designation DocumentsMay 2024 – Winter 2024

Step 5: Publish Final Designation Documents

Target: Winter 2024

Step 6: Sanctuary Designation

Target: Spring 2025

Sanctuary Proposal

NOAA has proposed a sanctuary area of approximately 582,250 square miles, coextensive with the existing Papahānaumukuākea Marine National Monument and the Monument Expansion Area. Large-scale conservation areas such as this are important to protect highly mobile species, such as sharks and marine mammals. They also protect entire ecosystems, preserving critical ecological functions and conserving biodiversity. After receiving public comments and conducting public meetings, staff continue to work diligently on the sanctuary designation process for Papahānaumokuākea and are currently completing a required review of the economic impact the sanctuary regulations may have. Stay tuned.

Superintendent's Corner

It's hard to believe another summer has passed while most of our staff have worked diligently on the final documents to support the Papahānaumokuākea National Marine Sanctuary designation process. We are quickly approaching the finish line on those final documents and I want to thank all of you for your thoughtful comments and your unwavering support for Papahānaumokuākea and our dedicated team that works everyday to protect this international treasure. As I write this, I'm sitting in Washington, D.C., celebrating National Marine Sanctuary Day and the 52nd Anniversary of the National Marine Sanctuaries Act. Today we have 17 national marine sanctuaries across the country, stretching far into the Pacific, with another four proposed sites currently in the designation process. I've traveled to our headquarters office to attend the annual NOAA Administrator's Award Ceremony, where three federal members of our science team will be nationally recognized for their work on the documentation of several new algal species discovered in the mesophotic region of Papahānaumokuākea, as well as the development of science-based best management practices to contain another recently characterized invasive alga, Chondria tumulosa. Please join me in congratulating Dr. Randy Kosaki, Jason Leonard, and Brian Hauk for this prestigious award and recognition for a job exceptionally well done. It's a very exciting time to be a part of Papahānaumokuākea and the stewardship of our oceans and Great Lakes and none of this would be possible without you! Mahalo and imua Papahānaumokuākea!

Eric Roberts



NOAA Administrator's Award Ceremony in Washington D.C. From left, Corinne Kosaki, Dr. Randy Kosaki, Donna Leonard, Jason Leonard, and Eric Roberts. Photo: NOAA



The Papahānaumokuākea marine debris removal effort featured on the cover of the 27 September 2024 issue of Science. Photo: Science.

One Million Pounds Removed

The Papahānaumokuākea Marine Debris Project has surpassed their goal of removing a million pounds of marine debris from the reefs and shorelines of the Northwestern Hawaiian Islands. This incredible milestone, surpassed during the September removal expedition, was achieved over the project's nearly four years of work, 10 removal expeditions, 265 expedition days and by the hard work of 75 team members. The eventual goal is to get to a point where the annual removal efforts can keep pace with the influx of marine debris.

During this last expedition, daily removal records previously set at 11,915 lbs in a single day were shattered. On September 20, the team removed 12,780 lbs in one day from the reefs of Manawai, and then a day later they removed 14,700 lbs, and 13,230 lbs the day after that. While these records are partially the result of the team's increasing skill and efficiency, they also hint at a potentially disturbing trend—that large ghost nets are increasing in our oceans, plastic production is not slowing down, and with the declining cost of large nets, repair of damaged nets may be more costly than replacement resulting in more damaged nets being disposed of at-sea.

The debris removal effort was also featured in a recent paper published in the prestigious journal *Science*. The paper quantified how nearly 30 years of marine debris removal in the Northwestern Hawaiian Islands increased endangered Hawaiian monk seal survival and decreased the entanglement threat from ghost nets. More than four decades of seal entanglement records were analyzed, prior to and after removal efforts, and showed how the threat has been decreasing.

Virginia Branco

Meet The Staff



What is your role and how long have you worked at Papahānaumokuākea (PMNM)?

I have been the National Marine Sanctuary Foundation Manager/Volunteer Coordinator for Mokupāpapa Discovery Center (MDC) since 2016. I joined the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve on December 3, 2003 at MDC and have held various positions such as Administrative Fiscal Assistant, PMNM Volunteer Coordinator, and MDC Assistant Manager.

What is your background prior to working at PMNM?

I held the position of Administrative Assistant to the Director for the Hawai'i Small Business Development Center Network for over 10 years; worked at Hawai'i Community College Outreach and Community Services Office to assist adults with Train-the-Trainer programs in business, home health aide, mechanics, nursing, and carpentry vocational programs; and I worked in the non-profit sector at Hawai'i County Economic Opportunity Council working in administrative and early childhood education programs in Hilo, HI.

What are you working on now?

MDC staff are working on a new Honu exhibit and refreshing our Polynesian Voyaging exhibit as well as major facility improvements, such as installing A/C in our large upstairs area. We also have several projects to keep our 114 year old building in great condition. I am also working with our Marine Options Program partners at Hawai'i Community College and the University of Hawai'i at Hilo in order to expand our community engagement program.

What do you enjoy about working at PMNM?

My favorite part of working at MDC is interacting with the public, especially our youth, and helping them realize their own potential. I enjoy connecting them with future opportunities that will continue their journey as lifelong stewards. I especially enjoy the friendships we garner over the years.

What is your hope for PMNM in the future?

I hope PMNM will continue to be a leader in the protection of our oceans and waterways and in addressing marine debris issues. The work we do showcases how a protected area can thrive. In the near future, I hope that sanctuary designation can be achieved and that there will be opportunities to bring young people to Midway Atoll to experience sacred spaces firsthand.

Haunani Kane

Research (Primary) Served since: 2021

RAC Member Highlight





What is your background?

I am an assistant Professor in the Department of Earth Sciences at UH Mānoa. My research focuses on understanding how climate change, in particular changes in sea level and storms influence islands and island people. I use remote sensing, sediment and reef cores to understand how climate has changed in the past and what changes we may expect in the future.

What first sparked your interest in marine conservation and/or Papahānaumokuākea?

I first voyaged to Papahānaumokuākea on Hikianalia with the Polynesian Voyaging Society as a part of a navigation training sail. As a team we were challenged to find Nihoa. This was the first time I had seen a low island from the sea and my first time to Papahānaumokuākea. This trip was really special because we sailed with many of the original crew members from Hōkūle'a's 1976 voyage. It was even more special because they introduced me to Papahānaumokuākea and how to observe birds, wind patterns, stars, clouds, etc. that are harder to observe in the main Hawaiian islands. This sparked my interest, my love, and appreciation for Papahānaumokuākea.

Why is it important to you to serve on the RAC?

I believe it is important to serve on the RAC because it allows us to ensure that the mission of Papahānaumokuākea – seamless integrated management- equally values both nature and culture. It has been truly inspiring to be a part of the various stages of evolution in Papahānaumokuākea, through expansion of monument boundaries, and potential Sanctuary status. I have also learned a lot from working alongside Uncle Sol Kahoʻohalahala, Pelika Andrade, Bonnie Kahapea, and others that have worked tirelessly to ensure that our communities back home have a voice in how Papahānaumokuākea is managed and cared for.

In what ways do you engage with or involve your community in supporting the efforts of Papahānaumokuākea?

Our lab, the MEGA Lab created a public lab space at the Mokupāpapa Discovery Center where the community can visit and see the work that we do in Papahānaumokuākea. Here we have hands on activities where visitors can view the 3D coral reef models and short films that our team has created. As a living lab the community gets to meet and engage with

the students and researchers in our lab, many of whom are from Hawai'i. We also host community events in the space related to art, culture, and science. It is our hope that by creating a welcoming space, with lots of local faces we may help Papahānaumokuākea and the sciences in general to be more accessible.

Reserve Advisory Council News

- The recent **RAC recruitment** ended on October 20th. We are in the process of reviewing applications and hope to announce the selected members at the December meeting.
- Next RAC meeting: Dec. 17, 2024 | 9 a.m. 1 p.m.
 - Virtual via GoogleMeet
 - · Members of the public interested in attending may send an email to Sara. Wood@noaa.gov to request a meeting link
- New State of Hawai'i Representative!
 - The RAC is pleased to welcome **Andy Winer**, appointed by the Governor as the State of Hawai'i's representative. Mr. Winer brings over 40 years of experience in federal service, government relations, and law; he previously served as Chief of Staff to Senator Brian Schatz as well as the NOAA Director of External Affairs. Read more about Mr. Winer on the *RAC Member Page*.





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