

Pacific Islands Ocean Observing System (PacIOOS)
Governing Council Meeting Summary
November 1-2, 2017

Day 1: Wednesday, November 1, 2017, PacIOOS 10-Year Anniversary Sail

Attendees:

Council Members: Jason Biggs, Ashley Evans, Mark Fox, Doug Harper, Willy Kostka, Moriana Phillip, Antonio San Jose, Dean Sensui, Nori Shoji (for Mike Seki), Tom Smith, Brian Taylor (Chair), Carlos Villacis

Invited Partners and Users: Brenda Asuncion, Seema Balwani, Hannah Barkley, Stephanie Bennett, Brock Blaisdall, Andy Bohlander, Barry Choy, Jen Conklin, Eric DeCarlo, Leigh Anne Eaton, Dolan Eversole, Erik Franklin, Ron Iwami, Anita Lopez, Randy Luikwan, Dana Okano, Brad Romine, Sandy Shor, Hudson Slay, Justin Stopa, Phil Thompson, Kirsten Turner, Maya Walton, Ruth Yender

U.S. IOOS Program Office: Carl Gouldman

PacIOOS Co-Investigators and Staff: Assaf Azouri, Simon Ellis, Ian Fernandez, Martin Guiles, Kim Holland, Feng Hsiao, Melissa Iwamoto, Fiona Langenberger, Ning Li, John Maurer, Carl Meyer, Kimball Millikan, Dale Partridge, Jim Potemra, Brian Powell, Volker Roeber, Alma Trujilo

1:30 p.m. Welcome, Brian Taylor, Chair of PacIOOS Governing Council, and Melissa Iwamoto, PacIOOS Principle Investigator and Director

1:35 p.m. Visit of Ocean Observing Assets along South Shore of O'ahu, including Pearl Harbor Entrance, Kaka'ako, and Waikiki

PacIOOS Partners Share Uses and Relevance of Observation and Model Data

Pearl Harbor Wave Buoy: Captain Ashley Evans, U.S. Navy

Leigh Anne Eaton, NOAA National Weather Service

Surface Currents Observations and Model Data:

Jennifer Conklin, U.S. Coast Guard

Water Quality/CO₂ Buoy: Hannah Barkley, NOAA Coral Reef Ecosystem Prog.

Ecosystem Research: Erik Franklin, Hawai'i Institute of Marine Biology

Nearshore Sensors: Ron Iwami, Friends of Kewalos

Wave Run-up Forecast: Dolan Eversole, Hawai'i Sea Grant

Shark Tagging: Kim Holland, Hawai'i Institute of Marine Biology

4:00 p.m. Return to Kewalo Basin

Attendees:

Council Members: Jason Biggs, Ashley Evans, Mark Fox, Doug Harper, Willy Kostka, Justine Nihipali, Moriana Phillip, Rich Roberts, Antonio San Jose, Dean Sensui, Nori Shoji (for Mike Seki), Tom Smith, Brian Taylor (Chair), Carlos Villacis, Davis Yogi

U.S. IOOS Program Office: Carl Gouldman

PacIOOS Staff: Simon Ellis, Melissa Iwamoto, Fiona Langenberger

8:10 a.m. Call to Order and Welcome, B. Taylor

8:15 a.m. Review of Meeting Agenda and Objectives, M. Iwamoto

8:20 a.m. Update: IOOS Program Office, Carl Gouldman, IOOS Director

C. Gouldman introduced the U.S. Integrated Ocean Observing System (IOOS), which is a robust network of people, resources, and technology collaborating to build a comprehensive ocean, coasts, and Great Lakes observing community to serve the needs of coastal communities, the nation, and the world. IOOS priorities for the coming year are to finalize the IOOS Strategic Plan, reauthorize the Integrated Coastal Ocean Observing System (ICOOS) Act, further IOOS' role in coastal and ocean observing with a focus on customer needs at all levels, and continue to deliver high-quality data through the data management architecture. C. Gouldman commended PacIOOS for a successful year and highlighted some accomplishments.

8:45 a.m. Update: PacIOOS Program, M. Iwamoto and Fiona Langenberger, PacIOOS Communications and Program Coordinator

M. Iwamoto shared an overview of the PacIOOS program and provided a summary of activities since the previous Governing Council meeting (November 2016). Updates included wave buoy deployments; on-the-ground documentation of flooding events to validate high sea level and wave run-up forecasts; a successful proposal to NOAA's Regional Coastal Resilience Grant Program; implementation of the Water Quality Sensor Partnership Program; partnership with University of Guam's EPSCoR (Experimental Program to Stimulate Competitive Research) to deploy and retrieve 40 instruments in Pago Bay, Guam; fin-mounted tags for tiger sharks to collect behavioral and oceanographic data; upgrade of the turbidity plume forecast; development of an observation diagnostic tool; new functionalities in PacIOOS Voyager; and new user-friendly plots and partner pages on the PacIOOS website.

F. Langenberger summarized outreach and engagement efforts of the past year. PacIOOS participated in various conferences, workshops, stakeholder meetings, and community outreach events to engage with different stakeholders from across the Pacific Islands region. Regular updates are shared with partners and users through monthly newsletters, website, social media, and traditional media outlets.

M. Iwamoto recognized two new MOA signatories: The Nature Conservancy Hawai'i Program and the State of Hawai'i, Department of Land and Natural Resources, Division of Aquatic

Resources. Five seats on the Governing Council will be open for election this summer, including all three territories, one Hawai'i seat, and one regional seat. The Executive Committee Governing Council met in Guam in April 2017. Many thanks to Jason Biggs for hosting the group. The meeting allowed members and IOOS staff to better understand the challenges and opportunities in the region.

Funding from the IOOS Program Office remains level. PacIOOS also identified other sources of funding. As of December 2016, PacIOOS can be supported through tax-deductible donations to the *Friends of PacIOOS* within the UH Foundation.

10:15 a.m. PacIOOS Results: Performance Measures, M. Iwamoto

M. Iwamoto shared the results of the PacIOOS performance measures (PM), covering activities from June 1, 2016 to May 31, 2017. The PM provide a snapshot of growth and operational reliability across PacIOOS core subsystems. Operational uptime was lower than the targeted metric. Spare buoys and sensors would help to increase operational uptime and lower turn-around time when instruments are serviced, out of the water, or in transit. A spare sensor was purchased for this purpose and recently received. Due to repeated ship strikes, PacIOOS is also planning to relocate two wave buoys to move these assets into areas with less ship traffic. It is also important to build capacity throughout the region, to have skilled maintenance support.

10:45 a.m. Discussion: Final Review and Approval of the PacIOOS Strategic Framework, M. Iwamoto

The purpose of the Strategic Framework is to set program direction and priorities for the upcoming 5-years. The intended audience includes PacIOOS management, researchers, and staff; MOA partners; IOOS Program Office; potential collaborators and partners; and existing and potential users. The development of the Strategic Framework started in October 2015 with input from the Governing Council, the Executive Committee, staff, and PacIOOS MOA partners to refine the framework.

There was a suggestion to introduce the concept of "regional security" into the Strategic Framework, which includes topics such as food security, environmental health, economic security, and a stable governance framework. It stresses the connection between a healthy ocean and food security and could possibly help to secure additional funding. A discussion ensued whether or not to add the concept to the vision/mission and/or the thematic areas. Some members felt the concept is already captured in the vision without using the exact term. There were other concerns that regional security might not be considered PacIOOS' and IOOS' mandate, and members argued that successful funding is based on a good proposal not necessarily the wording of the vision. The term could also be used verbally instead of in the document. The topic remained unresolved.

11:15 a.m. Updating Performance Measures, S. Ellis and F. Langenberger

The existing PM are mapped to the goals of the 2013-2018 Strategic Operational Plan. With the implementation of the new Strategic Framework, Governing Council members were asked whether the existing PM need to be updated. The council discussed how to best match PM to the goals. A question was raised whether PM should be linked to the new Goals 1-4, or to the

Objectives that are nested under each goal. It was also suggested that not every goal or objective necessarily needs to be associated with a PM.

Since the main purpose is to track program performance for internal self-assessment and reporting purposes, the PM should be set-up to drive the program forward and aspire to the program's future direction. The idea is to work on small incremental increases within the program; the PM should help to identify weaknesses to address. The existing PM may still apply moving forward to identify areas for improvement. This could also mean that some PM are not be fully realized every year.

11:45 a.m. PacIOOS Operational Plan Overview, F. Langenberger

Governing Council members reviewed the proposed Operational Plan outline. While the Strategic Framework serves as the outward facing document, the Operational Plan is mainly for an internal audience, including PacIOOS staff, researchers and the IOOS program office. The plan is to review the Operational Plan annually, and update it as necessary. The goal is to draft and finalize the Operational Plan in Spring/Summer 2018.

It was suggested to incorporate lessons learned, or "after action" reviews, by including a synopsis of high points and challenges from the previous year or from previous projects. PacIOOS has been in operation for the past 10 years. Along with regular operations and maintenance costs, PacIOOS will also need to plan for replacement costs. It was also suggested that the short-term goals and objectives within the Operational Plan include specific actions and metrics that lead back to the PM.

12:00 p.m. Lunch Break

1:00 p.m. PacIOOS Data Management, Dr. Jim Potemra, PacIOOS Co-Investigator

J. Potemra provided an overview of PacIOOS' data management services. PacIOOS receives data from data providers, including internal and external sources, which are processed by the data management team to allow for search, browse, and download functionalities. In addition to providing data infrastructure, the team also supports data telemetry, ensures data quality control, develops news tools, offers support, and oversees server administration. J. Potemra also discussed strengths and challenges of PacIOOS' data management.

1:45 p.m. Increasing Observation and Model Coverage to Fill Gaps and Achieve a More Balanced System, Gordon Walker, PacIOOS Oceanographic Research Specialist and Professor. Margaret McManus, PacIOOS Co-Investigator

G. Walker introduced the PacIOOS near shore sensor group. The team maintains nine near shore sensors and oversees the PacIOOS Water Quality Sensor Partnership Program (WQSPP). G. Walker shared information about several different sensors. They range in price between \$8K-\$21K. SeaBirds are of high quality and require less maintenance, which is more cost-effective in the long run—a key decision-making factor for sensor selection in a region spanning across the Pacific Islands. The PacIOOS near shore sensor group continues to look into various other sensor options, including low-cost sensors and bacteria sensors. Parties interested in the WQSPP can apply by sending a concept paper to Simon Ellis. The team has shared the program with potential partners throughout the region, in particular the insular Pacific. WQSPP data often

serve as a baseline before a project starts, and for monitoring purposes during and after a project.

2:30 p.m. Afternoon Break

2:45 p.m. New PacIOOS Governing Council Executive Committee, M. Iwamoto

The Executive Committee meets annually in the Spring and consists of five Governing Council members. M. Iwamoto thanked the outgoing Executive Committee members, whose two-year term is coming to an end. M. Iwamoto presented the proposed slate for 2017-2019, which includes Brian Taylor as the Chairperson; Carlos Villacis to represent Hawai'i; Moriana Phillip to represent the Freely Associated States and Government; Jason Biggs to represent Territories and Government; and Tony San Jose to represent Industry. The Governing Council approved the proposed slate.

3:00 p.m. Meeting Evaluation: Governing Council Frequency and Purpose, F. Langenberger

Meeting participants enjoyed the 10-year anniversary sail; hearing directly from users was extremely beneficial. A field trip to see research at the University of Hawai'i was suggested for future meetings. Members agreed that holding an annual Governing Council meeting is still the desired meeting frequency. The second week of November seems to work best for members. It was suggested to possibly meet virtually or via teleconference in between the meetings, if necessary.

3:15 p.m. Open Discussion

PacIOOS' thematic area "Ecosystems and Living Marine Resources" is currently focused on shark research. PacIOOS is also working with NOAA's Pacific Islands Fisheries Science Center to make existing data accessible.

A discussion ensued about aquaculture management and what resources PacIOOS could bring to the table to inform such projects. It was noted that PacIOOS could support marine spatial planning efforts, and that the information it already provides supports siting, modeling, and monitoring for aquaculture by providing currents, water quality, model data, etc. If resources were available, this could be expanded. Climatologies might also help to identify what conditions are considered normal.

The OceanObs'19 Conference will be held in Honolulu from September 16-20, 2019. It is a global ocean observing system decadal meeting.

3:25 p.m. Wrap-up of Meeting, B. Taylor and M. Iwamoto

3:30 p.m. Meeting Adjourned