

Pacific Islands Ocean Observing System (PacIOOS)
Governing Council Meeting Summary
Hawai'i Institute of Geophysics (HIG) Conference Room 210
University of Hawai'i at Mānoa, Honolulu, Hawai'i
November 7-8, 2018

Day 1: Wednesday, November 7, 2018

Attendees:

Council Members: Jason Biggs, Eric Brown (for Scott Burch), Jennifer Conklin, Mark Fox, Doug Harper, Willy Kostka, Justine Nihipali, Moriana Phillip, Jessica Podoski, Sandra Rossetter, Captain Mike Roth, Mike Seki, Dean Sensui, Brian Taylor (Chair), Carlos Villacis

U.S. IOOS Program Office: Krisa Arzayus

IOOS Association: Gerhard Kuska

PacIOOS Staff: Simon Ellis, Melissa Iwamoto, Fiona Langenberger

12:00 p.m. Welcome, Brian Taylor, Chair of PacIOOS Governing Council

12:10 p.m. Lunch

1:00 p.m. Review Agenda and Meeting Objectives, Melissa Iwamoto, PacIOOS Principle Investigator and Director

1:15 p.m. IOOS Program Office Update, Krisa Arzayus, IOOS Deputy Director

K. Arzayus provided a brief overview of the U.S. Integrated Ocean Observing System's (IOOS) set-up as a global, national, and regional enterprise and shared IOOS' mission, focus areas as well as enacted and anticipated budget numbers. IOOS supports a cycle of engagement to integrate stakeholder needs into ongoing observations and data management efforts. Accomplishments from fiscal year 2018 include (among others) certification of all regional associations as Regional Information Coordination Entities (RICE), publication of the U.S. IOOS Strategic Plan, and building a community of practice for biological data. In the coming year, IOOS will focus on furthering NOAA's Administration Priorities (e.g., innovations for Blue Economy), providing funding for Ocean Technology Transition projects, and leveraging partner initiatives. OceanObs'19, a decadal ocean observation conference, will be held in Honolulu in September 2019. IOOS will celebrate its 20th anniversary at the conference. K. Arzayus commended PacIOOS for a successful year and associated accomplishments.

1:35 p.m. IOOS Association: Role, Successes, Future Efforts, Gerhard Kuska, IOOS Association Vice Chair

The IOOS Association (IOOSA) is a non-profit association with the purpose of supporting and advocating on behalf of the entire IOOS network, including all 11 regional associations. In recent years, IOOSA chose to shift from general advocacy requests for increased funding to a more targeted approach for filling high priority gaps. The *Closing the Gaps Campaign*, is a 5-year scalable campaign, targeting surface currents and information gathered by gliders. The strategy has proven to be successful in FY17 and FY18. IOOSA also advocates for the reauthorization of

the Integrated Coastal and Ocean Observation System (ICOOS) Act from 2009, which provides the foundation for coordinated observing efforts and the IOOS system. In addition, IOOSA helps to set-up legislative briefings, explore philanthropy projects, and organize annual IOOS meetings for enhanced coordination.

1:50 p.m. Joint Q&A/Discussion on National IOOS picture

Meeting participants engaged in discussions related to the previous presentations. Glider investments were discussed as well as the benefits of showing cross-agency glider missions to ensure maximized use of the asset as an ocean observing platform. With regards to IOOS' biological initiatives, meeting participants are aware of the Animal Telemetry Network and the need for additional tracking was expressed (e.g., big eye tuna). It was suggested that there should be efforts to better integrate open ocean data with coastal resources.

2:00 p.m. PacIOOS Programmatic Updates, M. Iwamoto and Fiona Langenberger, PacIOOS Communications and Program Coordinator

M. Iwamoto presented an overview of the PacIOOS program and shared programmatic updates since the previous Governing Council meeting in November 2017. Updates included (among others) the deployment of the Lana'i and Kalaeloa Barbers Point (O'ahu) wave buoys; record-breaking wave heights measured by the PacIOOS wave buoys; new online archive system for wave run-up, high sea level, and harbor surge forecasts; development of a new high-resolution wave run-up forecast for West Maui; deployment of the Pelekane Bay (Hawai'i Island) water quality buoy; past, ongoing, and upcoming PacIOOS Water Quality Sensor Partnership Program projects; hosting of the Animal Telemetry Network Workshop in April; successful proposal to the Office of Insular Affairs to fund expansion of wave models and upgrade atmospheric models for Saipan, Rota and the Manu'a Islands in American Samoa; supporting U.S. Army Corps' Pacific Waves and Water Level Study; development of Hawai'i Sea Level Rise Viewer; including water sampling data from the non-profit Hui O Ka Wai Ola in Maui on PacIOOS Voyager; and data management support for University of Hawai'i Sea Grant's King Tides project.

F. Langenberger summarized PacIOOS' participation in conferences, workshops, and outreach events and provided an overview of ongoing communication efforts, including the monthly newsletter, social and traditional media, as well as the website. A website survey was conducted in early 2018, to learn more about PacIOOS' web users, specific use cases, overall satisfaction, and suggestions on how to improve. F. Langenberger presented a summary of the survey results and shared insights gained.

With regards to PacIOOS' management and governance, M. Iwamoto stressed the development process and implementation of the new 5-year Strategic Framework (2018-2022). M. Iwamoto welcomed three new Memorandum of Agreement (MOA) partners: Surfline, Hawai'i Pilots Association, and Trilogy Excursions. Five seats on the Governing Council will become available in summer 2019, including two regional seats, one Hawai'i, Marshall Islands, and Palau seat respectively. M. Iwamoto thanked council member Carlos Villacis for hosting the Executive Committee meeting on Maui in April 2018 and Tara Owens (UH Sea Grant Extension Agent) for leading a tour along West Maui to demonstrate wave inundation and erosion impacts. PacIOOS is currently hiring a new Operations Coordinator, council members were asked to share the announcement with their networks.

Meeting participants engaged in discussions throughout the presentation. Interest was expressed to learn more about the wave run-up forecast development for West Maui. Data from the Water Quality Sensor Partnership Program project in Kewalo Basin should be shared once publically available. Questions also arose with regards to PacIOOS' serving of citizen science data and associated quality control standards.

3:40 p.m. PacIOOS Governing Council Member Responsibilities and Expectations, Simon Ellis, PacIOOS Regional Coordinator

The Executive Committee approved a document in April 2018, that outlines PacIOOS Governing Council members' responsibilities and associated expectations when serving on the Governing Council for 3-year terms. This document will serve as a reference and guideline for both incoming and seasoned members, to ensure productive participation and discussions during and in between meetings. The document is available on the PacIOOS website in the "Documents" section.

3:50 p.m. PacIOOS Budget Updates, M. Iwamoto

Core funding from the IOOS Program Office remains level. However, additional funding from Congress was allocated through the *Closing the Gaps Campaign*. Funding will support regional capacity building efforts, glider operations, a watershed monitoring project in Pohnpei, and the essential recapitalization of some equipment. PacIOOS has also been successful in identifying other sources of funding by leveraging PacIOOS efforts. PacIOOS can be supported through tax-deductible donations to the *Friends of PacIOOS* within the UH Foundation.

4:00 p.m. Pau Hana (no host) at Mānoa Gardens

Day 2: Thursday, November 8, 2018

Attendees:

Council Members: Jason Biggs, Eric Brown (for Scott Burch), Jennifer Conklin, Mark Fox, Doug Harper, Willy Kostka, Justine Nihipali, Moriana Phillip, Jessica Podoski, Sandra Rossetter, Captain Mike Roth, Mike Seki, Dean Sensui, Brian Taylor (Chair), Carlos Villacis

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9:00 a.m. Tour of PacIOOS Labs and Facilities

Meeting participants learned about PacIOOS' modeling efforts, West Maui wave run-up forecast, sea gliders, high frequency radars, and PacIOOS Voyager through short demonstrations and presentations provided by PacIOOS co-investigators and staff.

11:00 a.m. PacIOOS Performance Measure, M. Iwamoto

The purpose of PacIOOS' performance measures is to analyze annually the progress towards the long-term system goals. Performance measures were adjusted based on discussions held during last year's Governing Council meeting to reflect PacIOOS' new Strategic Framework and input gleaned during the Executive Committee meeting in April 2018. The Executive Committee approved the revised performance metrics in May 2018. M. Iwamoto shared the results of the performance measures covering activities from June 1, 2017, to May 31, 2018. While all other performance measures met the targeted metric, operational uptime was slightly below target. Vandalism and instrument downtime have impacted currents and water quality observations. While some downtimes were unavoidable, spare sensors would reduce the turnaround time and increase overall uptime.

11:30 a.m. Lunch

12:15 p.m. Background and then breakout sessions to provide input on capacity building workshops, S. Ellis

In order to build capacity for ocean observing throughout the Insular Pacific region, PacIOOS is planning to hold a series of workshops (in reference to Objective 4A of the PacIOOS Strategic Framework). The workshops aim to provide a better understanding of ocean observing in general and also allow for hands-on training to assist with asset operation.

PacIOOS Voyager was briefly discussed with regards to its current users and how to best accommodate different user groups and their associated needs. Planners, ocean users, emergency managers all have different objectives. Guidance from stakeholders on what kind of data best informs decision-making is always helpful.

Meeting participants chose to divide into two breakout groups to discuss: A) how to improve stakeholder knowledge of PacIOOS services and projects, as well as the types of information that can be obtained through ocean observing; and B) how to provide stakeholders with hands-on training with instrumentation and software, mooring hardware, and data access.

12:45 p.m. Tour of PacIOOS Labs and Facilities (*continued*)

Meeting participants learned about PacIOOS' nearshore sensor program, wave buoy lab, and server set-up through short demonstrations and presentations provided by PacIOOS co-investigators and staff.

2:00 p.m. Breakout sessions to provide input on capacity building workshops (*continued*)

Group A suggested tailoring stakeholder outreach to the specific user groups and region. Social media is an important means of communications in some parts of the region. Understanding the audience and making science understandable for non-scientists (e.g., use of visuals and graphics, story telling) will enhance the engagement. It was suggested that PacIOOS support existing projects and local initiatives and identify the niche that PacIOOS can serve in.

Group B suggested considering various formats to build capacity throughout the region and identify someone on the ground who can champion and promote participation. It might also be

beneficial to pick a theme (e.g., from the Strategic Framework) to encourage cross-sector collaboration. Providing a certification might be an incentive to participate in the capacity building sessions. Be sure to manage expectations, since the capacity building workshops do not necessarily translate directly into the availability of instrumentation. Participants also discussed potential partners and funding sources. All input was recorded by staff.

2:45 p.m. Background and then rotating stations on how to sustain PacIOOS efforts and enhance impacts into the future

Meeting participants split into two groups to discuss: A) biological data; and B) PacIOOS short- and long-term priorities and stakeholder needs/issues/opportunities.

Group A discussed the various biological data collected by NOAA Fisheries, the State of Hawai'i, University of Guam, and local fisheries groups. It was suggested to use a pilot data set to find out how PacIOOS can best integrate biological data. A catalog of existing data (metadata) could also be developed. New technologies and a wider range of platforms to collect biological data should be considered and might be a niche for IOOS.

Group B suggested various topics for PacIOOS' future consideration, including connecting with the renewable energy sector, harbor currents measurements, sediment transport, and water quality (specifically nutrients and toxins). Participants also discussed expanding advanced notifications to water quality and erosion. Sea level projects and supporting community resilience in the insular Pacific are of interest. Suggestions were also provided on who to engage with and potential funding sources.

3:45 p.m. Meeting Evaluation, F. Langenberger

Governing Council members enjoyed meeting PacIOOS scientists and staff face-to-face. Seeing the labs and program components in action was a great opportunity to learn more about the opportunities and challenges. The program overview is a helpful immersion into the PacIOOS program and helps the Governing Council to identify ways to support PacIOOS. The use of many visuals and short summaries was recommended. Presentations from IOOS and IOOSA are also helpful to understand the larger context. It was suggested to invite data users to future meetings to learn how PacIOOS data is being used. Other suggestions included to provide advance notice of what kind of information will be gathered; to structure the meeting by thematically; and to check with council members ahead of time whether there are topics that they would like to discuss at the meeting.

3:45 p.m. Wrap up and Adjourn Meeting, B. Taylor