

# Marine and Coastal Zone Advocacy Council (MACZAC) / Ke Kahu O Na Kumu Wai

## MINUTES

Friday, May 13, 2022: 9:30 am – 12 pm

Zoom Virtual Meeting

OPSD Conference Room  
State Office Tower, Floor 6  
235 S. Beretania St.  
Honolulu, HI 96813

### ATTENDANCE

- **Members present (8):** Phil Fernandez, Donna Brown, Rich Brunner, Taryn Dizon, Robert “Bob” Nishimoto, Benjamin “Ben” Ostrander, Susan “Sue” Sakai, Scott Sullivan
- **Members absent (2):** James “Jim” Coon, Kimbal Thompson
- **Office of Planning and Sustainable Development/Coastal Zone Management (OPSD/CZM) staff present (7):** Mary Alice Evans, Justine Nihipali, Brittaney Key, Keelan Barcina, Sarah Chang, Debra Mendes, Lisa Webster
- **Others present (7):** Representative Lisa Marten (State of Hawai‘i House of Representatives), Andy Bohlander (Sea Engineering, Inc.), Megan Brotherton (Tetra Tech), Kitty Courtney (Tetra Tech), Mike Donoho (Tetra Tech), Kim Peyton (Department of Land and Natural Resources—Division for Aquatic Resources [DLNR-DAR]), Nancy McPherson (Department of Hawaiian Home Lands)

### DISTRIBUTED MATERIAL

- MACZAC meeting agenda for May 13, 2022
- Draft minutes from February 11, 2022 MACZAC meeting
- CZM Report to MACZAC (May 13, 2022)
- Tetra Tech presentation slides
- DLNR-DAR presentation slides
- DLNR-DAR post-presentation discussion slides
- *Identifying Frameworks for Land-Based Pollution Management in the Hawaiian Islands*

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#### I. **Call to Order**

MACZAC Chair Phil Fernandez called the meeting to order at 9:32 am and welcomed everyone. Introductions were made.

## II. **Approval of February 11, 2022 Meeting Minutes**

The minutes were approved as circulated.

## III. **Welcome from Office of Planning and Sustainable Development Director**

OPSD Director Mary Alice Evans welcomed everyone to the meeting.

## IV. **Tetra Tech presentation**

Kitty Courtney from Tetra Tech provided an overview of the Scoping Study for a Regional Shoreline Management Strategy for the State of Hawai'i ("scoping study"). The draft outline and key activities are explained on Slides 2-7 and 16-17. Andy Bohlander from Sea Engineering, Inc. also explained the team's approach to the scoping study and its evaluation of existing case studies both within and outside of Hawai'i for advantages, disadvantages, and applicability to a regional shoreline management strategy for the State.

Ms. Courtney noted that Tetra Tech would like to return in August to give MACZAC an update on the scoping study progress and seek further input.

Chair Fernandez opened the floor to questions from MACZAC members. MACZAC member Donna Brown asked if Tetra Tech intended to use one of the plans discussed in the case studies as a primary guide for Hawai'i and if there was a central hub to monitor the project development. Ms. Courtney and Mr. Bohlander clarified that the team was looking at multiple regions for ideas but would not be applying a singular case study or wholesale model to Hawai'i due to the state's unique shore and wave environments. Ms. Courtney added that Tetra Tech did not have a website for scoping study updates but would be developing a product to tell the story of the project. Tetra Tech will also be hosting virtual workshops to solicit input. MACZAC member Brown requested for Tetra Tech to inform MACZAC when the workshops are being held so members could participate. Ms. Courtney confirmed they would do so.

MACZAC member Scott Sullivan observed that shoreline management rules and responsibilities are decentralized and uncoordinated across the state's various jurisdictions, making for a confusing regulatory and management environment. MACZAC member Sullivan asked the scoping study team if there was any thought to proposing consolidating responsibilities into a central agency or agencies as part of its study. Ms. Courtney agreed that governance is key to shoreline management and agency consolidation is one option available. Mr. Bohlander seconded MACZAC member Sullivan's observation and noted that both MACZAC's *Coastal Management – Integrated State Erosion Management System* white paper and the Ocean Resources Management Plan (ORMP) had recommended centralization, so Tetra Tech would be evaluating this seriously.

MACZAC member Sue Sakai recommended that the priority for shoreline management be public infrastructure, such as wastewater treatment plants and highways, because it is easier for government to manage compared to private property. MACZAC member Sakai also pointed out that little to no action is being initiated for private property and

any mitigation or adaptation actions are all occurring on the public side. The scoping study should address this discrepancy.

Chair Fernandez seconded MACZAC member Sakai's observation and noted that engineered solutions tend to be seen unfavorably, but he advised Tetra Tech not to shy away from opening discussion to engineered solutions that may be needed, even if there is pushback. He also reminded those in attendance of the diverse and sometimes opposing perspectives and stakeholders in Hawai'i that need to be heard and balanced between in a management strategy.

MACZAC member Ben Ostrander asked Tetra Tech about its approach to soliciting input from community members. He also made an aside that he liked the vulnerability ribbon display on Slide 11 for being simple and intuitive. Ms. Courtney responded that Tetra Tech would not be pursuing community consultations for the scoping study itself, but it would include in its proposed strategy deliverable recommendations for how to involve communities in regional shoreline management.

MACZAC member Taryn Dizon agreed with Mr. Bohlander's earlier remark about the diversity of Hawai'i's shorelines, citing examples of different microclimates and coastal impacts just on the island of Kaua'i.

Nancy McPherson shared that the State Department of Hawaiian Home Lands (DHHL) has produced a draft South Moloka'i Shoreline Erosion Management Plan ([https://dhhl.hawaii.gov/wp-content/uploads/2022/03/030522-Draft-SM-SEMP\\_reduced.pdf](https://dhhl.hawaii.gov/wp-content/uploads/2022/03/030522-Draft-SM-SEMP_reduced.pdf)) if it would be of interest to those in attendance. She strongly supported the idea of shoreline management at the state level and said DHHL would be happy to provide feedback to Tetra Tech on its scoping study if appropriate and desired.

CZM Project Analyst Sarah Chang shared that there is an action team heavily involved to help CZM review deliverables from the scoping study. The action team consists of members from the four county planning departments, the State Office of Coastal Conservation Lands (OCCL), University of Hawai'i Sea Grant, and MACZAC member Sullivan (representing MACZAC). She also reminded the audience of the Tetra Tech virtual workshops that would be held over the summer and added that Tetra Tech would likely convene with the Focus Area 1 Permitted Interaction Group (PIG) members, too.

Chair Fernandez closed comments due to time constraints but expressed desire for MACZAC to confer again with Tetra Tech.

## **V. DLNR-DAR presentation**

MACZAC member Bob Nishimoto introduced the topic of estuaries as important for connecting freshwater stream flows to coral reef habitats. Dr. Kim Peyton from DLNR-DAR opened her presentation with the same point, that estuaries (muliwai) sustain healthy fisheries. Estuaries are important for marine species that use the estuaries for juvenile growth and foraging. Freshwater species rely on the estuary twice in their natural history; first as larvae that pass from the streams through the estuaries into the

ocean, and again as juveniles that pass through estuaries back into the streams for adulthood.

There are three types of estuaries in Hawai'i: riverine, lagoonal, and groundwater welling. Fish use the freshwater "signal" of healthy estuaries to guide them to it, and the estuary acts as a funnel that constrains population size. This is why Dr. Peyton's team is researching the impacts of lowered juvenile survivorship on adult fish populations. Environmental DNA (eDNA) is a monitoring technique to more accurately identify which species are present in an environment. Dr. Peyton used a case study in East Maui to show how eDNA informs fish population analysis.

For Slide 17, the lower the stress value, the stronger the indicated relationship. The large grouping of the gray dots (representing the reference site estuary) indicates a large amount of species diversity, whereas the tighter grouping of the restored estuaries shows lower species diversity (this is a result of historic diversion of the streams that fed these estuaries). These respective findings held true for the streams feeding the estuaries as well and supported that estuaries in poor condition constrain coastal fisheries' productivity.

The EPA National Estuary Program for estuaries of national importance is a potential resource for estuary research and protection to diversify funding sources.

MACZAC member Nishimoto concluded Dr. Peyton's presentation with slides recommending an ecosystem approach to coastal fishery management. He reminded the audience of the life cycle of coastal fishes and said that adult fish are easier to monitor and receive the most attention, but the late larval and juvenile stages (also the stage when fish live in estuaries) are overlooked because they can't be visually monitored. MACZAC member Nishimoto critiqued Holomua 30x30 for also focusing on visual monitoring in coral reefs and overlooking the juvenile-estuary phase. He said that Holomua 30x30 assumes that the presence of healthy adult fish equates to healthy and sustainable fish populations, while Dr. Peyton's presentation showed the bottleneck effect unhealthy estuaries can have. MACZAC member Nishimoto further provided his criticisms of marine area closures (Slide 6) and the perspective that overfishing is the only cause of fish stock declines (versus the contributing impacts of the degradation of estuaries as nursery habitat for fish).

Instead, MACZAC member Nishimoto proposed structuring management around the three habitat zones for fishes, primarily estuaries. He also shared questions from the fishing community about the role of Holomua 30x30 versus the 2020 ORMP in coastal fishery management and proposed that MACZAC focus outreach and education efforts on fisherfolk and building community partnerships that can restore estuaries and fish populations.

Chair Fernandez asked to clarify if MACZAC member Nishimoto was proposing MACZAC conduct community outreach. MACZAC member Nishimoto confirmed and recommended starting with something like an ORMP brochure or other literature to

place in fishing stores, as well as reaching out to community groups that work on wetlands for collaboration. He believed if MACZAC can connect with wetland and upstream environmental groups, it will increase public buy-in and strengthen the message of mauka-muliwai-makai, for example through the connectivity of protecting native forests, wetlands, and ocean fish populations.

MACZAC member Nishimoto also asked to clarify the respective roles of Holomua 30x30 and the ORMP. Chair Fernandez responded that the CZM Program is a policy-oriented agency while the implementing and action-oriented agencies are e.g., DLNR-DAR. Staff from these implementing agencies sit on ORMP working groups and action teams and take guidance from the ORMP for how to implement marine and coastal management in their respective agencies.

Chair Fernandez agreed with the importance of informing the public about the ORMP and explaining its vision. Because Holomua 30x30 is staggering its outreach island-by-island, Chair Fernandez recommended syncing any outreach efforts with the Holomua 30x30 timetables.

MACZAC member Nishimoto asked if Holomua 30x30 is Governor Ige's policy or the State's policy. Chair Fernandez clarified that Holomua 30x30 arose from a speech by Governor Ige in 2016 that was converted into policy and that the new incoming governor in 2022 may or may not choose to continue that policy. MACZAC member Nishimoto reaffirmed his support for literature outreach into the community so that the ORMP does not fall by the wayside. Chair Fernandez asked MACZAC member Nishimoto to draft a paragraph for a plan to that effect for MACZAC to vote on.

MACZAC member Sakai suggested MACZAC could focus its hotspot reports on degraded estuaries. Chair Fernandez asked members to review their respective islands and report back on their impression of the health of their island's estuaries. MACZAC member Nishimoto cautioned against focusing too much on hotspots and emphasized the need for education on the role of estuaries and mauka-muliwai-makai connectivity. MACZAC member Sakai said that hotspots could be a way to demonstrate that connectivity. Chair Fernandez agreed.

CZM Project Analyst Lisa Webster asked if Dr. Peyton would want to repeat her eDNA analysis research on an estuary before and after restoration if given the opportunity. Dr. Peyton confirmed that this is precisely the goal. Ms. Webster also asked if eDNA indicated only presence or also quantity of a fish species. Dr. Peyton said that currently, analyses only indicate the presence or absence of a species, but eventually it will be able to show relative proportions of different species in a habitat, though still not absolute numbers.

Ms. Webster asked if the estuary GIS layer from Dr. Peyton's team is publicly available. Dr. Peyton said the layer is still in development but would be open to working with OPSD for feedback and improvements before launching it publicly.

MACZAC member Ostrander expressed concern that developers might see Dr. Peyton's data and interpret her findings to mean that estuaries would be sufficient as long as stream diversions left some water behind. He asked if there are any safeguards to prevent future large diversions. Dr. Peyton clarified that her team is approaching its sites in the opposite way: large-scale diversions are already occurring, and her team requests that some water is restored. Chair Fernandez added that there is a Commission on Water Resource Management that manages stream flows and is the deciding authority on stream diversion amounts.

No further questions were raised.

## **VI. Hawai'i Coastal Zone Management (CZM) Program Manager's Report: National Initiatives**

### National CZM Program Funding

The CZM Program has prepared and submitted its FY22-23 and FY23-24 coastal management grant application to NOAA. NOAA has shared that we should be planning for flat funding at least for the first fiscal year.

CZM Program Manager and staff will be traveling to Washington D.C. to represent the state for Coastal States' Organization business meetings and the NOAA Program Managers' meeting from 5/16-5/19/2022.

### Hawai'i CZM Program

- 10 of 11 (2 are 0.5 FTE) positions staffed (1/2-time Project Analyst)
  - CZM Office Assistant (OAIV) position has been filled, eff 5/6/2022.
  - CZM Project Analyst position recently vacated, eff 5/10/2022.
- 1 intern position
  - The graduate intern position is in recruitment.
- CZM Website updated periodically (<http://planning.hawaii.gov/czm/>). Working on improving communications for consistency and currency. Analyzing existing website to make it more efficient and streamlined.

### Section 312 Evaluation

- No new activity
- CZM Staff contact is Debra Mendes

### Section 309 Assessment and Strategy

- No new activity
- CZM Staff contact is Justine Nihipali

### Program Changes

- Attended the Program Change Training provided by NOAA Office for Coastal Management on Feb 24, 2022
- CZM Staff contact is Shichao Li

## Ocean Resources Management Plan

- Implementation of the Kokua Community-Based Monitoring Program continues with the DLNR-DAR 30x30 planning team, project partners, and community groups. The program will increase DLNR-DAR's capacity to monitor culturally valuable nearshore marine resources which are not regularly monitored by the Division, and is anticipated to run through March 2023. DLNR-DAR, in coordination with UH partners, has recently recruited a coordinator to carry out the project; the coordinator is anticipated to start in June and will be based on Hawai'i Island. Additionally, a StoryMap was developed with project partners and will be available with the launch of the new ORMP landing page in the near future. CZM Staff contact is Keelan Barcina.
- CZM submitted one proposal for the NOAA Project of Special Merit FY22 competition to advance Focus Area #1. The proposed project is to analyze the legal and policy impacts of managed retreat in Hawai'i. Funding awards are announced in Fall 2022.
- In March 2022, OPSD executed a contract with Tetra Tech for *Developing a Scoping Study for a Regional Shoreline Strategy Specific to the State of Hawai'i*. The study's aim is to develop a scoping study as an exploratory step towards a regional shoreline management strategy for the State of Hawai'i. The project is scheduled to be completed by December 2022, with possible extension. CZM Staff contact is Sarah Chang.
- At the February 2022 Coordinated Working Group meeting, a panel discussion was held among subject matter experts whose programs have regulatory responsibility and/or research interests in managing land-based pollution. This robust discussion built upon a recent land-based pollution management report which offers actionable options and partnerships for to reducing land-based pollution. CZM continues to identify priority projects and are in the early stages of project planning for updating several existing guidance documents commonly referenced in SMA and EA/EIS land-based pollution considerations.
- In March 2022, OPSD reconvened the Act 178 Action Team to review the findings of the first Act 178, SLH 2021 annual report. OPSD presented a literature review summary of adaptation strategies being implemented in other coastal states/cities. The Action Team discussed next steps, which include continued 1:1 conversations between OPSD and key stakeholders to understand the feasibility of a standardized vulnerability assessment process. The Annual Report can be found at: [Act 178: Relating to sea level rise adaptation \(hawaii.gov\)](#). An interactive StoryMap related to recent Act 178 activities can be found at: [Sea Level Rise Adaptation in Hawai'i \(arcgis.com\)](#).
- CZM Staff contact is Sarah Chang

Chair Fernandez asked Ms. Chang if it might be useful to form a PIG to facilitate MACZAC giving feedback to Tetra Tech as its scoping study progresses, or if today's presentation was adequate. Ms. Chang responded that Tetra Tech was interested in meeting with the existing Focus Area 1 PIG for more detailed discussion and feedback. Chair Fernandez confirmed with Ms. Key that the latter route would be simplest. Ms. Nihipali also clarified that CZM had built in consultation with the Focus Area PIG to

Tetra Tech's workplan, although these meetings had not been scheduled yet. Ms. Chang would be in contact with the PIG members to coordinate.

CZM Project Analyst Keelan Barcina shared three links in the chat related to the recent *Identifying Frameworks for Land-Based Pollution Management in the Hawaiian Islands* report: the 2006 Low Impact Development Guide ([https://files.hawaii.gov/dbedt/op/czm/initiative/lid/lid\\_guide\\_2006.pdf](https://files.hawaii.gov/dbedt/op/czm/initiative/lid/lid_guide_2006.pdf)), the 2010 Hawai'i Watershed Guide ([https://files.hawaii.gov/dbedt/op/czm/initiative/nonpoint/hi\\_watershed\\_guidance\\_final.pdf](https://files.hawaii.gov/dbedt/op/czm/initiative/nonpoint/hi_watershed_guidance_final.pdf)), and the 2013 Stormwater Impact Assessment Guide ([https://files.hawaii.gov/dbedt/op/czm/initiative/stomwater\\_impact/final\\_stormwater\\_impact\\_assessments\\_guidance.pdf](https://files.hawaii.gov/dbedt/op/czm/initiative/stomwater_impact/final_stormwater_impact_assessments_guidance.pdf)).

Ms. Webster showed those in attendance a preview of the ORMP landing page and dashboard website that would be launching soon. Ms. Nihipali noted that the StoryMap which Tetra Tech will be producing as part of the scoping study will be housed on the ORMP website.

#### Coastal Non-Point Pollution Control Program (CNPCP)

- On 4/26/22 OPSD has executed a memorandum of agreement (MOA) with Central Maui Soil and Water Conservation District to develop a Pohakea Watershed Management Plan. This plan will address the pollutants causing waterbody impairments in the Pohakea watershed; include the EPA nine minimum elements necessary for watershed plans; and include applicable management measures from the EPA Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters. Project will be completed by December 31, 2022.
- CZM Staff contact is Debra Mendes

#### Climate Change Adaptation

- OPSD Director and CZM Program Manager serve as Commissioners on the Climate Change Mitigation and Adaptation Commission
- Meeting schedule: - next meeting is scheduled for July 20, 2022 at 1pm.
- CZM Staff contact is Justine Nihipali

#### Coastal Hazards

- Section 309 Coastal Hazards Strategy for the *Probabilistic Tsunami Design Zone Mapping – Maui Island (Phase II) and Kaua'i Island* contract executed January 20, 2021 is underway. The first technical meeting for this contract took place on October 29, 2021. The Contractor requested a contract extension, and pending NOAA approval, the new contract end date would be on September 30, 2023.

#### County CZM Projects

- The CZM Program was provided the opportunity to extend an award for an additional 12-months to address delays due to disruptions from COVID-19 and has engaged with counties to develop scopes of work to continue previously



funded project initiatives that enhance their abilities to meet program objectives and policies.

#### Other Initiatives

- Greenhouse Gas Sequestration Task Force. Three projects have been completed to meet objectives of Act 15, SLH 2018. The most recent meeting was held March 16, 2022, and the next meeting will be held on May 23, 2022. CZM Staff contact is Justine Nihipali.
- CZM Program is involved with a number of external groups and activities:
  - Coral Reef Initiative Working Group (DLNR-DAR)
  - Hawaiian Islands Humpback Whale National Marine Sanctuary Advisory Council
  - Hawai'i Invasive Species Council (HISC) and HISC Resource Committee
  - Coastal States Organization
- Continue to review environmental assessments/environmental impact statements to ensure CZM objectives, policies, and initiatives are considered.

#### **VII. Report back from MACZAC member attendance at the May 5, 2022 Ocean Resources Management Plan Coordinated Working Group meeting**

Vice-Chair Jim Coon attended the May 5, 2022 meeting of the Ocean Resources Management Plan Coordinated Working Group but was absent from this MACZAC meeting. Mr. Barcina summarized the meeting during the CZM Report to MACZAC agenda item. The ORMP CWG hosted a presentation from DLNR-DAR on its Holomua Marine 30x30 initiative and the phases of its community engagement process. CZM will post the meeting summary and presentation pdf once available.

#### **VIII. Public Input**

No public input was provided.

#### **IX. New Business**

##### **A. Welcome and introduction of new MACZAC members**

Chair Fernandez welcomed new MACZAC members Taryn Dizon (Kaua'i) and Ben Ostrander (Lāna'i). Both MACZAC members Dizon and Ostrander expressed appreciation to be joining MACZAC and working alongside the other members while representing their respective communities.

##### **B. Discussion and evaluation of CZM's 2021 *Identifying Frameworks for Land-Based Pollution Management in the Hawaiian Islands***

In the interest of time, Chair Fernandez very briefly went over the purpose and summary of the *Identifying Frameworks for Land-Based Pollution Management in the Hawaiian Islands* report ("land-based pollution report"). The full report was also shared with MACZAC and posted to its website after the February meeting. Chair Fernandez requested members to consider what successes and shortfalls of the current land-based pollution management system they observe, critique existing public outreach and compliance campaigns, and consider on what land-based pollution issues MACZAC members want more information.

**C. Decision regarding potential site visit for August 26, 2022 meeting**

The next meeting is tentatively scheduled for Friday, August 26, 2022 at 9:30am – 12pm. Chair Fernandez recommended holding the meeting in person on O‘ahu in conjunction with a site visit related to Focus Area 1: Development and Coastal Hazards. MACZAC member Sullivan suggested DLNR’s long-term plan in development for Waikīkī as a meeting topic and nearby site visit. MACZAC member Kimbal Thompson suggested the Ala Wai or fishpond work in Kāne‘ohe Bay for a site visit. The locations were noted and a final decision will be announced closer to the meeting date.

**D. Suggestions for agenda items for next meeting**

Review and possible implementation of MACZAC member Nishimoto’s recommendation for brochure outreach on the ORMP will be discussed in further detail at the August meeting.

Multiple members expressed interest in reviewing their current PIG memberships, so Ms. Key agreed to follow up offline with MACZAC regarding the existing PIGs.

**X. Adjournment**

The meeting adjourned at 12:07pm.