

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

**MINUTES**

**Wednesday, May 18, 2016: 9:30 am – 2:30 pm**  
**Office of Planning's Conference Room**  
**235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813**

**ATTENDANCE**

- Members Present: Robert Nishimoto, Rich Brunner, Jim Coon, Angela Anderson, Phil Fernandez, Kimbal Thompson, Sue Sakai, Robin Kaye
- Members Absent: Donna Brown, Lori Buchanan, Dawn Hegger-Nordblom, Robert Kaden
- Office of Planning/Coastal Zone Management (OP/CZM) Staff Present: Justine Nihipali, Lisa Webster, Josh Hekeka
- Others Present: Bruce Anderson (DLNR/DAR), Lauren Yasaka (DLNR/OCCL), Anne Rosinski (UH/Hawaii Coral Reef Initiative), Nancy McPherson (DHHL), Zack Stoddard (OEQC)

**DISTRIBUTED MATERIAL**

- MACZAC Meeting Agenda for May 18, 2016
- Minutes from February 10, 2016 MACZAC Meeting [Draft]
- CZM Report to MACZAC (May 18, 2016)
- MACZAC Hotspots 5/2016
- Marine Geospatial Layers and Data Gaps
- Articles:
  - "BOARD TALK – Coastal Resilience Project Receives \$1 Million in Federal, State Funds" – (2016, May 1). BOARD TALK – Coastal Resilience Project Receives \$1 Million in Federal, State Funds. *Environment Hawaii*, p. 10.
  - "Feds, fishermen discuss offshore wind farm plans" – (2016, May 17). Feds, fishermen discuss offshore wind farm plans. *Honolulu Star-Advertiser*, pp. B5, B7.
  - "Haena plan goal: More fish" – [[http://thegardenisland.com/news/local/haena-plan-goal-more-fish/article\\_b49a17e6-83a2-5f02-bda3-e5acf4f12921.html](http://thegardenisland.com/news/local/haena-plan-goal-more-fish/article_b49a17e6-83a2-5f02-bda3-e5acf4f12921.html)]
  - "Hawaii Lawmakers To Obama: Don't Grow Marine Monument" – [<http://www.civilbeat.com/2016/05/hawaii-lawmakers-to-obama-dont-grow-marine-monument/>]
  - "Ocean View residents lacking beach access call for opening Pohue Bay" – [<http://hawaiitribune-herald.com/news/local-news/ocean-view-residents-lacking-beach-access-call-opening-pohue-bay>]
  - "Volunteers sought to help monitor ocean water quality in West Maui" – [<http://www.lahainanews.com/page/content.detail/id/532587/Volunteers-sought--to-help-monitor-ocean-water-quality-in-West-Maui.html?nav=19>]

**I. Call to Order**

MACZAC Chair, Sue Sakai, called the meeting to order at 9:36 am and welcomed everyone. All those present briefly introduced themselves.

**II. Approval of February 10, 2016 Meeting Minutes**

The February 10, 2016 Meeting Minutes were unanimously approved by all members present.

### III. Guest Presentations: Status Reports for Department of Land and Natural Resources (DLNR)

Ms. Sakai stated that DLNR is responsible for implementation of many of the tasks outlined in the Ocean Resources Management Plan (ORMP), and that MACZAC members are interested in a status report on what DLNR is working on, especially to do with climate change and other ORMP-related issues.

- Mr. Bruce Anderson, DLNR/DAR Administrator, provided brief updates on some of the initiatives DAR has recently been involved in:
  - Community-Based Subsistence Fishing Areas – DAR developed a management plan around the rules, had a hearing on that, and will be reporting to the Land Board on the results of that meeting. This is a living document which tries to address issues of monitoring and enforcement, which are challenging for community-based projects. Who’s going to be implementing, monitoring, enforcing? It is important to think about these issues early in the process and make sure that they’re clearly identified and resolved. Still determining how to monitor the effectiveness of the management measures.
  - Ka’upulehu Fisheries Management Area – this is a community-based project that has been in the works for the last 10 years, with a well-attended hearing held in February. Overwhelming support for closing a significant area of the coastline extending from Kukio to Kalaemano (approximately 3.5 miles of coastline). The proposal includes closing the area for all fishing out to 20 fathoms (120 feet), and then from 20-100 fathoms (120-600 feet) trolling and bottom-fishing will be allowed, along with crabbing, with restrictions on fishing of certain species. Had the hearing, will be making a recommendation to the Board at the end of this month.
    - Mr. Phil Fernandez, MACZAC member, noted that there is opposition to this project among many in the fishing community. Concerns include lack of transparency in the planning process, possibility of overfishing in neighboring waters, and lack of acknowledgement of opposing opinion.
    - Mr. Anderson thanked Mr. Fernandez for his input, and noted that he also has concerns about how to reach people who come in from other places to fish. Mr. Anderson also noted that DAR received a number of negative comments that were not expressed at the public meeting.
  - Maunalua Bay – the community is concerned with user conflicts. DAR is considering new rules to ban night spear-fishing, possibly add further restrictions on netting, and considering increasing the area to include all of Mamala Bay.
  - Expansion of the Papahānaumokuākea Marine National Monument – President Obama is considering expanding the existing Monument from 50 to 200 miles out (EEZ boundary). The downside to expanding the Monument would be the impact on fishermen. About 8% of longline catch (swordfish, big eye, some yellow fin) is from the area being considered for protection. Monument expansion would put additional pressure on fisheries in nearby areas.
  - Coral Bleaching – Mr. Anderson noted that DAR expects to see more and more of these events in the next few years. Mr. Anderson then introduced Ms. Anne Rosinski, of the University of Hawaii, Hawaii Coral Reef Initiative, who was recruited to do a study on coral bleaching for DAR.
- Ms. Rosinski began her presentation by noting that she has been working with Dr. Bill Walsh (DAR, Kona office), to find a way to investigate what types of management interventions can be taken following a coral bleaching event to help build resilience and recovery of corals.
  - Ms. Rosinski explained that coral bleaching is a stress response mainly to elevated temperatures. Other stressors include sediment and contaminated run-off.

- When corals bleach, it is due to loss of intracellular endosymbionts, also known as zooxanthellae. Corals can recover quite well from bleaching if water temperatures are reduced and zooxanthellae return.
- Corals can exist in a bleached state for a few months, allowing for a window of recovery.
- As temperatures increase, the accumulated stress leads first to bleaching, and then, if temperatures continue to increase, to mortality.
- Once there is algae growing on the coral, that indicates that the coral is dead, and there is no chance of recovery.
- Coral in Hawaii grows about a centimeter per year, so recovery after widespread bleaching and mortality can take 10 to 20 years.
- Ms. Rosinski shared temperature plots along with coral bleaching data for 2014 and 2015 for different areas within the Hawaiian Islands.
  - In 2014, there was a mild bleaching event mainly focused in the northern areas of the State, including Oahu and Kauai.
  - In 2015, there was another bleaching event, this time focused in the more southern areas of the State, including Maui and Kona. This event caused extensive coral bleaching and mortality. The highest temperature recorded in Kona waters over this time period was 86.9° F, about 2° F above normal.
- Ms. Rosinski also shared data for coral mortality in the Kona area over the last few years. The surveyed areas showed up to 66% live coral loss, with an average loss of 49.3% along the coast of West Hawaii.
- Part of Ms. Rosinski's work included surveying coral experts around the world to ask them what strategies they believe would be most effective as management interventions.
  - 176 experts were surveyed in 20 different countries, with a 47% response rate, with the majority of responses coming from Hawaii, other parts of the U.S., and Australia, as well as other Pacific Island groups.
  - 78% of respondents were scientists, with the vast majority having over 10 publications and over 10 years of experience in this field.
  - The bottom strategies identified by the survey (least effective): artificial reefs, attempts to eradicate introduced fish species, attempts to eradicate crown of thorns, establishing a moratorium on aquarium collecting.
  - The top 5 strategies identified by the survey (most effective): reducing sediment stress, reducing nutrient stress, establishing a network of permanent, fully-protected, no-take MPAs, which should make up 20-30% of coral reef habitats, enhancing marine enforcement efforts, establishing a network of permanent herbivore fishery management areas to specifically limit the harvest of herbivorous fish and sea urchins.
- Literature review – Ms. Rosinski read over 200 pieces of literature to discover what's been recommended to managers and what managers have done after bleaching events to accelerate the recovery process, and found that there are 5 types of recovery strategies discussed in the literature:
  - Try to stimulate new coral settlement.
  - Try to stimulate remnant coral to regrow.
  - Prevent additional damage to coral by reducing multiple stressors.
  - Replace dead coral.
  - Focus on algae overgrowth.
  - There were 4 examples in the literature of intervention following a bleaching event:
    - On the Great Barrier Reef, a no-anchor zone was instituted, which led to a decline in anchor damage, but no measurable increase in coral cover.
    - In the Philippines, coral fragments were transplanted into a denuded area, which led to tremendous success in increasing coral cover.

- In Southeast Thailand and Malaysia, high-traffic dive sites were closed after bleaching events. No outcomes have been reported.
  - Also on the Great Barrier Reef, aquarium fishers self-imposed a moratorium on collecting in bleached areas. No outcomes were published, but this moratorium was considered a success from the stakeholder collaboration point of view.
- Next steps: Look at political and sociocultural considerations in Hawaii, and narrow down spatially and conceptually what the coral bleaching recovery strategy for Hawaii will look like.
- Mr. Anderson added that a working group will be convening to see what's practical for Hawaii. Coral transplanting may not work well in Hawaii because our corals grow very slowly. Coral recovery in Hawaii may need to focus on making conditions favorable for existing corals – one way to do this is to make sure there are high numbers of herbivorous fish, especially parrot fish, the 'excavators and scrapers' of the reef. Parrot fish eat dead coral and algae, and create a denuded surface where new coral can grow. Sedimentation and sewage discharge are other stressors that need to be addressed.
- Lauren Yasaka, Staff Planner, DLNR/OCCL, introduced herself and provided an overview and status report of the Sea Level Rise Vulnerability Assessment and Adaptation Report (SLR Report).
  - In 2014, the Hawaii State Legislature passed the Hawaii Climate Adaptation Initiative Act (Act 83). The purpose of Act 83 is to address the effects of climate change in order to protect the State's economy, health, environment, and way of life.
  - Act 83 calls for the establishment of an Interagency Climate Adaptation Committee (ICAC), led by DLNR and OP. The ICAC is composed of the following members: Suzanne Case, Leo Asuncion, Senators Laura Thielen and Mike Gabbard, Representatives Chris Lee and Ryan Yamane, and directors/chairs of the following agencies: DBEDT, DOA, DOH, DOD, DOT, DHHL, OHA, and county planning departments.
  - The first task of the ICAC is to develop a statewide SLR Report by December 31, 2017. The purpose of the SLR Report is to help the Legislature identify risks and potential losses that may occur due to sea level rise. The SLR Report will also serve as a framework for the State and ICAC to address other climate-related threats and climate change adaptation priorities, ultimately leading to a Climate Adaptation Plan for the State of Hawaii.
  - DLNR/OCCL will lead the development of the SLR Report in coordination with the ICAC. Tetrattech has been contracted to assist in development of the Report. This Report is a living document, and will evolve as the science evolves.
  - Tetrattech will be using Hazus to predict vulnerabilities and potential losses. Hazus is FEMA's software program that uses GIS layers to run scenarios and estimate potential losses of buildings and infrastructure, as well as estimating the impacts of these losses on populations.
  - A 50% draft Report is to be completed by late October/early November 2016 using Oahu data, with the final report due to the Legislature at the end of 2017. The ICAC would like to provide a briefing to the Legislature at the end of 2016 when the Draft SLR Report is completed.
  - The SLR Report will be using Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathways (RCP) 8.5 projections for 2030, 2050, 2075, and 2100 mixed with Dr. Chip Fletcher's (UH SOEST) data on coastal erosion, seasonal wave run-up, static and groundwater inundation. The SLR Report will also include coastal floodplains data (provided by Tetrattech) and community data from the counties.
  - The SLR Report will be looking at social, economic, and environmental vulnerability, and quantifying losses based on these measures.

- The Hawaii Climate Adaptation Portal, with ICAC meeting minutes, SLR workshop presentations, and additional relevant information, can be found at the following URL: <http://climateadaptation.hawaii.gov/>.

#### IV. **Hawaii Coastal Zone Management (CZM) Program Report**

Ms. Justine Nihipali, Office of Planning, went over the CZM Program Report highlighting the following:

##### **National CZM Program Funding**

For FY 2016 (July 2016 – June 2017), the CZM Program is at overall level funding from FY 2015. Specifically, there was an increase in administrative costs [Section 306 funds] (due to collective bargaining contracts), and a reduction on project funding [Section 309 funds]. The CZM Program has been informed that they will be awarded a Project of Special Merit grant, which may be able to make up for the reduction on project funding.

##### **Hawaii CZM Program**

The following is a status summary of the Hawaii CZM Program and its initiatives as of 5/18/2016:

- 8 of 10 positions staffed (Policy Analyst and CZM Manager vacant; in recruitment)
- 1 contractor (via RCUH) for two project areas (MACZAC and Sub-Regional Ocean Partnership (Sub-ROP) Admin)
- CZM Website updated periodically (<http://planning.hawaii.gov/czm/>)

##### Section 309 Assessment and Strategy / 2016-2020

- Final Assessment and Strategy approved by NOAA and will begin implementation on July 1, 2016
- CZM Staff contact is Justine Nihipali

##### Ocean Resources Management Plan (ORMP)

- Implementation underway with 2 Action Teams established (Appropriate Coastal Development/Coastal Hazards, and Coral Reef)
- Council on Ocean Resources Meeting scheduled for Friday, May 20, 2 - 4 pm, at 215 S. Hotel Street (Hemmeter Building), in the first floor multipurpose room.
- Updated ORMP available on-line at ([http://files.hawaii.gov/dbedt/op/czm/ormp/ormp\\_update\\_reports/final\\_ormp\\_2013.pdf](http://files.hawaii.gov/dbedt/op/czm/ormp/ormp_update_reports/final_ormp_2013.pdf))
- CZM Staff contact is Justine Nihipali
- Community-Based Subsistence Fishing Areas (CBSFAs) - OP worked with Bruce Anderson and Erin Zanre to provide public meeting facilitation for CBSFAs in Haena and Mo‘omomi.
- Hawaii Moon Calendar Project – looking at doing community workshops with interested communities on the Big Island for training in the monitoring protocol for their catch, so that it can inform their spawning seasons calendar. This will provide information which will lead to more pono fishing practices.

##### Climate Change Adaptation

- One of the ORMP Management Priorities
- Current focus is on the implementation of Act 83 (2014) – Inter-agency Climate Adaptation Committee (ICAC); DLNR and OP are co-chairs of the ICAC
- Looking at developing managed retreat strategies through scenario-based workshops
- ICAC projected to have meetings throughout 2016 and 2017
- Information on Climate Change Adaptation can be found on-line at (<http://planning.hawaii.gov/czm/initiatives/adapting-to-climate-change-2/>)

- Interim CZM Staff contact is Rebecka Arbin

## V. Reports from MACZAC Working Groups

No Working Group reports were given.

## VI. Presentation: Marine Data Analysis – Identifying and Filling Geospatial Data Gaps

Mr. Josh Hekekoa and Ms. Lisa Webster, OP/CZM Staff, gave a short PowerPoint presentation summarizing the Hawaii Coastal and Ocean Planning Project, OP's preliminary steps in marine spatial planning.

- The first steps of this project included inventorying available GIS data layers that could be used in coastal and ocean planning.
- The available GIS layers were then analyzed for accuracy, timeliness, and completeness, and separated into the following categories: Preservation, Pressures, and Ocean Resources.
- Data that fell into the category of Preservation included coral reefs, fishponds, wetlands, bottom types, fish aggregating devices (FADs), and wrecks.
- There were a number of issues identified during analysis of existing data:
  - There were multiple data layers from different sources that included coral and fishponds data. When comparing the data from each layer, discrepancies were identified in both the location and extent of coral reefs and fishponds.
  - There were also data layers that appeared to be outdated or inaccurate, including the FADs and Wrecks maps.
- After determining which layers were publically available, and identifying the gaps in these layers, stakeholder engagement meetings were held with multiple state agencies and NGOs to try to gather additional information about which of the existing data layers were most accurate, as well as to find out what data was needed but not yet available.
- The findings of this project will be written up in the Hawaii Coastal and Ocean Planning Project Report, to be submitted by June 30, 2016.

## VII. Discussion Highlighting Critical Marine and Coastal Hotspot Issues, By Island

- Hawaii Island –
  - Hilo  
Dr. Bob Nishimoto, MACZAC member, noted that there has recently been a heavy migration of Micronesians and other Pacific Islanders to the Hilo area, and this seems to be driving changes in target species of fish, with a move towards herbivores – mostly wrasses and other small species, including butterfly fishes. Normal catch reporting is usually to the dealers, but more and more fishermen are using social media to advertise and then selling fish on the side of the road, cutting out the middlemen. Mr. Fernandez noted that there has also been a shift in recent years in the target species on the west side of Hawaii Island to smaller, herbivorous species.
  - West Hawaii  
Mr. Fernandez also shared a long term hotspot for West Hawaii - The National Parks Service (NPS) filed a petition in 2013 with the Water Commission to take over management of Keauhou Aquifer, which is currently under county jurisdiction. Initially, the issue was the protection of NPS' Kaloko Fishpond, but this proposed change in management could affect mauka development as well because new wells may not be approved. A compromise might include designation of a smaller portion of the aquifer as something NPS can take over. In addition to Kaloko Fishpond, another environmental issue that has come up in the past few years is coral bleaching. With more development, less fresh water goes out to the coral reefs, which could negatively impact the coral reefs. Mr. Fernandez stated that UV photos of the

area are able to show the fresh water plume, and the plume appears to be getting smaller and smaller over time.

- Maui –
  - Lahaina Harbor waste oil disposal facility  
Mr. Rich Brunner, MACZAC member, shared with the group that the facility was found to have contaminants and is going to be shut down. If this facility is shut down, what will people do with waste oil?
  - Lahaina Harbor in need of dredging  
Mr. Brunner also noted that the shoaling of sand in Lahaina Harbor, as well as other facilities, including Kihei Boat Ramp, are making it difficult for boats to navigate. Until the Coast Guard closes a facility, or until boats can no longer navigate, DOBOR won't go in and dredge. This policy leads to loss of income for the local tourism industry, as well as posing a danger in case of emergency situations at sea. Mr. Brunner and Mr. Jim Coon, MACZAC member, will draft a letter encouraging DOBOR to dredge in anticipation of closure, rather than wait until after closure to dredge. The letter will also suggest that DOBOR allow for privatization of harbors. Ms. Sakai will send out the letter on behalf of MACZAC to Suzanne Case, DLNR Chair, and Ed Underwood, DOBOR Administrator.
  - Honoapiilani Highway realignment  
Ms. Sakai noted that she hasn't received an answer to the letter MACZAC sent to DOT in October 2015 regarding Honoapiilani Highway realignment. The group agreed that Ms. Sakai will send a second letter to the Governor, to Senator Kalani English, a member of the Senate Committee on Transportation and Energy, as well as to the same cc list as the original letter, asking for a response to the first letter.
  - Kanaha Beach Park  
Mr. Coon shared a letter written on May 11, 2016 to Jimmy Gomes, Maui representative of the Board of Land and Natural Resources (BLNR), from the Maui Boardsailing Association. The letter discusses a dangerous situation at Kanaha Beach Park, where DLNR has recently installed a post in the water, about 10 feet from shore, to demarcate the mauka end of the swim zone as established by Administrative Rule in the 1980s, not taking into account changes to the user zones that have been developed through extensive community outreach and discussion over the past three years. According to the letter, the post is under water at high tide, and is very difficult to see from the ocean side. Kite surfers are getting tangled up on the post, and someone could get severely injured or killed if the situation is not rectified. Mr. Coon would like MACZAC to forward the Maui Boardsailing Association letter to Chair Case, along with the original petition sent to William Aila from the Maui Boardsailing Association in 2013 requesting amendment to HAR 13-256-130 Kanaha Beach Park Restricted Zones. The group agreed that Ms. Sakai would send out a letter to Chair Case on behalf of MACZAC.
  - Between Lahaina and Kahului  
Ms. Dawn Hegger-Nordblom, MACZAC member, sent in some photos illustrating heavy commercial use of the coastline between Lahaina and Kahului (photos showed multiple trucks towing kayaks, as well as large tour buses parked on the side of the road). Mr. Brunner stated that the tour operators had probably been pushed to these areas due to regulations in other areas.
- Molokai – Ms. Lori Buchanan, MACZAC member, submitted several hotspots for Molokai:

- Moomomi CBSFA  
Malama O Moomomi continues to work to obtain the CBSFA designation from DLNR.
- Molokai Community Plan Update  
Molokai community members showed up prepared to give feedback to Maui County Long Range Planning Division for the Molokai Community Plan Update. Efforts to provide feedback for environmental protection for land and sea were spearheaded by the Molokai Aha Kiole who did an outstanding job of gathering input from the five moku of Molokai.
- DLNR Permits for water/ocean events  
The Molokai Aha Kiole also sent a letter to DLNR requesting information about who is receiving ocean permits for an array of water/ocean events that use Molokai. This information is needed to assess impacts to nearshore waters and the island itself.
- Draft Kalaupapa National Historical Park Plan  
There is an ongoing Section 106 consultation for a Draft Kalaupapa National Historical Park Plan.
- Statewide –
  - Papahānaumokuākea Marine National Monument proposed expansion  
Ms. Buchanan also submitted a petition and maps from Expand Papahānaumokuākea, an organization in favor of expanding the existing Marine National Monument protections from 50 nautical miles around the Northwestern Hawaiian Islands to 200 nautical miles (the full extent of the U.S. exclusive economic zone), excluding the waters surrounding Kauai and Niihau, and granting co-trusteeship to the Office of Hawaiian Affairs.

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

No public input was given.

#### **IX. Presentation of 2015 Douglas Tom “Thumbs-Up” Award to West Maui Ridge to Reef Initiative DAR Partner, Bruce Anderson**

Ms. Sakai noted that the Douglas Tom Thumbs-Up Award is presented annually to an organization that furthers the goals of MACZAC, advances the CZM Program and its ORMP, and actively engages the community. Following Mr. Anderson’s DLNR/DAR status update, Ms. Sakai presented him with the 2015 Thumbs-Up Award for West Maui Ridge to Reef Initiative, an organization that has partnered with DAR. West Maui Ridge to Reef Initiative is an all-encompassing approach across multiple agencies and organizations to address adverse impacts to coral reefs in West Maui.

#### **X. New Business**

- Agenda item for next meeting: Mr. Robin Kaye, MACZAC member, noted that many of MACZAC’s members have been with MACZAC for at least 10 years, and this is keeping others from coming in and taking a leadership role within the community. Mr. Kaye suggests that MACZAC have a discussion about how to move towards a structure that integrates institutional memory with succession and generational transitioning.
- The next MACZAC Quarterly Meeting will be held Friday, September 23<sup>th</sup>, 2016, the last day of the HCPO Conference, at the Grand Hyatt Kauai.

#### **XI. Adjournment**

MACZAC Chair, Sue Sakai, adjourned the meeting at 1:51 pm.