

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

**MINUTES**

**Friday, January 27, 2017: 9:30 am – 12:30 pm**  
**Office of Planning's Conference Room**  
**235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813**

**ATTENDANCE**

- Members Present: Phil Fernandez, Jim Coon, Nick Palumbo, Rich Brunner, Dawn Hegger-Nordblom, Kimbal Thompson, Sue Sakai, Robert Nishimoto, Angela Anderson, Lori Buchanan
- Members Absent: Robert Kaden, Donna Brown
- Office of Planning/Coastal Zone Management (OP/CZM) Staff Present: Justine Nihipali, Lisa Webster
- Others Present: Tom Eisen (OEQC)

**DISTRIBUTED MATERIAL**

- MACZAC Meeting Agenda for January 27, 2017
- Minutes from September 23, 2016 MACZAC Meeting [Draft]
- MACZAC Hotspots 1/2017
- Thumbs-Up Award Guidelines
- Thumbs-Up Award Nominations 2016

**I. Call to Order**

MACZAC Chair, Sue Sakai, called the meeting to order at 9:39 am and welcomed everyone. All those present briefly introduced themselves. Ms. Sakai shared with the group that there are grants available through the National Parks Service, Rivers, Trails, and Conservation assistance Program to fund staffing. Proposals are due in August.

**II. Approval of September 23, 2016 Meeting Minutes**

The September 23, 2016 Meeting Minutes were unanimously approved by all members present.

**III. Election of MACZAC Officers**

The group unanimously voted in favor of having Kimbal Thompson as Chair, and Angela Anderson as Vice-Chair.

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

Justine Nihipali, CZM Manager, provided a verbal CZM Program Report highlighting the following:

Hawaii CZM Program Goals for 2017

- Approval of the Coastal Non-Point Pollution Control Program (Staff Contact – Rebecka Arbin)
- Completion of Probabilistic Tsunami Design Zone Mapping Project
- Better communicate CZM Project successes

Ocean Resources Management Plan (ORMP)

Ms. Nihipali presented the draft ORMP Dashboard to the group, and explained that she envisions this as a way for agencies to share what they are doing as it relates to the ORMP. The Dashboard is organized to reflect the goals and metrics of the ORMP, and includes information from the plan about each of the goals.

Phil Fernandez, MACZAC member, suggested that it would be helpful to have a one-page handout available to introduce the Dashboard.

National Estuarine Research Reserve in Hawaii

Ms. Nihipali shared that as of January 17, 2017 the NERR designation for the Heeia site was completed several months ahead of schedule.

**V. Guest Presentation: Update on Building Code Amendments for the City & County of Honolulu to Account for Existing Coastal Hazards and Future Climatic Risks**

Kimbal Thompson, MACZAC Chair, briefly introduced Gary Chock, President and Structural Engineer at Martin & Chock.

- Mr. Chock stated that the basic premise of the study is to look over the horizon to decide what changes should be made to building codes and standards to take into account the state of affairs of natural hazards as impacted by climate change. The purpose of this is to maintain disaster resilience moving into the future. Mr. Chock added that adaptive design should be incorporated so that future changes can more easily be made to existing structures, as necessary. Coordinated code and ordinance changes are being proposed for the City and County of Honolulu. The County will have the option of initiating changes to its codes and ordinances based on findings of this report.
- Mr. Chock pointed out that there's uncertainty in knowledge. Climate change models have a lot of uncertainty. The IPCC understand this, and so they base their estimates on the ensemble mean, which gives less weight to outliers, in order to reduce 'modeling noise'. In Hawaii, we should look at models that do more work on representing El Nino-La Nina cycles. The ensemble mean global sea level rise prediction is approximately 2/3 of a meter by the year 2100.
- The study looked at how coastal flooding maps might change when climate change effects are accounted for. A pilot study was done for the Waikiki area. The model considered frequency of storms, storm intensity, and sea level rise as projected in the last 20 years of this century. If there is an increase in flooding, what will be the economic impact on structures that might be flooded in the future? What is a justifiable amount of expense to mitigate that?
- The general indications from the model is a predicted shift to greater intensity storms with greater rainfall, but not, necessarily, an increase in the number of storms. The study looked at 50 simulations of possible hurricane events in the twenty year period 2080-2100, and chose 10 critical events based on wind speed at Kaka'ako. He then created Probabilistic Inundation Maps looking at 330-year, 500-year, and 1000-year storm events. Sea level rise was also incorporated into the flood hazard maps. Results indicate that Waikiki is likely to flood from overtopping of the Ala Wai Canal, rather than from coastal wave set-up and run-up. Estimated losses range from \$0.76 Billion to \$3.623 Billion, with the higher estimate taking climate change and sea level rise into account. Using basic economic analysis, Mr. Chock believes that a current investment of \$20-\$25 million dollars is justifiable to try to avoid future losses.
- The lifespan of existing single-family homes as-is are unlikely to exist in their current state in 75 years, so the study does not reflect that the building code amendments should apply to those structures. Resilience for the community is based on the infrastructure (buildings, transportation networks, supply chain facilities, coastal infrastructure, energy supply and distribution, water and wastewater systems). Develop more resilient, more adaptive infrastructure. Develop to the most probable (not the worst case) climate. An example of this would be examining the building of a levee for the Ala Wai Canal, with the intent to design the foundation around the future climate, but to have the wall above built for current needs. Make some investment now, but don't require tax payers of today to completely pay for something that probably won't be needed for many years.

- The State Building Code Council (SBCC), was created because of the Hawaii State Building Code, a statute of 2007. The Council has the authority to adopt, amend, and update codes and standards including, but not limited to, those applicable to buildings, residential structures, and hurricane resistant standards. However, since 2010, DAGS has not proceeded with any State Building Code updates approved by the SBCC.
- The study provides proposed amendments to the Honolulu Building Code (ROH Chapter 16) to revise the rainfall intensity map to account for higher intensity storms, by adding 15 minute 500-year intensity, and to update wind speed maps for Critical and Essential Facilities. For Risk Category III and IV structures, the study includes proposed amendments to building codes to require that foundation systems are designed to take into account 80 years of shoreline erosion and 2 feet of relative sea level rise.
- The study also proposes the creation of a Coastal Construction Control Zone (to be defined by Chapter 21A as the 500-year coastal flood inundation limit, to include the effects of 2 feet of sea level rise), with requirement that structural and foundation design be in accordance with the International Building Code, and not the less stringent International Residential Code that does not require engineered structures. If adopted, the Coastal Construction Control Zone would also be subject to SMA review.
- Electrical Code amendments (ROH Chapter 17) would require locating electrical equipment for Risk Category III and IV structures above the 500-year coastal flood inundation limit including the effects of 2 feet of sea level rise, or locate in a waterproof enclosure.
- The study identifies that greater drainage capability is needed off of roofs and proposes amending the Honolulu Plumbing Code (ROH Chapter 19) to include primary roof drainage. The location and sizing of drains and gutters will be coordinated with the structural design and pitch of the roof, and will be sized based on a rainfall intensity equal to or greater than both the 15-min duration/500 year and the 60-min duration/500-year storm.
- While Honolulu has fire hazard maps that show increased incidences of wildfires, used for fire management, we haven't used these to look at whether communities near those should have some kind of buffer zone to protect them from the wildfires.
- Adjustment of Shoreline Setback Line. Maui and Kauai have updated their setback rules to account for historic erosion rates. DPP pointed out that if Honolulu adopted these same rules, many people would be unable to rebuild due to the small size of lots. Proposed amendments to Honolulu Building Codes would need to provide exceptions for those small lot sizes.
- Certified Shoreline (HRS 205A) could, for planning purposes, also include an Expected Shoreline map taking into account shoreline erosion and sea level rise over the next 50 years.

## **VI. Discussion of MACZAC Retreat Outcomes**

A Retreat Working Group was formed, with the following members: Angela Anderson, Phil Fernandez, Sue Sakai, and Kimbal Thompson. The Retreat Working Group will make recommendations at the next MACZAC Meeting on some ways to make MACZAC more effective.

## **VII. Reports from MACZAC Working Groups**

- Education and Website Working Group  
Ms. Lisa Webster, MACZAC Administrative Assistant, noted that she updated the MACZAC brochure.
- Ocean Resources Working Group  
No Report.
- Shoreline Access Working Group  
No Report.
- Legislative Working Group  
No Report.

- Executive Working Group (Formerly the Request for Comments Working Group)  
No Report.

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

- Molokai – Lori Buchanan, MACZAC member, discussed the following Molokai hotspot:
  - The Aha Moku, which is an open organization focused on resource preservation, got some grants in to help the organization hire staff and get organized. The Aha Moku had its Number 8 Puwalu in 2016, and a couple of resolutions came out of it. One of the resolutions was to try to get a Hawaiian Cultural Representative on every relevant Board and Commission within the State of Hawaii. The Aha Moku Advisory Council at DLNR adopted Draft Administrative Rules, with help from UH Law Students. The DLNR Chair feels the Draft Administrative Rules are overreaching for an advisory council, but it's a really thorough document, and was voted through by the Aha Moku Advisory Council.

- East Hawaii Island – Dr. Robert Nishimoto, MACZAC member, discussed the following East Hawaii Island hotspot:

- Hamakua Coast

Dr. Nishimoto noted that the Hawaii County CDP is soon going to be approved, which has a lot of open space. There are also updates to setbacks in that plan, which is good.

Through the County Council Chair, Dr. Nishimoto contacted Brian Schatz's office to try to access overflight information. Chip Fletcher suggested getting overflight information to look at stability. From there, based on study results, amendments can be made to building codes.

- Hawaiian Fish Ponds

Dr. Nishimoto considers Hawaiian Fish Ponds as surrogate estuaries. The same way that goats can clear the land, Dr. Nishimoto believes mullet can clean the waters by filtering the mud. Some of the ponds are being stocked with the wrong species of mullet (the Australian mullet), and Dr. Nishimoto has offered to help identify the correct mullet species, but his offers of help haven't been accepted. He would like to attend meetings of the Hawaiian Fish Pond Working Group, but is not sure how to go about getting invited.

Dr. Nishimoto added that DAR's Ānuenue Fisheries Research Center should get involved in natural remediation by releasing native species of mullet where needed.

- Hawksbill Turtles

Mr. Fernandez added that there are pickup trucks driving over Hawksbill Turtle nesting sites on beaches in the Kau area. NOAA Protected Resources Division is aware of this problem, and is planning outreach and education to mitigate this problem.

- Kauai – Angela Anderson, MACZAC Vice-Chair, shared the following Kauai hotspots:

- Driving on the beaches

Ms. Anderson noted that driving on the beaches is very popular with Kauai locals, and it poses a danger to beach goers. A sunbather at Waialua was killed when a vehicle drove over her.

- Water Quality in Streams and Estuaries

MRSA infections are common on Kauai, and DOH does not keep track of them. Ms. Anderson's daughter contracted a MRSA infection after playing in a stream at Maha'ulepu. While seeking treatment for the infection, Ms. Anderson was told by the doctor that 8-10

cases of MRSA infections are treated every day on Kauai. The doctor explained to Ms. Anderson that the bacteria is everywhere in the sand and the water on Kauai. People in the Kauai paddling community also shared with Ms. Anderson that they regularly have to deal with MRSA. The EPA is now requiring signage when there are toxic levels of bacteria in the water.

Nick Palumbo, MACZAC member, noted that when he was working as an ocean safety officer in Waikiki, one of his coworkers contracted a MRSA infection as well.

- Kuleana Lands in the Pila‘a Area  
There are issues with coastal access in the area. Ms. Sakai suggested contacting the Na Ala Hele Advisory Council folks to see if they can help. Ms. Sakai and Mr. Fernandez also noted that there should be a community group taking on an issue at the local level before MACZAC gets involved.
- Lanai – Mr. Palumbo shared the following Lanai hotspots:
  - Fishing Regulations  
Someone from DLNR came to Lanai to talk to the fishermen there about changes to uhu fishing rules, but the fish were misidentified to the fishermen, which led to the fishermen not feeling compelled to follow the new rules. People are also increasingly coming on boats from Maui and spearing fish.
  - Manele-Hulopoe Marine Life Conservation District  
Larry Ellison shot off a 40-foot container of fireworks in the Manele-Hulopoe Marine Life Conservation District, home to the ‘ua‘u kani, or wedge-tailed shearwater (also known as ‘crying baby’). The next day there was trash everywhere on the beach in the area. The community was really upset about Ellison’s disregard for all of the rules that everyone else is expected to follow.
- Maui – Rich Brunner, MACZAC member, discussed the following Maui hotspot:
  - Injection Wells in Maui  
A study was done that clearly links turbidity and poor water quality in Maui to the wastewater injection wells. Mr. Brunner added that the water in South Maui is always green.
  - Brown Water Events in Kapalua  
Linked to construction site in the area. Any surf events in the area cause whatever silt is in the water to be resuspended, leading to coral stress.
- Maui – Jim Coon, MACZAC member, shared the following Maui hotspot:
  - Kanaha Beach Park Renovation Plan  
The County of Maui Parks Department has developed a proposed plan for renovation of Kanaha Beach Park which has failed to incorporate the feedback and concerns of the park’s community members. The plan proposes to close convenient existing parking and replace it with poorly located, inconvenient parking vulnerable to vandalism and thievery. Environmental groups are concerned that the proposed parking may generate too much foot traffic over dunes and across sensitive areas. The community is requesting support from MACZAC in asking that the County slow the timeline of the plan and make sure that the community is satisfied and supportive.
- Statewide – Phil Fernandez, MACZAC member, shared the following statewide hotspots:

- Hawaiian monk seals  
The recently reported increase in numbers of Hawaiian monk seals from 1250 to 1400 individuals was due to researchers changing their method of modeling, which led to different calculations. The new model is thought to be more accurate. There aren't any more seals than there were before.
- Increased Demand for Reef Fish  
Mr. Fernandez noted that displaced Micronesians coming to Hawaii are creating a high demand for reef fish, a popular food source for this group. Fishermen are catching reef fish in the Kona area and sending them to Honolulu to sell, and many of these fish have ciguatera toxin.

**IX. Public Input**

No public input was given.

**X. Nominations and Selection of 2016 Douglas Tom "Thumbs-Up" Award**

Chair Thompson made a motion, which was unanimously accepted, to defer the discussion of the 2016 "Thumbs-Up" Award until the next meeting, due to lack of time.

**XI. New Business**

- The next MACZAC Quarterly Meeting will be held Friday, April 7, 2017 at the Office of Planning Conference Room.
- Agenda items for next meeting:
  - Discussion of 'MACZAC Visioning' session.
  - Nominations and Selection of 2016 Douglas Tom "Thumbs-Up" Award

**XII. Adjournment**

Chair Thompson adjourned the meeting at 1:20 pm.