# MINUTES OF THE MEETING OF THE HAWAIʻI CLIMATE CHANGE MITIGATION AND ADAPTATION COMMISSION

DATE: THURSDAY, August 10, 2023

TIME: 1:00 PM

PLACE: 1151 PUNCHBOWL STREET, CONFERENCE ROOM 132 HONOLULU, HI 96813, AND VIDEO CONFERENCE

PUBLIC VIEWING LINK: [https://www.youtube.com/@climatecoordinator2356](https://www.youtube.com/%40climatecoordinator2356)

Attendees:

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| Dawn Chang, DLNR, Co-ChairMary Alice Evans, OPSD, Co-ChairRep. Nicole LowenMark Glick, DBEDT DesigneeNoelle Cole, Honolulu City and County Designee, Katie Ducatt, DHHLJeremy Koki, DOE DesigneeDavid Lopez, HIEMAJustine Nihipali, OPSD | Diana Felton, DOH DesigneeMelissa Miranda-Johnson, DOT DesigneeApril Surprenant, Hawaii County DPP DesigneeMark Glick, DBEDT Designee Kaʻāina Hull, Kauai County DPPLeah Laramee, CCMAC Staff Dante Hirata-Epstein, CCMAC StaffJo Dunne, CCMAC Staff |

Additional attendees: Kara Neal (CCMAC), Amy Wirts (OCCL), Morris Atta (DOT), Trinity Gilliam (CCMAC), Michael Cain (DLNR), Monique Schafer (HSEO), Katie Rooney (Ulupono Initiative), Ben Sullivan (CCSR), Asia Yeary (EPA), James Francucci (CCMAC), Brad Romaine (HI Sea Grant), Meg Turner (Senator Gabbard’s Office), Kiana Otsuka (HSEO), Dexter Kishida (CCSR) Nancy McPherson, DHHL

The meeting took place in a hybrid format. It was hosted in person at 1151 Punchbowl Street and on Zoom and live cast on the Commission's YouTube for public viewing. All materials are posted on the Commission’s website: https://climate.hawaii.gov/hi-commission/.

1. **Welcome, roll call, and announcements.** The public viewing link opened approximately 30 minutes before the meeting began. Co-Chair Chang began the meeting at 1:00PM
	1. Co-Chair Chang gave roll call. Quorum was reached.
2. **June 22, 2023 Meeting Minutes** (Action item) Co-Chair Chang (30:09)

# Co-chair Chang requested that any comments or additions to the commission meeting minutes for June 22nd, 2023, be brought forth.

# Commissioner Cole had corrected the spelling of her name and added that DHHL had completed their coastal management plan for homesteads on the south shore of Moloka’i.

# Co-Chair Evans called for motion to approve the meeting minutes for June 22nd, 2023, with the amendments. Motion by Commissioner Hull, second by Commissioner Felton. Motion passed unanimously.

1. **Commission Member Updates** (Non-action item.) Co-Chair Chang (32:05)

# Co-Chair Evans shared that OPSD has been working with the Community Development Authority on Act 221, which amends community development authority for Kakako developments to be required to report on SLR and climate change impacts. This will hopefully lead to future developments becoming more resilient.

# Commissioner Surprenant shared that the HI county climate action plan is complete and was adopted by County Council last week. The general plan update will be incorporated into documents next week. They are still working on updating their shoreline setback regulations with updated data and site-specific regulations. They also contracted a consultant to analyze and update flood and erosion control codes.

# Commissioner Cole shared that Honolulu county has updated its building energy conservation code, received EPA funding to update its climate action plan, and is working with the Interagency One Water Panel on a coordinated infrastructure framework action plan. There is also a drainage action plan in progress for flood mitigation in Kalihi Kai. Additionally, the Waikiki area action plan for adaptation has begun, and a draft of the Primary Urban Center Development Plan will soon be presented. The East Honolulu Watershed Management Plan was also recently released for public comment.

# Commissioner Glick shared that HSEO has approved several new clean energy projects with the Hawai’i Natural Energy Institute.

# Co-Chair Chang shared that DLNR’s Hawai’i Drought Council will be meeting again on August 3rd, in recognition of the drought expected from El Nino. The recent fires have showed the necessity for this.

1. **Update on the Environmental Protection Agency Award and EPA Site Visit** (Non-action item) Co-Chair Chang, Leah Laramee (CCMAC) (40:29)
2. Laramee gave a recap of the $3 million award for the Priority Climate Action Plan and Comprehensive Climate Action Plan. The PPAP will be submitted in March for consideration for a 4.6 billion pot of implementation funds. The CCAP will be ongoing over two years and will focus on outreach, adaptation, and resiliency.
	1. Laramee presented the timeline for this effort. CCMAC is currently working on hiring contractors and staff, identifying priority actions/workforce issues, and how to partner with other funding opportunities to leverage resources as much as possible.
3. Laramee went over the requirements including the GHG inventory, emissions requirements, and workforce planning analysis.
4. The RFP to hire a contractor for the climate action plan is complete, four have been selected for best and final offers which will be due August 25th.
5. CCMAC is also recruiting five additional positions, which will be run through Hawai’i Sea Grant, as they have the ability to pay higher. Once this is signed by the dean, we will start recruiting.
	1. There will be two subawards to Sea Grant and the County of Hawai’i as well to do outreach work.
6. The CCMAC website is updated on these plans, and an outreach work plan is also being developed. Overburdened communities and Native Hawaiian communities will be targeted for outreach that gives them an opportunity to participate. Outreach will be presented in concepts that they can connect with.
7. All Technical working groups have each had at least one meeting so far. Laramee noted that the transportation sector has been brought up as a concern in every area.
8. Organizations should contact Laramee if they would like to be involved in the review team for the climate action plans. It will meet bi-weekly.
9. It was determined to switch items 5 and 6 on the agenda since the presenter on item 5 was still parking.

**6.**  **Impacts of Climate Change on Health in Hawai’i** (Non-action item) Co-chair Chang, Diana Felton (DOH), Leah Laramee (CCMAC) (51:20)

1. Commissioner Felton introduced her research on the topic and how she had framed it to be Hawai’i-specific, and gave an overview of the health impacts that will result from climate change.
	1. Air pollution will increase allergens, cardiovascular disease, and respiratory illness.
	2. Extreme heat will not be as much of an issue as it is on the continent, but decreased tradewinds will have an impact. Heat has accessory impacts violent crime, learning problems, and worsened mental health impacts.
	3. Drought will impact drinking water, agricultural water supply, and wildfire risk.
	4. Wildfires and smoke will result in injuries and fatalities, loss of homes and property, respiratory illness, decreased air quality, and worsened mental health.
	5. Environmental degradation will cause increased climate migration, which we are already seeing from other from pacific island communities, increased civil conflict, loss of cultural ties, agricultural impacts, and loss of tourism economy.
	6. Degraded living conditions and social inequalities will cause disproportionate impacts on overburdened communities, exacerbation of inequities, and strains on the economy.
	7. Rising temperatures and habitat changes will increase the risk for invasive vectors, including mosquitos and ticks, and vector-born illnesses that can come with them.
	8. Impacts to the food system will include increased prices, food insecurity, disruption to the import supply change, and health impacts of food insecurity.
	9. Severe weather and floods will result in injury, drowning, property loss, disruption of essential services, mold in homes, cesspool overflows, and chemical contamination.
	10. Decrease in water quality will result in harmful algal blooms.
	11. Mental health impacts will include stress, anxiety, depression, PTSD, eco-grief, and strains on social relationships. Youth will be especially vulnerable.
2. Commissioner Felton expressed that although these predictions are depressing, we still have time to make change in a lot of these areas to prevent negative outcomes and to reduce their potential negative impact.
3. James McCallum was introduced, and he shared about DOH’s current project to assess vulnerable communities in Hawai’i based on the CDC’s BRACE framework.
	1. The DOH website has been updated with a portal on climate change and health and resources for healthcare providers.
	2. The Climate Change and Health Hui started back up in June and meets again August 23rd.
4. **Projections of Severe Weather Due to Climate Change** (Non-action item) Co-Chair Chang, Professor Pao-Shin Chu (UH Mānoa) (1:06:37)
5. Laramee introduced Professor Pao-Shin Chu, State Climatologist at UH Mānoa. Chu gave a presentation of the research he has done on climate change and extreme weather, particularly tropical storms.
	1. “Tropical cyclones” is umbrella term for all types of tropical storms, ranging from depressions, to storms, to hurricanes.
	2. Chu gave examples of recent hurricanes like Hurricane Iwa and Hurricane Iniki, and their economic impacts, as well as storms that were close calls in recent years. He also spoke briefly about Hurricane Dora’s role in the winds that caused the wildfires on Maui.
	3. Chu gave information on how El Nino and La Nina years will become more severe in their future impacts.
	4. Last year, Chu published a book last year on climate variability and tropical cyclones, including future changes in response to increased concentrations of greenhouse gasses. The book is available for purchase from Cambridge University Press.
	5. In the Northeast Pacific, there is no increase predicted for the number of tropical storms that will take place each year. However, there will be an increased frequency of category 4 and 5 hurricanes.
	6. Drought conditions are predicted to increase, which will also affect water salinity. Both ecological and socioeconomic drought will increase.
	7. Frequency of rainfall will vary in El Nino versus La Nina years.
6. Co-chair Chang thanked him for his presentation and opened up the discussion for questions.
	1. Commissioner Evans asked if next spring and summer are predicted to be drier than this year. Chu said that it is a strong possibility, although there is not enough data to know the predictive corrections.
	2. Commissioner Hull asked if the statistic of a 20% increase in tropical storms will be the case for Hawai’i or for the Pacific in general Chu clarified that the statistic applies to the Northeast Pacific, which included Hawai’i.
	3. Commissioner Hull asked if there is hydraulic modeling going on. Chu said that there are some studies based on it, but there are not specific to Hawai’i.
	4. Commissioner Evans asked if there will still be increased drought conditions during the occurrence of tropical storms. Chu said it is most likely that already dry areas will become dryer, and wet areas will become wetter as they will be most impacted by the storms.
	5. Commissioner Evans asked if Hawai’i temperatures will always lag behind increasing temperatures on the continent since the ocean helps to moderate them. Chu clarified that the temperature increase will be slower, but will go up as the ocean temperatures do.
	6. Co-Chair Chang asked how reliable this research is when predicting extreme weather events, since such events seem more frequent but not necessarily predictable. Chu explained that predictions are based on passed events, so it depends on how good of indicators those past events are.
	7. Co-Chair Chang asked if modern technology makes it easier to predict extreme weather. Chu said it does, since it allows for more accurate and quick communication. In general, however, predictions should be taken on the conservative side.
	8. Commissioner Hull asked if Chu’s data is accurate to FEMA. Chu said that it is, but it will be important to stay on top of the research and to make it more granular.
7. Co-Chair Chang stressed the importance of decision making in the future being based off the scientific research we continue to have access to. Co-Chair Chang called for a five-minute break before the next agenda item.

**7.**  **Hawai’i Ocean Resources Management Plan Implementation Update** (Non-

 action item) Meeting was resumed by Co-Chair Chang (2:07:34)

1. Co-chair Chang presented Commissioner Justine Nihipali (OPSD). She introduced her team on the Zoom call with her: Sara Chang Kristi Kimura, Lisa Webster, and Yuki Tarata. They presented on updates to the Ocean Resources Management Plan.
	1. The plan focuses on costal hazards & development, land-based pollution, and marine ecosystems. It is guided by a mauka to makai approach and has coordinated actions between a variety of agencies. Costal Zone Management is in charge of coordinating it, implementing the 2020 plan, running working groups, and coordinating action teams.
	2. Since there is so much overlap between the CZM board and the Climate Commission, giving the updates at this meeting is a helpful way to coordinate it.
	3. Costal projects include an analysis of state facilities and sea level rise, and funding has been obtained to continue with the next phase of this.
	4. The shoreline management scoping study looks at interventions for balancing development and natural world, defining shoreline locations, and next steps. The managed retreat analysis looks at understanding the implications of managed retreat, legal framework, and funding strategies. There is an action team of ORP partners to advise on this project if any Commissioners are interested.
	5. The Social Vulnerability and Costal Hazards project analyzes disproportionate risk for sea level rise, inaccurate existing tools, and next steps.
	6. CZM has released materials for the public on costal adaptation strategies suitable for Hawaii’s coastlines, including information card with the pros and cons of different options, and pricing and permitting information.
2. Co-Chair Chang asked how to get a copy of this report. Commissioner Nihipali informed her that it is available online, and hard copies can also be requested.
3. **Coordinator’s Update** (Non-action item)Leah Laramee (CCMAC) (2:21:27)
4. Laramee called for a moment of silence for Maui and all those who have been impacted.
5. Laramee highlighted that this type of devastation will unfortunately become much more common as temperatures rise. The world has reached a 1.5 degree average temperature increase, which had been set as highest it can go to avoid a lot of extreme impacts, and we reached it much faster than we thought.
6. The next CCMAC meeting will be on Nov 9th.

 **Meeting adjourned at 3:00PM (YouTube time stamp at 2:23:57)**