

March 11, 2024

MEMO TO: David Raatz, Director of Council Services

F R O M: Ellen McKinley, Legislative Analyst *EM*

SUBJECT: **PRESENTATION: “STATE OF OUR CLIMATE: HAWAI‘I AND MOANANUIĀKEA FIFTH NATIONAL CLIMATE ASSESSMENT”**

I attended a presentation titled “State of Our Climate: Hawai‘i and Moananuiākea; Fifth National Climate Assessment” on February 8, 2024, at University of Hawai‘i Maui College. The presentation was the first in Mayor Bissen’s Sustainability Speaker Series.

Maui County Environmental Coordinator Joshua Cooper hosted the presentation. The Fifth National Climate Assessment, or 5th NCA, was published in November by the U.S. Global Change Research Program, which coordinates environmental research for the federal government. Three co-authors of the 5th NCA, all based in Hawai‘i, spoke at the presentation:

- Victoria Keener, Senior Research Fellow, East-West Center
- Zena Grecni, Researcher, ASU Global Institute of Sustainability and Innovation
- Richard Wallsgrave, Assistant Professor and Co-Director, Environmental Law Program, University of Hawai‘i at Mānoa, William S. Richardson School of Law

The 5th NCA is online at <https://nca2023.globalchange.gov/>. According to the presentation, the report’s key takeaways are:

- The United States is taking action on climate change.
- The United States is experiencing increased risks from extreme events.
- Climate change exacerbates social inequities.
- Mitigation strategies can deliver reductions, but more options are needed to reach net zero.

- Opportunities exist to create a more resilient and just nation.

Chapter 30 discusses the Hawai'i and Pacific Island indicators (rising temperatures, acidification) and impacts (biodiversity loss, habitat changes). The key messages in this chapter are:

- Climate change impairs access to healthy food and water.
- Climate change undermines human health, but community strength builds resilience.
- Rising sea levels threaten infrastructure and local economies and exacerbate existing inequities.
- Responses to rising threats may help safeguard tropical ecosystems and biodiversity.
- Indigenous knowledge systems strengthen island resilience.

The threats could result in dire consequences for coral reefs, negative economic impacts, and further biodiversity loss. Hawai'i already experiences more extreme and frequent daily heat events, more consecutive dry days and wet days, more extreme rainfall events, and a fourfold increase in wildfires since the early 1990s.

The speakers identified responses to the threats:

- Promote both climate adaptation and climate mitigation (decarbonization).
- Use global science for local adaptation.
- Provide data to natural-resource managers.
- Protect watersheds.
- Restore coral reefs.
- Consider coral reef insurance as part of retreat.
- Use indigenous knowledge and systems to strengthen island resilience.

- Transition to cleaner electricity such as with large-scale solar farms. Molokai can provide a model for self-sufficiency.
- Promote and transition to cleaner transportation modes.
- Advocate for State legislation (green fees) and local policy (building code and zoning code changes; benchmarking).
- Debunk the myth that mitigation and adaptation will require great sacrifice and huge expense. In reality, maintaining the status quo will be more expensive.

Thank you for the opportunity to attend this presentation. If you have any questions regarding the 5th NCA or this presentation, please contact me at ext. 7661.