

RES22-239
Testimony

MISC. COMM. 484

COUNCIL

COUNCIL Meeting

Meeting Date: Nov 2, 2022 @ 10:00 AM

Support: 2

Oppose: 0

I wish to comment: 0

Name: Dr. Chip Fletcher	Email: fletcher@soest.hawaii.edu	Zip: 96734
Representing: Climate Resilience Collaborative	Position: Support	Submitted: Nov 1, 2022 @ 01:46 PM
Name: Mialisa Otis	Email: mialisa808@gmail.com	Zip: 96795
Representing: Self	Position: Support	Submitted: Nov 1, 2022 @ 06:21 PM
<p>Testimony:</p> <p>Aloha,</p> <p>I would like to give my formal support for resolution 22-239. The monitoring of sea level is equally, actually more, important than our fresh water source. Even as someone that doesn't know the science of it, while observing the beaches, the sea level change is obvious and evident as the months go by. I urge councilmembers to support Hawai'i Climate Change Mitigation and Adaptation Commission, and the State of Hawai'i Office of Planning and Sustainable Development's Coastal Zone Management Program - in all ways possible to remedy sea level rise.</p> <p>Mahalo,</p> <p>Mialisa</p>		



Dr. Charles “Chip” Fletcher

Director, University of Hawai‘i at Mānoa Climate Resilience Collaborative
Interim Dean, School of Ocean and Earth Science and Technology at the
University of Hawai‘i at Mānoa
fletcher@soest.hawaii.edu

November 2, 2022

Aloha, Chair Waters and Vice Chair Kia‘āina,

As the former Chair of the Honolulu Climate Change Commission, I am writing to voice my **strong support of Resolution 22-239** which is being heard by the Honolulu City Council on November 2, 2022. Resolution 22-239 would urge the Hawai‘i State Legislature to appropriate funding to enable the Hawai‘i State Climate Change Mitigation and Adaptation Commission, in collaboration with the State of Hawai‘i Office of Planning and Sustainable Development’s Coastal Zone Management Program, to conduct certain activities to address sea level rise impacts.

I write as Interim Dean of the School of Ocean and Earth Science and Technology at the University of Hawai‘i at Mānoa and as the Director of the Climate Resilience Collaborative (CRC), a research program at the University of Hawai‘i at Mānoa.¹ CRC is an affiliation of scientists, architects, attorneys, economists, planners, and undergraduate and graduate students spread across campus working on challenges related to climate change. Our work is focused on building community resiliency to climate change impacts by maximizing the effectiveness of predictive climate science and advancing our ability to dynamically respond to climate change.

I support Resolution 22-239 because Hawai‘i is already experiencing the significant impacts of climate change and sea level rise including more frequent and intense storms, increasing temperatures combined with decreased trade winds to cool our communities, and nearshore marine and coastal impacts such as coral bleaching and beach loss. Peer-reviewed research has shown that these harmful impacts will continue to get worse and at increasing rates.

Sea level rise alone is an unstoppable reality and without major adjustments to coastal laws and policies, these dangers will increase - slowly at first, as at present, but by the 2030’s sea level rise impacts related to extreme tidal flooding will increase exponentially. The 6th Assessment Report of the Intergovernmental Panel on Climate Change states with high confidence that “[i]n the longer term, sea level is committed to rise for centuries to millennia due to continuing deep-ocean warming and ice-sheet melt and will remain elevated for thousands of years.”²

¹ I have been a research scientist specializing in coastal processes and beach response to sea level rise for over four decades. In that time, I have published over one hundred peer-reviewed articles and three textbooks on these topics. Further, I have been a key advisor in over 30 master and PhD studies of shoreline processes in Hawai‘i.

² AR6 WGI SPM p.21 B.5.4.

Global mean sea level will rise by about 6.5 to 10 feet if warming is limited to 1.5°C, 6.5 to 20 ft if limited to 2°C and 62 to 72 ft with 5°C of warming, and it will continue to rise for centuries to millennia. There is nothing we can do to stop sea level rise. Communities need to understand the problem and governments must develop adaptation policies to adjust to and prepare for the new reality.

Given these significant sea level rise projections, I support Resolution 22-239 because its main purpose is to urge the state to fund critical planning and analysis of Hawai'i's vulnerabilities including conducting a thorough inventory of infrastructure at risk to sea level rise, identifying priority areas that will be subject to high rates of sea level rise, designing and proposing sea level rise impacts zone maps, working with state and county agencies to develop sea level rise plans, and making specific recommendations to the Hawai'i Legislature regarding managed retreat, relocation, or mitigation measures.

I sincerely appreciate the City Council's time and effort to hear and consider Resolution 22-239. Please feel free to contact me if you have any questions about the substance of my testimony.

Respectfully,

C. Fletcher

Charles Fletcher