Dr. Charles "Chip" Fletcher: Biography

Dr. Charles “Chip” Fletcher, a climate scientist, geologist, and educator, is currently serving as the Interim Dean of the School of Ocean and Earth Science and Technology (SOEST) at the University of Hawai‘i at Mānoa. Chip also leads the Climate Resilience Collaborative (CRC), a research team dedicated to modeling climate impacts, sea level rise, and resilience strategies for Hawai‘i and Pacific Island communities.

As Chair of the Department of Earth Sciences, Associate Dean for Academic Affairs, and now Interim Dean, Chip’s leadership has been guided by several core values: a belief in the importance of serving, sharing, and collaborating to foster a positive and inclusive environment; a commitment to promoting diversity and equity, with particular attention to increasing representation of women, Indigenous, and underrepresented populations in STEM fields; a dedication to service and applied research that supports both scientific progress and community well-being; and a teaching and mentoring philosophy centered on meeting students where they are, encouraging their growth with kindness, and supporting their journey toward independence.

With a career spanning over three decades, Dr. Fletcher has made contributions to the fields of Holocene and Pleistocene coastal systems evolution, anthropogenic sea level rise, coastal erosion, and climate adaptation, focusing on how these challenges impact Pacific Islands. His research has directly shaped climate policy, coastal management, and community resilience planning. His 2018 paper “*Failure to Protect Beaches Under Slowly Rising Sea Level*” in the journal Climatic Change, was a critique of shoreline policy in Hawai‘i and led to the prohibition of seawall building on beachfront lands. He has served on the Legacy Lands Commission and as the Chair of the Honolulu Climate Change Commission, where he helped develop climate adaptation strategies for the region.

A big picture thinker, Chip has published over 100 peer-reviewed scientific papers, contributing critical knowledge to the fields of climate change, marine geology, and environmental sustainability. His most recent work, *“Earth at Risk: An Urgent Call to End the Age of Destruction and Forge a Just and Sustainable Future”*, was published in Proceedings of the National Academy of Sciences NEXUS. This paper highlights the interconnected crises of climate change, pollution, disease, biodiversity loss, and social inequality and calls for urgent global action to create a just and sustainable future.

In addition to his research contributions, Dr. Fletcher has authored three textbooks on Hawaiian shorelines, climate change, and Earth systems science which are widely used in higher education. A dedicated mentor and advisor, Chip has supported over 40 graduate students and post doctoral scholars in the Earth and planetary sciences.

Dr. Fletcher enjoys applying his research on climate resilience and sea level rise to serve the community and his work informs several county and state policies. Chip and his team developed sea level rise modeling tools that have influenced land-use regulations and disaster preparedness efforts in Hawai‘i. This research was also the foundation for Hawai‘i Senate Bill 474, making Hawai‘i the first state to require real estate disclosures of sea level rise risks, and the shoreline setback laws for Maui and Kaua‘i counties and the City and County of Honolulu.

As a frequent public speaker and science communicator, Dr. Fletcher regularly provides training, media commentary, and community presentations on climate risks and adaptation. His leadership extends beyond academia into policy advocacy, environmental justice, and strategic planning for climate resilience.

For his contributions, Dr. Fletcher has received several accolades, including:

- 2023 - Association of Fish and Wildlife Agencies, *Climate Adaptation Leadership Award for Natural Resources*
- 2019 – ThinkTech Hawaii, *Community Service Award*
- 2018 - O‘ahu Surfrider Foundation, *John Kelly Lifetime Achievement Award*

Throughout his career, Chip has been an advocate for climate action and environmental stewardship, ensuring that scientific research informs real-world solutions for Hawai‘i, the Pacific, and beyond. His leadership at SOEST continues to advance critical climate science, education, and resilience-building in the face of accelerating global climate change.