## BILL042(22) Testimony

MISC. COMM. 382

COUNCIL

## **COUNCIL Meeting**

Meeting Date: Sep 7, 2022 @ 10:00 AM

Support: 1
Oppose: 0
I wish to comment: 2

Name: Dr. Chip Fletcher	Email: fletcher@soest.hawaii.edu	Zip: 96734
Representing: University of Hawaiʻi Climate Resilience Collaborative	Position: Support	Submitted: Sep 6, 2022 @ 02:04 PM
Name: Zhizi Xiong	Email: kapalamansw@gmail.com	Zip: 96817
Representing: Kapalama NSW	Position: I wish to comment	Submitted: Sep 7, 2022 @ 09:53 AM

Testimony:

Dear Chair, Vice Chair & Members of the Committee

I'm testifying to provide comments as a safety coordinator of Kapalama NSW Neighborhood Security Watch. NSWs are recognized as advocates of safety in the community and in public policy.

I want to refer to page 31 revoking or modifying permits and the process for that. Does it involve an audit? For example if an applicant uses hazardous materials to build with and the development poses a significant threat to peoples health & safety, it effects the pacific resources of our Hawaiian islands, instead of just revoking or modifying the permit, is there a process to audit that applicant? If they're building with hazardous material in an SMA, how can we say that they haven't built with that material before? And they got away with it because SMA regulations are more strict then other zones' regulations.

A permit can be revoked or modified without the consent of the permittee if it is in violation of any of these regulations...if the material they are are building with is toxic and is a significant threat to public health or safety, as determined by DOH, the US army corps of Engineers, the Surgeon General, the US environmental Protection Agency, the occupational safety and health administration and the US coast guard.

Bill 42 mentions public hearings...If an applicant does not conform to the regulations, and there are adequate reasons to revoke or modify the permit, the agency will hold a public hearing on the proposed revocation date. The applicant has the right to an administrative appeal according to the DPP's administrative rules In DPP's administrative rules, rules relating to shoreline setbacks and the special management area, these are the parameters set forth by the department and approved by the mayor for how an appellant, the director and DPP is to operate when there is a contested case hearing. These procedures apply to hearings pursuant to Chapters 15, 17, 18 and 20 and the appeal of an action by the Director on a decision rendered pursuant to Sections 25-3.3(e)(2) and 25-7.1(a), Revised Ordinances of Honolulu, 1990, as amended.

The bill and the department's procedures are thorough in terms of addressing public health & safety. It would be wise to amend the bill to include an audit in the revocation or modification process because it would add another measure of protection.

Thank you for the opportunity to testify.

Name:	Email:	Zip:
Zhizi Xiong	Alohadivinedesign@gmail.com	96817
Representing:	Position:	Submitted:
CARES Community Art Recreation	I wish to comment	Sep 7, 2022 @ 09:57 AM
Education Services		

Testimony:

Dear Chair, Vice Chair & Members of the Committee,

I'm testifying to provide comments on behalf of CARES, a grassroots organization advocating for environmental justice.

My first thoughts were..

What is the calculation that goes into that? How is that calculated...the shoreline formula...to preserve Hawaii's pacific resources? I didn't see any maps or tables in the Bill 41's content except for 1 table referring to the costs of for applications of permits for environmental assessment.

However after some research, I found a document from DPP called a staff report that calculates the formula.

"Shoreline lots with a history of coastal erosion will be subject to a setback based on the erosion rate, measured as 60 feet plus 70 times the annual coastal erosion rate, up to a maximum setback of 130 feet. For example, a shoreline lot with 0.1 feet of erosion each year will be subject to a shoreline setback of 67 feet ( $60 + 70 \times 0.1$ ). This is designed to capture erosion (0.1 feet per year) over the estimated life of the structure ( $70 \times 10^{-1}$ ) "

I'm just trying to bring you in on the thought process to set up the premise so that you can see where I'm going with this testimony. I was thinking at first, nature is unpredictable, how can you accurately calculate the erosion rate? But I've gained a new appreciation for scientists because the DPP package contains 86 pages of research from the City's department of Emergency Management, the mayor's office, research from NOAA predicting storms, tsunamis and wave action.

I'm gonna conclude with this, to wrap it up with my point, instead of amending the requirement every few years, why not just don't let them build at all?

Thank you for the opportunity to testify.



## Dr. Charles "Chip" Fletcher

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

September 7, 2022

Aloha, Councilmembers,

I am writing to voice my **strong support of Bill 42 (2022)** which is being heard by the Honolulu City Council on September 7, 2022. Bill 42 (2022) would update the Special Management Area on O'ahu, codified at Revised Ordinances of Honolulu Chapter 25.

I write as former Chair of the Honolulu Climate Change Commission, 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, formerly called the Coastal Geology Group. 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.

Every year human communities on our coastline grow increasingly vulnerable to the dangers of wave impacts, coastal erosion, high tide flooding, and storm surge, all of which are exacerbated by sea level rise. Sea level rise 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 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." Over the next 2000 years, 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 over subsequent 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.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>2</sup> AR6 WGI SPM p.21 B.5.4.

I support Bill 42 (2022) because rising sea levels will shift the ocean and estuarine shoreline landward. It will inundate coastal areas, displacing wetlands and altering tidal ranges on the shoreline and in streams and bays. Predictably, coastal erosion, hurricane storm surge, king tide flooding, and compound flooding caused by combinations of rain and high tides will all increase in frequency and severity. This will be accompanied by increases in stormwater runoff, erosion and sedimentation in waterways and nearshore reef and recreational environments.

While I think it is worthwhile to preserve these ecosystems for their own sake, they also provide a suite of services including providing a natural buffer from flooding because the effects of sea level rise will not be limited solely to the shoreline. CRC's research has documented that groundwater tables are hydrologically connected to the ocean.<sup>3</sup> Thus, the rising sea level will also have the effect of raising inland groundwater tables, leading to inland flooding - essentially creating new wetlands in urban areas. Connecting the Special Management Area regulation to the Sea Level Rise Exposure Area gives insight into how particular proposed projects will be affected by the impacts of sea level rise, and thus how new types of community design and development can reduce such risk. This bill reinforces the tenets of building in a way that is resilient to the rapidly growing threats posed by climate change.

I support Bill 42 (2022) because it will update Revised Ordinances of Honolulu Chapter 25 to conform to the amendments made to the Hawai'i Coastal Zone Management Act made by the State Legislature in 2020. Overall, Bill 42 (2022) will have the effect of increasing the resilience of Honolulu's coastal communities to the impacts and hazards caused and exacerbated by sea level rise.

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

Respectfully,

C. Fletcher

Charles Fletcher

<sup>&</sup>lt;sup>3</sup> Habel, S., Fletcher, C., Anderson, T., & Thompson, P. 2020. Sea-Level Rise Induced Multi-Mechanism Flooding and Contribution to Urban Infrastructure Failure. Nature Scientific Reports, 10: 3796 DOI:10.1038/s41598-020-60762-4