

OFFICE OF CLIMATE CHANGE SUSTAINABILITY AND RESILIENCY KE KE'ENA LOLI ANIAU MĀLAMA 'ĀINA A ME KE OLA LOA



CITY AND COUNTY OF HONOLULU

KŪLANA KAUHALE A KALANA O HONOLULU

This is a compilation of all comments received by the City and County of Honolulu Office of Climate Change, Sustainability and Resilience (CCSR) submitted during the public comment period of the draft climate adaptation strategy, "Climate Ready O'ahu (CRO)" with accompanying responses. The public comment period extended from November 1, 2023 to December 1, 2023. A total of 44 unique commenters provided a total of 194 comments during this period. Comments were received via Konveio (konveio.com) which is a website that allows users to leave a comment directly on PDF documents.

This public comment period built on more than two years of community engagement in the CRO planning process, during which more than 2,000 perspectives were shared in workshops, surveys, tabling events, and open houses with the community and City departments. Mahalo to the community members who were instrumental to the City and County in creating this climate adaptation strategy.

Page	Туре	Comment	Response	Link to comment on
No.				document
1	Suggestion	Good article in the NY Times about adaptation:	Mahalo for your feedback and for supporting green	https://resilientoahu.ko
			infrastructure. Please refer to Strategy 6, and Action	nveio.com/climateready
		https://www.nytimes.com/2023/11/03/headw	6.1 for more information on stormwater detention	oahu?cid=86#page=1
		ay/hoboken-floods.html?smid=nytcore-	and retention, and improving water quality of	
		android-share	ocean-bound runoff.	
		Definitely should consider similar approaches -		
		in particular, we should be prepared to capture		
		rain from hurricanes and other flooding events,		
		not just expedite it going into the ocean.		
		And we need Bioswales to help clean runoff		
		from polluting coastal waters		
1	Suggestion	It looks great except I feel a sense that it is not	Mahalo for your feedback and support. Achieving a	https://resilientoahu.ko
1	Juggestion	enough soon enough! I applaud the engaging	Climate Ready O'ahu will require collaborative and	nveio.com/climateready
		the public, people need to become empowered	urgent action. This Strategy includes actions to	oahu?cid=95#page=1
		to take action. I see how we CAN make a	promote community partnership identifies near-	Outla: Cla-JJ#page=1
		difference togetherso community building is	promote community partitership lacitatines hear	

		a musthowever, the infrastructure problems needs to be addressed NOWthat can't wait, so do it at the same time. Mahalo!	term actions that be pursued within the next 5 years.	
1	Suggestion	Didn't finish reading so if already said ok. The way to empower people is with right livihood and affordable housing/30% of income. Plant clumping bamboo-hi rose is now indigenous to Hawai'i (building bamboo) and prevents soil erosion/puts oxygen back into the air/grows 1' per day. Plant hemp-complete crop 3 months and make hempcrete, almost as strong as concrete and fire resistant/plus 1001 uses	Mahalo for your feedback. A focus on affordable housing was included in the City's Resilience Strategy, adopted in 2019. Please refer to Goal 1 of that document for more information. https://www.resilientoahu.org/resilience-strategy	https://resilientoahu.ko nveio.com/climateready oahu?cid=117#page=1
1	Suggestion	This report is consistent with the political narrative on climate change. However, this narrative, which is not peer reviewed by scientist, has parts that conflict with the scientific findings and data on climate change, or assert impacts that go beyond the scientific findings. See for example, Unsettled by Dr. Steven Koonin.	Mahalo for your comment. Most of the data in this strategy is from the City Climate Commission Guidance Documents, which are all based on peer reviewed scientific literature. We have updated a few of our data points in the future risk sections to match the most current projections. The Climate Commission is charged with gathering the latest science and information on climate change impacts to Hawai'i, with a focus on O'ahu.	https://resilientoahu.ko nveio.com/climateready oahu?cid=188#page=1
1	Suggestion	I think that most climate-related changes will be gradual and not abrupt as asserted in parts of the report.	Mahalo for your comment. The impacts we feel as a community will depend on our future emissions. However, the precautionary principle (discussed on Page 15) explains that we should prepare for impacts even without 100% certainty of the extent of impacts.	https://resilientoahu.ko nveio.com/climateready oahu?cid=189#page=1
1	Question	For balance, shouldn't the benefits of higher CO2 be noted? Also, shouldn't the cost of various policies and actions be included inasmuch as some costs might outweigh anticipated benefits?	Mahalo for your comment. The purpose of a climate adaptation strategy is to prepare for the impacts that stem from increasing levels of CO2. This report is focused on those impacts as outlined in the science (Climate Commission Brief). In regard to your comment about cost, please refer to Action 9.2.	https://resilientoahu.ko nveio.com/climateready oahu?cid=190#page=1

1	Question	Is there a legend explaining the icons? At least to me, meanings are not intuitively obvious.	Mahalo for your question. We have added labels to the table in the final draft.	https://resilientoahu.ko nveio.com/climateready oahu?cid=242#page=1
1	Suggestion	This document shows deep and comprehensive thought. It is largely written for an audience with a graduate-degree level of education. A follow-up effort might be a summary document aimed at an audience with a high-schoolgraduate level of education (including for actual high school students!).	Mahalo for your comment. For each of our documents, CCSR puts together an executive summary, which is generally an easier read and is typically a few pages.	https://resilientoahu.ko nveio.com/climateready oahu?cid=243#page=1
2	Suggestion	Climate Ready Oahu seems to indicate a collaboration between the City, State and feds. However, most of the discussions seem to focus on City. Would be nice to have one document that includes State and City goals. Seems like there are lots of City and State documents out there with no single document to pull it all together. Was hoping that this Climate Ready Oahu was that unifying document	Mahalo for your feedback. Adapting to the impacts of climate change is a collaborative effort and happening at multiple scales. As the City and County of Honolulu's climate adaptation strategy, Climate Ready O'ahu is grounded in actions the City is able to do on a local level. However, as you point out, the impacts and solutions are cross-cutting and we incorporate collaboration with State and federal governments as much as possible.	https://resilientoahu.ko nveio.com/climateready oahu?cid=123#page=2
3	Suggestion	Please consider adding an executive summary. Like most research articles and reports, I wanted to read the executive summary before I read the entire document.	Mahalo for your feedback. An executive summary is currently in progress.	https://resilientoahu.ko nveio.com/climateready oahu?cid=96#page=3
3	Suggestion	Utilize deep sea water air conditioning for large buildings (especially hotels that are using AC on a 24/7 basis. This would reduce approximately 40% of the electricity demand.	Mahalo for your feedback. This idea was included in the City's Resilience Strategy, adopted in 2019. Please refer to Action 22 of that document for more information. https://www.resilientoahu.org/resilience-strategy	https://resilientoahu.ko nveio.com/climateready oahu?cid=97#page=3
4	Question	is it manu or Manu? body text says manu but this says Manu.	Mahalo for pointing this out. Upon further research, it should be capitalized only at the beginning of a sentence and we made changes accordingly.	https://resilientoahu.ko nveio.com/climateready oahu?cid=142#page=4

5	Suggestion	Wahiawa spelling	Mahalo for your comment. We have fixed the spelling.	https://resilientoahu.ko nveio.com/climateready oahu?cid=241#page=5
7	Suggestion	In addition to my mama, I love the city and county needs to embrace the fact that historic adaptations will not necessarily be valid as climate change in the future. We will need new ideas and resources to adapt to new and different climate scenarios.	Mahalo for your feedback. We are committed to combining the latest climate adaptation science with traditional knowledge and expertise. This can be seen in the strategies and actions we present, many of which propose new ideas that could be implemented on island.	https://resilientoahu.ko nveio.com/climateready oahu?cid=157#page=7
9	Suggestion	Pls consider adding flooding associated with king or the highest high tides (Mapunapuna) to the timeline	Mahalo for your feedback and suggestion. King Tides are impactful events that can occur multiple times per year. While we may not have room for all King Tide events on this timeline, we detail more impacts from sea level rise, including flooding from King Tides, in the Changes to Our Island section.	https://resilientoahu.ko nveio.com/climateready oahu?cid=99#page=9
9	Suggestion	This document does not contain population projections. DBEDT has a 2045 projection study. i.e. more people on island who may be vulnerable, need energy and water, food, etc.	Mahalo for your feedback. Land use and resource needs related to population growth can be found in the O'ahu General Plan, which uses DBEDT projections for 2040, and can be viewed here: https://www.honolulu.gov/dpp/planning/planning-documents/oahu-general-plan.html	https://resilientoahu.ko nveio.com/climateready oahu?cid=110#page=9
9	Suggestion	what about food and agriculture	Mahalo for your feedback. We have included food and agriculture as sources of greenhouse gas emissions in the final draft.	https://resilientoahu.ko nveio.com/climateready oahu?cid=113#page=9
9	Question	How was this degree number and the amount of sea level rise increase figured out?	Mahalo for your question. The goal of this sentence is to illustrate the rapid increase in expected climate impacts. The degree number and amount of sea level rise were interpolated based on models in the IPCC Climate Change 2021: The Physical Basis report, which is referenced in the Climate Commission Brief (2023). However, these statistics have been replaced with another example that better illustrates an	https://resilientoahu.ko nveio.com/climateready oahu?cid=185#page=9

			increasing rate of change in the final draft. We have also added in citations in the final draft.	
9	Question	Sea Level Rise is usually listed first, but won't heat (and maybe drought) impacts develop even faster?	Mahalo for your question. The five climate hazards were identified based on likelihood and potential impact but are not meant to be in chronological order.	https://resilientoahu.ko nveio.com/climateready oahu?cid=234#page=9
10	Suggestion	Need to add shoreline retreat this list	Mahalo for your suggestion. Please refer to Strategy 11 for a more detailed focus on retreat as an important adaptation activity. This introductory section includes just a handful of examples to help readers understand the difference between adaptation and mitigation.	https://resilientoahu.ko nveio.com/climateready oahu?cid=158#page=10
10	Suggestion	Could there be some language added that explains the gains made by investing in these measures now and how it will benefit our children and communities in the future.	Mahalo for your suggestion! Some language has been added to the final draft, as suggested.	https://resilientoahu.ko nveio.com/climateready oahu?cid=217#page=10
10	Question	This sounds like a protest slogan, as though someone is pushing an adversarial "Adaptation, Not Mitigation" agenda. Maybe just say both Adaptation AND Mitigation are needed?	Mahalo for your feedback question. Since Climate Ready O'ahu is an adaptation plan, the focus is on adaptation. This small section was included to highlight the importance of mitigation as well, which our office dives into in the Climate Action Plan.	https://resilientoahu.ko nveio.com/climateready oahu?cid=235#page=10
10	Suggestion	Flagging potential alignment with the Aloha+ Challenge which was built through a multi-year stakeholder engagement process and reflects shared values and local priorities.	Mahalo for your comment. We agree that there is strong alignment with the local values and priorities reflected in the Aloha+ Challenge.	https://resilientoahu.ko nveio.com/climateready oahu?cid=263#page=10

11	Suggestion	Aside from (cultural) dissemination and community buy-in, the CAP crew might consider including a section that provides mano and strategies on chaos mitigation, adaptation and logical – situationally aware survival skills. Chaos is inevitable. I find that folks are quite receptive to these mano, because it empowers while nurturing interdependence.	Mahalo for your feedback. We agree that disaster mitigation, adaptation and disaster response are all important. The city has multiple plans to address this issue, such as the Emergency Operations Plan, Multi-Hazard Pre-Disaster Mitigation Plan, and Long Term Disaster Recovery Plan.	https://resilientoahu.ko nveio.com/climateready oahu?cid=219#page=11
11	Suggestion	Maybe add dates to these phases? Useful to know, especially as plan ages in future.	Mahalo for your feedback. We have added dates to this diagram in the final draft.	https://resilientoahu.ko nveio.com/climateready oahu?cid=236#page=11
13	Suggestion	Need to talk infrastructure holistically and inclusive of State, Feds and City critical infrastructure	Mahalo for your feedback. Adapting to the impacts of climate change is a collaborative effort and is happening at multiple scales. As the City and County of Honolulu's climate adaptation strategy, Climate Ready O'ahu is grounded in actions the City is able to do on a local level. However, as you point out, the impacts and solutions are cross-cutting and we incorporate collaboration with State and federal governments as much as possible.	https://resilientoahu.ko nveio.com/climateready oahu?cid=124#page=13
13	Suggestion	Infrastructure should also not exacerbate climate change and should include nature based interventions.	Mahalo for your feedback. Nature-based interventions are critical components of climate adaptation and are included in actions 6.1, 6.4, 6.5, and 12.2. We have updated our vision statement to address your comment.	https://resilientoahu.ko nveio.com/climateready oahu?cid=136#page=13
13	Suggestion	I believe that this is an excellent mission statement as they are stating their purposes, The strategies in which they are going into implement these changes into society, and finally they state what the intended outcome of these changes will be and how this will benefit everyone.	Mahalo for your support of Climate Ready O'ahu!	https://resilientoahu.ko nveio.com/climateready oahu?cid=220#page=13

13	Suggestion	Maybe it's implied by "people," but it's equally or more important that all INSTITUTIONS (including govt, business, etc.) have these tools and knowledge.	Mahalo for your comment. We agree that many institutions have the knowledge, tools, and resources to prepare for climate impacts. Institutional change and organizational capacity are themes throughout the strategy, which will continue to be critical during the implementation phase of Climate Ready O'ahu.	https://resilientoahu.ko nveio.com/climateready oahu?cid=237#page=13
13	Suggestion	Just a formatting/flow note here: Having Parts 1-3 and then Strategies 1-12 creates and bit of a disjointed flow. Part 1 starts off with 1.1 and so on, but that's not really the outline that's intended. Consider numbering Part.Strategy.SubStrategy or perhaps Parts A, B, C.	Mahalo for your suggestion. We considered many ways to organize and number the strategies and actions, and chose to use continuous numbering for the strategies to be consistent with the Climate Action Plan.	https://resilientoahu.ko nveio.com/climateready oahu?cid=289#page=13
13	Suggestion	While hopeful, I worry this language suggests that infrastructure can maintain historic normalcy. That is not true for any geographic area moving forward - especially an island community. When discussing 1.5C, 2C, 3C scenarios the language used is often - "avoiding the worst" or "every tenth of a degree prevents". Perhaps this could be tempered with more realistic language? (Comment 1 of 2)	Mahalo for your comment. Our vision statement is meant to be lofty and describe the goal that we are striving for. However, we understand that it is certainly unachievable to keep 100% of residents safe at all times. In our strategies and actions (which are more tangible action items), we often use the language of "reducing risk".	https://resilientoahu.ko nveio.com/climateready oahu?cid=290#page=13
13	Suggestion	This might be improved to talk about infrastructure that provides safeguards as opposed keeping residents safe. Adaptation requires evolving expectations, redefined baselines, and a nimbleness to move with change. A suggested rewrite might include more frank language about risk minimization vs. elimination. (Comment 2 of 2)	Mahalo for your comment. Our vision statement is meant to be lofty and describe the goal that we are striving for. However, we understand that it is certainly unachievable to keep 100% of residents safe at all times. In our strategies and actions (which are more tangible action items), we often use the language of "reducing risk".	https://resilientoahu.ko nveio.com/climateready oahu?cid=291#page=13

14	Suggestion	I think the information could stand out a little	Mahalo for your suggestion. We're working on	https://resilientoahu.ko
		more so that it is more visable.	updating this graphic and hope that you will find the	nveio.com/climateready
			new version clear and easy to read in the final draft.	oahu?cid=221#page=14
14	Question	utility lines not undergroundretrofit?	Mahalo for your question. Strategically moving	https://resilientoahu.ko
			portions of the electric grid underground in high risk	nveio.com/climateready
			areas would probably be considered new	oahu?cid=226#page=14
			infrastructure as opposed to a retrofit of existing	
			infrastructure.	
14	Suggestion	US military impacts on or as part of the	Mahalo for your feedback. The climate risks are	https://resilientoahu.ko
		community	impacts we would have to deal with as the climate	nveio.com/climateready
			changes. The impacts of the military are those that	oahu?cid=227#page=14
			the military would deal with through their own	
			actions.	
15	Question	This page doesn't quite work not sure how all	Mahalo for your feedback. This page was added to	https://resilientoahu.ko
		these paragraphs fit together? E.g. where were	highlight the range of climate variations found on	nveio.com/climateready
		you going with the microclimates? And I don't	our island and the complexity of preparing for	oahu?cid=114#page=15
		quite understand the outdoor wedding story?	climate change. While we have identified the	
			climate hazards most relevant to our island,	
			pinpointing the impacts and severity can be difficult	
			due to the varying climates. There is no scientific	
			certainty on how much sea level rise we will witness	
			or days of drought we will face but we can use the	
			information and scientific evidence we have now to	
15	Cussostian	Her of the propertioner principle is illeditional	determine our best interests in action.	https://wasiliamtaah.u.ka
15	Suggestion	Use of the precautionary principle is ill advised. There is no absolute certainty, moving forward	Mahalo for your feedback. We are in agreement that the City should use the best available data at any	https://resilientoahu.ko nveio.com/climateready
		with climate change preparation. A model is	given time to prepare for climate change impacts.	oahu?cid=159#page=15
		just that, a prediction based on the best day	The precautionary principle states that regardless of	Odilu:Clu-159#page-15
		available. It is not certain.	data certainty, we should take action before it is too	
		available. It is not certain.	late.	
		The city and county and residence would be	iute.	
		best served to act on the best available		
		knowledge at any given day.		

		-	T	,
15	Question	This is a poor example of the implementation	Mahalo for your feedback. While models and	https://resilientoahu.ko
		of the precautionary principle. One	projections are sophisticated and will continue to	nveio.com/climateready
		interpretation would be no tent rental at all.	improve, we will never have absolute certainty	oahu?cid=160#page=15
		The person is not certain that it will be raining,	about the future. The precautionary principle is an	
		so the precaution is unnecessary. While it is	important link between future uncertainty and	
		important to the bride and groom, it's really	current action. Current actions should be informed	
		not important to anyone else.	by the best data available, even when it is imperfect.	
			The precautionary principle states that we do not	
		That said, most reasonable people would rent	need perfect data to take action for our safety from	
		a tent. Can you delete precautionary principle?	climate change in the future. The example here was	
			included to make this principle easier to understand.	
15	Suggestion	I like your example and your use of the	Mahalo for your support.	https://resilientoahu.ko
		precautionary principle.		nveio.com/climateready
				oahu?cid=218#page=15
16	Suggestion	Would like to see stronger language "is" instead	Thank you for your feedback. We updated the text	https://resilientoahu.ko
		of "can" and "will"	to indicate that sea-level rise will have significant	nveio.com/climateready
			impacts.	oahu?cid=137#page=16
16	Suggestion	This image could be stronger. Larger town	Mahalo for your feedback. The resolution of the	https://resilientoahu.ko
		names and stronger basemap color would help.	images will be improved in the final draft of the	nveio.com/climateready
			Strategy.	oahu?cid=138#page=16
16	Suggestion	Please add an explanation for what RCP means.	Mahalo for your feedback. We have updated the	https://resilientoahu.ko
		Many people are not familiar with that term	caption of this figure to include an explanation.	nveio.com/climateready
		and it would make this graph much more		oahu?cid=161#page=16
		useful.		
17	Suggestion	Please include a discussion on risk and what	Mahalo for your feedback. Impacts to critical	https://resilientoahu.ko
		SLR level critical facilities should be designed	structures are included in the impacts table starting	nveio.com/climateready
		for.	on page 22. Please also refer to Action 10.6 about	oahu?cid=125#page=17
			design guidelines for capital projects.	
17	Suggestion	Same comment about map. Quite small and	Mahalo for your feedback. The resolution of the	https://resilientoahu.ko
		hard to read. Perhaps use a whole page for the	images will be improved in the final draft of the	nveio.com/climateready
		map?	Strategy.	oahu?cid=139#page=17

			I	
17	Suggestion	Agree, talking about the land area impacted	Mahalo for your feedback. Impacts to infrastructure	https://resilientoahu.ko
		and the number of structures would be	and land area are included in the impacts table	nveio.com/climateready
		impactful.	starting on page 22.	oahu?cid=140#page=17
17	Question	Should "will" be changed to "could"?	Mahalo for your feedback. We have changed the	https://resilientoahu.ko
			wording of this section.	nveio.com/climateready
				oahu?cid=191#page=17
17	Suggestion	Please take a close look at NOAA's data for	Mahalo for your comment. Please refer to the City	https://resilientoahu.ko
		Honolulu's sea level rise (SLR). The long-term	Climate Change Commission's Climate Change Brief	nveio.com/climateready
		trend is an increase of about 0.6 inch per	(2023) and Sea Level Rise Guidance (2022) for peer-	oahu?cid=192#page=17
		decade, with no indication that this rate is	reviewed sources of data on sea level rise. In	
		increasing. Also, the latest NOAA data for	particular, you may be interested in the following	
		Greenland and Antartica show no acceleration	references: Sea level is rising at an accelerating rate	
		in ice melts that would cause a significant	over recent decades based on satellite altimetry	
		acceleration in SLR for Honolulu.	data (Climate Change Brief, footnote 125). There is	
			likely to be as much SLR in the next 30 years as in	
			the last 100 years (Climate Change Brief, footnote	
			129). Also, melting of Greenland and Antarctica's ice	
			sheets is accelerating. Ice loss from the Greenland	
			Ice Sheet increased seven-fold from 34 billion tons	
			per year between 1992 and 2001 to 247 billion tons	
			per year between 2012 and 2016. Antarctic ice loss	
			nearly quadrupled from 51 billion tons per year	
			between 1992 and 2001 to 199 billion tons per year	
			from 2012 to 2016. (Climate Change Brief, footnote	
			128).	

17	Suggestion	Reaching the 2050 sea-level projected for	Mahalo for your comment. Please refer to the City	https://resilientoahu.ko
	348634.31.	O'ahu would require an abrupt increase in the	Climate Change Commission's Climate Change Brief	nveio.com/climateready
		rate of SLR, from an average rate of 0.6 inch per	(2023) and Sea Level Rise Guidance (2022) for peer-	oahu?cid=195#page=17
		decade to a rate of 4.4 to 5.5 inches per decade	reviewed sources of data on sea level rise. In	
		starting immediately. Such an increase seems	particular, you may be interested in the following	
		far fetched.	references: Sea level is rising at an accelerating rate	
			over recent decades based on satellite altimetry	
			data (Climate Change Brief, footnote 125). There is	
			likely to be as much SLR in the next 30 years as in	
			the last 100 years (Climate Change Brief, footnote	
			129). Also, melting of Greenland and Antarctica's ice	
			sheets is accelerating. Ice loss from the Greenland	
			Ice Sheet increased seven-fold from 34 billion tons	
			per year between 1992 and 2001 to 247 billion tons	
			per year between 2012 and 2016. Antarctic ice loss	
			nearly quadrupled from 51 billion tons per year	
			between 1992 and 2001 to 199 billion tons per year from 2012 to 2016. (Climate Change Brief, footnote	
			128).	
17	Suggestion	I like this graph example, i think it highlights the	Mahalo for your support!	https://resilientoahu.ko
1,	Suggestion	infomation effectively, through the use of the	Wandio for your support:	nveio.com/climateready
		key.		oahu?cid=222#page=17
18	Suggestion	As a theme throughout would be good to talk	Mahalo for your feedback. For more information	https://resilientoahu.ko
	00	about what these risks mean. Heat is a hard	about impacts of these hazards, please refer the	nveio.com/climateready
		one but perhaps saying HNL temps could get to	Impact Tables in the next section.	oahu?cid=141#page=18
		record highs of 9x degrees may help.		
18	Suggestion	Add a period	Mahalo for your suggestion. The change has been	https://resilientoahu.ko
		·	made as suggested.	nveio.com/climateready
			-	oahu?cid=186#page=18

18	Suggestion	I think it would be great to add data for earlier	Mahalo for your feedback. In an effort to be	https://resilientoahu.ko
		years to come such as 2030 (since it isn't so far	consistent with our data sources, we are primarily	nveio.com/climateready
		away but could give readers insight that in such	using data from two documents, the Climate	oahu?cid=187#page=18
		a quick amount of time the temperature	Commission Brief (2023) and our Risk Assessment	
		will/can raise to "", making a bigger impact	(2020). These sources primarily use 2050 and 2100	
		as to why it is so imperative to start change	projections, which is where this particular	
		now. Also, maybe explaining what could	information comes from. Please review the impact	
		happen if the temperatures rise to these points	tables, which start on page 22 and dive into more	
		(e.g. coral reefs dying, etc.)	detail on impacts.	
18	Suggestion	Please take a close look at the National	Mahalo for your comment. Please refer to the City	https://resilientoahu.ko
		Weather Service temperature trend for	Climate Change Commission's Climate Change Brief	nveio.com/climateready
		Honolulu. It does not show a sharp increase in	(2023) for peer-reviewed sources of data on	oahu?cid=193#page=18
		warming over the past decade.	historical temperature data. Average air	
			temperature has risen by about 1.1°C (2°F)	
			statewide and by 1.4°C (2.6°F) in Honolulu since	
			1950, with a sharp increase in warming over the last	
			decade (Climate Change Brief, footnote 38).	
18	Suggestion	Most global warming will occur in the northern	Mahalo for your comment. Climate Ready O'ahu is	https://resilientoahu.ko
		latitudes, over land, in the winter, and at night.	focused on hazards we will experience here on	nveio.com/climateready
		Even assuming a major temperature increase	O'ahu. Here are some Hawai'i specific projections:	oahu?cid=194#page=18
		for earth, temperatures changes in Hawai'i are	Model projections for late 21st century for Hawai'i	
		likely to be modest.	indicate that surface air temperature over land will	
			increase 2° to 4°C (1.8° to 7.2°F), with the greatest	
			warming at the highest elevations and on leeward	
			sides of the major islands. (Climate Change Brief,	
			footnotes 70-72). Under continued ("business as	
			usual") greenhouse gas emissions, elevations above	
			3,000 m (9,800 ft.) in Hawai'i are projected to reach	
			up to 4° to 5°C (7.2° to 9°F) warmer temperatures by	
			the late 21st Century (Climate Change Brief,	
			footnote 73).	

18	Suggestion	Instead of "actual" maybe use "experienced" or just start with "Temperatures will vary"	Mahalo for your suggestion. We rephrased the sentence to begin with "Temperatures will vary" We believe this will help avoid the association of relative humidity included with air temperatures variation.	https://resilientoahu.ko nveio.com/climateready oahu?cid=281#page=18
18	Suggestion	This is an important point that I think deserves a citation. Can you cite trends that show trade winds days are decreasing in frequency by year/decade? Or maybe a research report that identifies this pattern directly?	Mahalo for your suggestion. The statement is based on a general trend which is also reported in the City Climate Change Commission's Climate Change Brief (2023). The Historic Data and Future Risk Data on the right side of the page provide statistics from the Climate Change Brief (2023) to support the trend. We have added citations to identify this source as well.	https://resilientoahu.ko nveio.com/climateready oahu?cid=282#page=18
19	Suggestion	Please take a close look at the National Weather Service data on Honolulu's rainfall. The trend over the past 25 years has been a gradual increase in rain, not a decrease.	Mahalo for your comment. Drought frequency, duration, and magnitude has increased on O'ahu from 1920-2019 (Climate Change Brief, footnote 77) and historical data shows a decrease in rainfall for both the wet and dry seasons (Climate Change Brief, footnote 75). The City Climate Change Commission's Climate Change Brief (2023) sites many peer reviewed papers on precipitation observations and projections. However, you are correct that there is currently some disagreement in the projections. Both drought and flash flooding are listed as impacts in this report.	https://resilientoahu.ko nveio.com/climateready oahu?cid=196#page=19
19	Suggestion	Droughts generally hurt ranchers on O'ahu because they rely on rainfall to grow feed for their cattle. Most crop farmers are not affected by droughts because their crops are irrigated. Also, when O'ahu Sugar Co. and Wailuā Sugar Co. closed, they released more water than used by the Honolulu Board of Water Supply. Much	Mahalo for your feedback. According to the Board of Water Supply (BWS), due to a combination of urban growth and a decline in sugar production, the amount of water released by the closure of sugar plantations in the mid-1990s was less than that used by BWS. Some of that groundwater and surface water diversions remain available for agricultural irrigation, primarily in Waialua. In other former	https://resilientoahu.ko nveio.com/climateready oahu?cid=197#page=19

		of this water remains available for irrigating crops.	sugarcane areas such as 'Ewa, Waipahu, Waikele, and lower Kunia, new urban development has supplanted the demand for water.	
19	Suggestion	salt water intrusion	Mahalo for your suggestion. We have incorporated salt water intrusion into our risk graphic.	https://resilientoahu.ko nveio.com/climateready oahu?cid=228#page=19
20	Question	Does the data suggest that there are more flash flood incidents now that in the past?	Mahalo for your question. The data from the Honolulu Climate Commission's Updated Climate Brief suggest that the rainfall will be less frequent, but more intense when it does occur, leading to increases in flash flooding. See the Climate Brief here: https://www.resilientoahu.org/climate-change-commission	https://resilientoahu.ko nveio.com/climateready oahu?cid=162#page=20
21	Suggestion	Again stronger language is appropriate. "Warmer ocean temps are fueling"	Mahalo for your feedback. The language will be updated in the final draft as suggested.	https://resilientoahu.ko nveio.com/climateready oahu?cid=143#page=21

21	Suggestion	Please take a close look at the NOAA's data on hurricanes in the mid-Pacific. The trend is slightly fewer hurricanes, not more. Whether they will become stronger is still being debated.	Mahalo for your comment. You are correct that there has not been an observed increase in hurricanes in Hawai'i. "Since 1980 in the Central North Pacific basin, trends in the number of named storms have remained constant, with no significant trend in observed tropical cyclone frequency" (Climate Change Brief, footnote 154 & 155). On the other hand, hurricanes are more frequent during El Niño (Climate Change Brief, footnote 197), and El Niño conditions are projected to double in the 21st Century (Climate Change Brief, footnote 206). It is also projected that storms will follow tracks that bring them into the vicinity of Hawai'i more often (Climate Change Brief, footnote 194,195,196). Lastly, there are other peer-reviewed sources that suggest that hurricane frequency will remain about the same in Hawai'i, but intensity may increase.	https://resilientoahu.ko nveio.com/climateready oahu?cid=198#page=21
			https://journals.ametsoc.org/view/journals/wcas/11/1/wcas-d-17-0112 1.xml	
21	Suggestion	"never (yet) made landfall"	Mahalo for your comment. We have made edits to this sentence for clarity.	https://resilientoahu.ko nveio.com/climateready oahu?cid=238#page=21
21	Suggestion	"for as long as records are available" maybe	Mahalo for your suggestion. We restructured the sentence to reference no landfall on O'ahu since records have been available.	https://resilientoahu.ko nveio.com/climateready oahu?cid=283#page=21
22	Suggestion	Due to what? Is this for one or all hazards?	Mahalo for your question. Please refer to our response to your comment on page 22.	https://resilientoahu.ko nveio.com/climateready oahu?cid=115#page=22
22	Suggestion	Oh, wait, I see now this is the SLR section. Perhaps create a different color theme for each hazard and make consistent throughout?	Mahalo for your suggestion. Impacts are color coded by the vision part they fall under, rather than color coded by hazard. There is an icon for each hazard that you can follow throughout the document.	https://resilientoahu.ko nveio.com/climateready oahu?cid=116#page=22

22	Suggestion	this is great!	Mahalo for your support.	https://resilientoahu.ko
				nveio.com/climateready
				oahu?cid=144#page=22
22	Suggestion	The term domino effect refers to one thing, causing another that in turn causes another. Perhaps a more appropriate term would be "nested impacts" where one event may contribute to the occurrence (not necessarily cause) or intensification of another event. Nesting also allows one to anticipate events that have not yet happened.	Mahalo for your suggestion. Cascading impacts refer to an event that contributes to, but may not necessarily be the single cause of, another event. The 'domino effect' is used here as a layman's term to paint a picture of cascading impacts for the everyday reader of this document.	https://resilientoahu.ko nveio.com/climateready oahu?cid=163#page=22
22	Suggestion	due *to* climate change	Mahalo for your suggestion. The change has been made as you suggested.	https://resilientoahu.ko nveio.com/climateready oahu?cid=183#page=22
22	Question	No direct discussion of impacts on O'ahu's economy. Why? It is often said that "Exponential economic growth on a finite planet is unsustainable." It is also not sustainable on a finite island, especial when everything we rely upon comes from somewhere else. But our economic growth paradigm continues unabated and cannot be questioned or discussed. It should be!	Mahalo for your feedback. Although economic growth paradigms are not within the scope of this document, economic impacts of climate hazards are. Economic impacts of climate hazards can be found throughout these impact tables, and are the impetus for numerous actions including Action 3.5, Action 8.6, and Action 11.3.	https://resilientoahu.ko nveio.com/climateready oahu?cid=250#page=22

22	Question	Climate change is not the problem, it is a	Mahalo for your feedback. As a climate adaptation	https://resilientoahu.ko
		serious symptom caused by the real problem,	strategy focused on preparing us for the climate	nveio.com/climateready
		which is overshoot. Our goal seems to be to	impacts of today and generations to come, we do	oahu?cid=251#page=22
		keep our current and future "island way of life"	value and reference the economic implications and	
		and its economy fully powered so we can	impacts of climate hazards. However, the full	
		continue full speed ahead without disruption,	dissection and economic direction of our economy	
		without restraint and preferably without any	are not fully accessed in this document, as this is	
		inconvenience. Why can't this be discussed?	outside of our scope. The State has written a 2023	
			Comprehensive Economic Development Strategy for	
			Honolulu county, and the City's Office of Economic	
			Revitalization has numerous programs aimed at	
			creating an economy with more equitable, diverse,	
			and good jobs. The Economic Revitalization	
			Commission Report 2023 provides a highlight of the	
			different initiatives and goals for revitalizing our	
		6	economy.	1 11 11
22	Suggestion	Just finished up this section I think it might be	Mahalo for your suggestion. We considered many	https://resilientoahu.ko
		better to divide this section up by THREAT	ways to organize these data, but decided on this	nveio.com/climateready
		rather than by IMPACT. Had to go between	arrangement to strengthen the connection between	oahu?cid=288#page=22
		many times Lots of great information here	the three parts of the vision and the five climate	
		but I also think it is more intuitive to recognize	hazards.	
		impacts once we have put on the lens of threat.		1 11 11
23	Suggestion	It is always good to implement sections on how	Mahalo for your support. The impact tables were	https://resilientoahu.ko
		the data will negetively impact the reader, as	designed to show how the five climate hazards will	nveio.com/climateready
		they are able to relate and connect with the	affect our lives.	oahu?cid=223#page=23
		infomation being presented.		

23	Suggestion	This report/plan often aludes to increased costs, however. O`ahu is quickly approaching a time when O`ahu will be unaffordable for much of our population, especially the service workers who are essential for the visitor industry. When these workers leave for the mainland perhaps our visitors can be trained to make their own hotel beds and clean their	Mahalo for your suggestion. By offering an adaptation strategy, we aim to reduce the future costs from these climate hazards and provide equitable solutions. Additionally, the first 3 goals of Ola O'ahu Resilience Strategy focus on ensuring an affordable future for our island.	https://resilientoahu.ko nveio.com/climateready oahu?cid=252#page=23
23	Suggestion	room's toilet during their visit. Insects also thrive in warm and humid climates.	Mahalo for your suggestion. This is discussed under	https://resilientoahu.ko
		Maybe that will be discussed in a biodiversity section, but it has potential impacts of worsening invasive species and creating infestations in homes.	'Āina Impacts and the third bullet for Increasing Temperatures and Heat Waves.	nveio.com/climateready oahu?cid=284#page=23
24	Suggestion	This is more people.	Mahalo for your feedback. This bullet is being relocated to the people impacts section.	https://resilientoahu.ko nveio.com/climateready oahu?cid=145#page=24
24	Suggestion	This is more people	Mahalo for your feedback. This bullet is being relocated to the people impacts section.	https://resilientoahu.ko nveio.com/climateready oahu?cid=146#page=24
24	Suggestion	This is more people	Mahalo for your feedback. This bullet is being relocated to the people impacts section.	https://resilientoahu.ko nveio.com/climateready oahu?cid=147#page=24
24	Suggestion	Loss of wetlands	Mahalo for your feedback. Wetland loss was added to this section.	https://resilientoahu.ko nveio.com/climateready oahu?cid=148#page=24
24	Suggestion	Could talk about impacts of contaminated water on wildlife	Mahalo for your feedback. We have added a bullet to this section in the final draft.	https://resilientoahu.ko nveio.com/climateready oahu?cid=147#page=24
24	Suggestion	People in packs are covered and the previous section.	Mahalo for your suggestion. Please see the above response, as this was addressed in a reply comment to Leah Laramee.	https://resilientoahu.ko nveio.com/climateready oahu?cid=145#page=24

24	Suggestion Question	And funds may not be available if FEMA is depleted from other disasters around the country, if events become more frequent. People might be not be able to build back at all (like Puerto Rico after their hurricane). Where is this quote from?	Mahalo for your suggestion. We agree and incorporated your suggestion into our impacts table. Mahalo for your feedback. This reference is from the 2018 State of Hawaii Hazard Mitigation Plan, which	https://resilientoahu.ko nveio.com/climateready oahu?cid=285#page=24 https://resilientoahu.ko nveio.com/climateready
			can be found on p.4-111. Citations will be updated in the final draft.	oahu?cid=165#page=25
25	Suggestion	OK I see you.	Mahalo!	https://resilientoahu.ko nveio.com/climateready oahu?cid=286#page=25
26	Suggestion	This should be in SLR	Mahalo for your feedback. This bullet was relocated to the sea-level rise impacts section and revised as an impact of hurricanes in the final draft.	https://resilientoahu.ko nveio.com/climateready oahu?cid=150#page=26
27	Suggestion	Public safety at beaches where Rights of Way are impassable are also a new reality. The city just closed the BROW at Grays Beach near the Halekulani, likely for good.	Mahalo for your feedback. Protecting beaches Public Rights of way will continue to be important as sea levels rise.	https://resilientoahu.ko nveio.com/climateready oahu?cid=100#page=27
27	Suggestion	Really need citations with these hard numbers	Mahalo for your suggestion. We added citations for these numbers, which came from the Climate Change Commission's Sea Level Rise Guidance (2022).	https://resilientoahu.ko nveio.com/climateready oahu?cid=287#page=27
28	Suggestion	Increased need for irrigation for urban green spaces	Mahalo for your feedback. A point on an increased need for irrigation in urban green spaces was added to the final draft.	https://resilientoahu.ko nveio.com/climateready oahu?cid=151#page=28
29	Suggestion	This should be first on the list. We are in a housing crisis right now and if 60 percent of existing housing stock is destroyed a massive amount of people will be displaced to the mainland.	Mahalo for your suggestion. While the impacts were not listed in order of importance, we moved this bullet to the top of the list.	https://resilientoahu.ko nveio.com/climateready oahu?cid=248#page=29

31	Question	What are these green zones? Legend does not include them.	Mahalo for your question. We apologize for the poor image quality that resulted from file compression when uploaded to the web. The areas indicated appear to be coral reefs offshore and are not part of the census tracts.	https://resilientoahu.ko nveio.com/climateready oahu?cid=239#page=31
32	Question	I haven't heard Kamaaina in a long time when shopping? However, I am frequently asked if I'm military. I find that inequity especially troublesome since military have housing allowances, as well as a PX for buying food and essentials at lower rates.	Mahalo for your comment. This may be an equity issue, however it is not climate-related.	https://resilientoahu.ko nveio.com/climateready oahu?cid=229#page=32
32	Question	Shouldn't equity be high concern for both Adaptation AND Mitigation?	Mahalo for your question. This document is focused on adaptation, but please refer to the 2020-2025 Climate Action Plan and p.28 for more information on how the city is prioritizing equity in its mitigation work as well.	https://resilientoahu.ko nveio.com/climateready oahu?cid=240#page=32
32	Suggestion	I think that there should be a definition of climate equity in the introduction.	Mahalo for your comment. Equity is extremely important to consider in climate adaptation and resilience. The introduction focuses more on climate hazards, while "Climate Equity in Adaptation" is where we discuss equity in detail. Climate Equity is also defined in the glossary.	https://resilientoahu.ko nveio.com/climateready oahu?cid=249#page=32
32	Suggestion	Sentence fragment: suggest "communities, especially with Native Hawaiian community leaders"	Mahalo for your suggestion. We have made this change.	https://resilientoahu.ko nveio.com/climateready oahu?cid=292#page=32
33	Suggestion	Suggest using a picture that does not show that there is no one listening to our youngsters (Empty audience as evidenced by empty chairs)Manini comment but a picture says a 1000 words.	Mahalo for your feedback. We agree, and have replaced this photo in the final draft.	https://resilientoahu.ko nveio.com/climateready oahu?cid=126#page=33

33	Suggestion	In response to the other comment left on this page, wondering HGG could contribute with photos of the KS Ka'āmauloa educational pathway students/Hawaii Youth Climate Delegation on panels at the United Nations	Mahalo for your suggestion. We reached out to HGG and they provided us with a photo from that event that will be used here in the final draft.	https://resilientoahu.ko nveio.com/climateready oahu?cid=261#page=33
26	Cussostian	and/or HGG Annual Partnership Event	Nahala farusum faadhaali NA/a haya addad in	https://www.liantach.u.la
36	Suggestion	My concern is mostly related to fire risk, including preventative measures and evacuation plans for residents. I live in upper Manoa Valley in an area with many trees, powerlines running along streets as well as through "back/side yard" easements. This area experiences high wind several times a year. With only 2 roads out of the valley and population on the rise, this area would be a prime targ	Mahalo for your feedback. We have added in Wildfire as a climate hazard in the final draft. Actions 2.2, 6.5 and 10.3 address wildfire management and the City is committed to strengthening wildfire preparedness plans.	https://resilientoahu.ko nveio.com/climateready oahu?cid=154#page=36
36	Suggestion	This area would should be cited as a fire risk area. We need evacuation plans and a long term plan, with phasing, for moving power lines underground.	Mahalo for your suggestion. The above response addresses this comment, as this one is a reply to it.	https://resilientoahu.ko nveio.com/climateready oahu?cid=154#page=36
41	Suggestion	Part 3 is not just about keeping residents safe. It is also about how we are going to keep our harbors and airports in operation to deliver food and allow for visitors to keep our GDP going How are we going to keep sewage flowing to wastewater treatment plant. What are we going to do to save Waikiki, our main economy and employers.	Mahalo for your feedback. We have edited the infrastructure vision statement. We agree that resilient harbors, airports, and other infrastructure are key to a climate ready future. The reliability of that infrastructure is ultimately to ensure the wellbeing of people.	https://resilientoahu.ko nveio.com/climateready oahu?cid=127#page=41

42	Suggestion	Seems that there should be more State	Mahalo for your feedback. Adapting to the impacts	https://resilientoahu.ko
	2.0822	involvement included in this document.	of climate change is a collaborative effort and	nveio.com/climateready
			happening at multiple scales. As the City and County	oahu?cid=128#page=42
			of Honolulu's climate adaptation strategy, Climate	
			Ready O'ahu is grounded in actions the City is able	
			to do on a local level. However, as you point out, the	
			impacts and solutions are cross-cutting and we	
			incorporate collaboration with State and federal	
			governments as much as possible.	
43	Suggestion	It would be great to get a more detailed	Mahalo for your suggestion. Looking at the 5 blue	https://resilientoahu.ko
		summary of the strategies and sub-strategies to	icons that float above the left edge of the document,	nveio.com/climateready
		see them more comprehensively as a list.	the bottom one called "Action Summary" provides a	oahu?cid=224#page=43
			comprehensive summary table of all the Strategies	
			and Actions.	
45	Suggestion	Equity would mean to me monetary incentives	Mahalo for your feedback. We agree that	https://resilientoahu.ko
		to put in solar (could include low interest loans	affordability and accessibility are equity issues. This	nveio.com/climateready
		possibly tied into feeding into the grid during	strategy (Strategy 1) is focused on education, but	oahu?cid=230#page=45
		peak ours (SWELL).	Action 7.3 includes information about BWS' Water	
			Sensible Program provides rebates for residential	
		Rain barrels	rain barrels and water-efficient upgrades for toilets,	
			weather-based irrigation controller, and washing	
		Catchment	machines. Other actions, like Action 5.3 were	
			included in recognition that financial assistance will	
		xeriscape workshops (all golf courses switched	be necessary to allow most families to convert their	
		to xeriscape)	cesspools.	
49	Question	WHY is the question of permitting endless new	Mahalo for your feedback. Please refer to Strategy	https://resilientoahu.ko
		buildings on our fragile coast land nowhere in	11, and Actions 11.2 and 11.4 for more information	nveio.com/climateready
		this document? It should have been up front	on building in vulnerable areas.	oahu?cid=84#page=49
		from the very beginning of this process. Every		
		new building increases the likelihood of		
		disaster and yet nothing stops this insane		
		process. No citizen efforts can offset this ever		
		increasing danger.		

49	Suggestion	ditto on resourcessuch as trees to plant in areas, done together as community. Maybe advice from horticulturists on best trees to plant in a specific area that need less water, provide more shade and also are a food source.	Mahalo for your feedback. We agree- trees are a great way for communities to be champions of climate adaptation! Please refer to action 1.1 as one way to address this.	https://resilientoahu.ko nveio.com/climateready oahu?cid=231#page=49
49	Suggestion	celebrate by sharing best practices, how to	Mahalo your comment. It is very important to share best practices along with celebrating successes. We will keep this in mind during implementation.	https://resilientoahu.ko nveio.com/climateready oahu?cid=232#page=49
56	Suggestion	correction: flower and foliage collecting	Mahalo for your comment. We have made this change.	https://resilientoahu.ko nveio.com/climateready oahu?cid=293#page=56
58	Suggestion	Could be an opportunity to use the existing project assessment tool produced by Aina Aloha Economic Futures, Stantec, and HGG: The Malama Implementation Tool! (https://alohachallenge.hawaii.gov/pages/alawai-watershed-collaboration). As discussed with HSEO reps - well designed for specific projects.	Mahalo for your suggestion. We have added this tool as an existing resource in the final draft.	https://resilientoahu.ko nveio.com/climateready oahu?cid=262#page=58
58	Suggestion	Is there a way to connect this to the Aloha+ Dashboard which already measures progress towards locally relevant goals? Happy to discuss any synergies and how the Aloha+ Dashboard might be a tool for metrics here.	Mahalo for your question. We will reach out during implementation to discuss how the Aloha+ Dashboard could be utilized.	https://resilientoahu.ko nveio.com/climateready oahu?cid=264#page=58
60	Suggestion	great tool!	Mahalo for your support!	https://resilientoahu.ko nveio.com/climateready oahu?cid=233#page=60

62	Suggestion	The definition of communities should include not just residents but also those with relationship/affinity to place, e.g. through stewardship, cultural activities, and even recreation. This is particularly important given histories of land displacement, and natural resources whose benefits extend beyond geographic boundaries (e.g., beaches).	Mahalo for your feedback. This is an important point not just for this action but all of our equity work. We will add this to the Strategy 4 introduction section, and make sure to keep it in mind during implementation moving forward.	https://resilientoahu.ko nveio.com/climateready oahu?cid=253#page=62
66	Suggestion	This vision ignores the hard fact that invasive non-native plants and animals now dominate much of our island, and restoring this to a fully native system is not possible. Instead, we can manage a mixed ecosystem to contain or eradicate the most destructive invasives, conserve intact native areas, and beef up fire management. Prevent development of wetlands and recharge areas as sea levels rise.	Mahalo for your feedback. Vision statements depict ideal futures that we can strive towards. The strategies and actions provide feasible ways to make progress towards those goals. For example, Action 5.1 supports conservation, Action 5.2 supports wetland restoration, and Action 6.2 supports increased maintenance, conservation and restoration of watersheds.	https://resilientoahu.ko nveio.com/climateready oahu?cid=102#page=66
66	Suggestion	Is this vision to include large tourist numbers? Hard to take the plan seriously without stating some assumptions about population. Perhaps that is found in another document.	Mahalo for your feedback. Land use and resource needs related to population growth can be found in the O'ahu General Plan, which uses DBEDT projections for 2040, and can be viewed here: https://www.honolulu.gov/dpp/planning/planning-documents/oahu-general-plan.html	https://resilientoahu.ko nveio.com/climateready oahu?cid=103#page=66
67	Suggestion	also affecting the fresh water lens sitting on top of our aquifer	Mahalo for your comment. Salt water intrusion into the aquifer is certainly an impact of sea level rise. Please see Strategy 8 for more information on the impact of saltwater intrusion.	https://resilientoahu.ko nveio.com/climateready oahu?cid=254#page=67
67	Question	removing infrastructurewhat does that mean? how is it accomplished? laws, education, cultural and environmental education?	Mahalo for your question. This is a complex challenge that is addressed by multiple actions. For more information on siting new infrastructure, please see Actions 10.6 and 11.2. For more information on planning for existing infrastructure, please see Actions 10.4 and 11.3. For more	https://resilientoahu.ko nveio.com/climateready oahu?cid=255#page=67

			information on managed retreat please see Action 11.4.	
67	Suggestion	Good to provide funding as that is a barrier for many mitigations that people are more than willing to do.	Mahalo for your support.	https://resilientoahu.ko nveio.com/climateready oahu?cid=256#page=67
68	Suggestion	It seems the DPP should be involved in revising their protocols to resonate with existing knowledge on these areas. For instance the cement troughs that are required to mitigate streams that may be affected by construction. Cement ditches seem environmentally unfriendly. Restoration with native vegetation, rock or gravelnot cement troughs?	Mahalo for your comment. Action 6.4 discusses reestablishing natural stream systems and DPP is listed as a partner.	https://resilientoahu.ko nveio.com/climateready oahu?cid=257#page=68
69	Suggestion	possibly work with schools in areas that need restoration. this will hopefully lead to the virtue of stewardship as children grow into adulthood.	Mahalo for your support of community-led stewardship.	https://resilientoahu.ko nveio.com/climateready oahu?cid=258#page=69
70	Suggestion	The added value and importance of newer technology (like ATUs) cannot be understated here. Plan for the future by adopting (at least) current (not antiquated) technology which can helps make us more climate resilient in many ways. ATUs address the isssue of cesspools with many co-benefits. Their expense should be subsidized by state-funded incentive programs.	Mahalo for your support of Action 5.3. Aerobic Treatment Units (ATUs) are among the cesspool conversion options for consideration.	https://resilientoahu.ko nveio.com/climateready oahu?cid=104#page=70
70	Suggestion	DOH indicates at https://health.hawaii.gov/wastewater/home/c esspools/ that there are >11,000 cesspools on Oahu. Although possibly outdated, it is unlikely that 1/3 of them have been eliminated since that number was posted on their website.	Mahalo for your feedback. Please refer to the source cited (Hawai'i Cesspool Hazard Assessment & Prioritization Tool 2022 Updated Report and Technical Appendices) for additional information on how the figure of 7,491 cesspools was calculated	https://resilientoahu.ko nveio.com/climateready oahu?cid=108#page=70

			and validated in the most recent study provided to the State Legislature.	
70	Suggestion	In 2023, the DOH Wastewater Branch and University of Hawai'i launched the Hawai'i Cesspool Prioritization Tool (HCPT), an opensource web viewer that identifies the urgency of cesspool conversion based on 15 risk-factors. (hawaiicesspooltool.org)	Mahalo for your suggestion. We have included a reference to the tool as a resource for people to look at in the final draft.	https://resilientoahu.ko nveio.com/climateready oahu?cid=175#page=70
70	Suggestion	Septic tanks may not be appropriate in areas close to the shoreline or in the SLR-XA where groundwater levels are high. Consider saying instead "Upgrade your cesspool to a more advanced form of wastewater treatment with the assistance of an engineer or technical advisor."	Mahalo for your suggestion. This change has been added into the final draft.	https://resilientoahu.ko nveio.com/climateready oahu?cid=176#page=70
70	Suggestion	Agree with Melanie's suggestions, also "and connect to the City's municipal sewer system wherever feasible."	Mahalo for your comment. We have made this change.	https://resilientoahu.ko nveio.com/climateready oahu?cid=295#page=70
71	Suggestion	Hawaii Sea Grant's Dune Restoration coordinator Wes Crile may be of assistance.	Mahalo for your suggestion. We will make a note to reach out to Mr. Crile during implementation.	https://resilientoahu.ko nveio.com/climateready oahu?cid=179#page=71
71	Suggestion	Remove seawalls asap to slow erosion, by communities. I suggest starting with the most wealthy areas. Around diamond head there are so many sea walls, and the coast is eroding quickly. Just ask the residents and the surfers, its changing rapidly in front of our eyes.	Mahalo for your feedback. The adverse impacts that seawalls have on beaches is serious and well-documented. The City recently adopted Ordinance 23-4, which strengthened the shoreline rules against seawalls and other shoreline armoring.	https://resilientoahu.ko nveio.com/climateready oahu?cid=306#page=71
72	Suggestion	community driven is key	Mahalo for your support of community-led stewardship.	https://resilientoahu.ko nveio.com/climateready oahu?cid=259#page=72

75	Suggestion	Green infrastructure is beneficial to water quality during "normal" rainfall events, but severe flooding typically occurs after the ground is already saturated from previous precipitation. Under these situations, green infrastructure is not effective for either runoff quality or quantity. Large-capacity basins (many acre-feet) or larger channels are needed to mitigate flooding from such events.	Mahalo for your feedback. Action 6.1 aims to increase the use of green infrastructure. While not a replacement for larger capacity stormwater drainage infrastructure, green infrastructure has been proven to help reduce flooding and improve water quality.	https://resilientoahu.ko nveio.com/climateready oahu?cid=111#page=75
75	Question	Who (what department) is working on this plan and when will it be available for review?	Mahalo for your suggestion. DFM is working on this plan, which is identified as the Storm Water Master Plan and Functional Plan and detailed in their Storm Water Strategic Plan 2023-2028. The plan will address green infrastructure as well as flooding, water quality, recharge, sea level rise and asset renewal.	https://resilientoahu.ko nveio.com/climateready oahu?cid=182#page=75
75	Suggestion	xeriscape gold course vegetation	Mahalo for your suggestion. Xeriscaping refers to replacing turf with landscaping that requires little to no irrigation. While this is not possible for golf courses as a whole, certain non-playable parts of the turf could potentially be converted to xeriscaping.	https://resilientoahu.ko nveio.com/climateready oahu?cid=265#page=75
77	Suggestion	The multi benefits of stream restoration is undervalued and underestimated given our island ecosystem's tendency to have surface area flooding, flash floods, extreme rain events, combined with king tides - is known to regularly cause major access and safety issues in several places in the islands. Bridges across streams are dilapidated as they mitigating for huge debris from historic lack of	Mahalo for your feedback and support of Action 6.3. This action aims to realize the many co-benefits of stream restoration.	https://resilientoahu.ko nveio.com/climateready oahu?cid=85#page=77

77	Suggestion	There are many additional organizations working in watershed restoration that involve volunteer opportunities. It would be great to see a comprehensive list of organizations the community can get involved with. I am more than happy to help provide the list of organizations I do know of.	Mahalo for your feedback. There are so many amazing community organizations doing critical climate adaptation work island-wide. We would love to learn more from you who community members can get involved with! Please send us an email at resilientoahu@honolulu.gov. As a general note, City and State stakeholders are mostly listed as initial partners, but this Strategy must be implemented in partnership with non-governmental organizations and community members. Please refer to the Adapting Together section on page 127.	https://resilientoahu.ko nveio.com/climateready oahu?cid=156#page=77
77	Suggestion	The 2021 Hawaii Streamside Guide (https://seagrant.soest.hawaii.edu/streamsideg uide/) offers tips for maintaining stream banks, choosing stream-friendly plants, and benefiting ecosystem health.	Mahalo for your suggestion. We have added the 2021 Hawai'i Streamside Guide under "Actions You Can Take" for Action 6.3.	https://resilientoahu.ko nveio.com/climateready oahu?cid=180#page=77
78	Suggestion	I believe this system only includes beach/shoreline water quality monitoring, not streams	Mahalo for your feedback. This tool is important, but we agree that it would be more appropriate in another action. We have moved this tool to Action 6.1.	https://resilientoahu.ko nveio.com/climateready oahu?cid=181#page=78
78	Suggestion	insert hyphen: re-establish	Mahalo for your comment. Generally, there is no hyphen in American English.	https://resilientoahu.ko nveio.com/climateready oahu?cid=296#page=78
80	Suggestion	Please take a close look at the National Weather Service data on Honolulu's rainfall. The trend over the past 25 years has been a gradual increase in rain, not a decrease.	Mahalo for your comment. Drought frequency, duration, and magnitude has increased on O'ahu from 1920-2019 (Climate Change Brief, footnote 77) and historical data shows a decrease in rainfall for both the wet and dry seasons (Climate Change Brief, footnote 75). The City Climate Change Commission's Climate Change Brief (2023) cites many peer reviewed papers on precipitation observations and projections. However, you are correct that projections are not consistent. We have both	https://resilientoahu.ko nveio.com/climateready oahu?cid=199#page=80

	1		T	_
			drought and flash flooding listed as impacts in this report.	
80	Suggestion	need a period at end of sentence.	Mahalo for your comment. We have made this change.	https://resilientoahu.ko nveio.com/climateready oahu?cid=297#page=80
81	Suggestion	Should add ENV since they own the Wastewater plants	Mahalo for your feedback. ENV has been added as a partner in the final draft.	https://resilientoahu.ko nveio.com/climateready oahu?cid=130#page=81
81	Suggestion	The development of R-1 water is by no means economical, but it does free up our precious water resources	Mahalo for your feedback.	https://resilientoahu.ko nveio.com/climateready oahu?cid=131#page=81
81	Question	Is there a timeline for expansion? With conversion of the plant to full secondary almost completed, there will be opportunities to expand the BWS RO plant.	Mahalo for your question. Completion of the facility's upgrade to full secondary will provide new opportunities to expand recycled water use such as increasing capacity for internal recycled water use within wastewater treatment plants, or distribution. BWS's Water Master Plan calls for more recycled water infrastructure, and recommends a new recycled water facility for the Ala Wai Golf Course.	https://resilientoahu.ko nveio.com/climateready oahu?cid=132#page=81
81	Suggestion	Common area and street landscaping	Mahalo for your feedback. Street landscaping was added to the expected benefits.	https://resilientoahu.ko nveio.com/climateready oahu?cid=133#page=81
81	Suggestion	Just because we have R-1, we should not ovedo it with water thirsty plants. we should still prioritize endemic plants that require less water	Mahalo for your feedback. Prioritizing native plants will be critical in restoration efforts as detailed in Strategy 5.	https://resilientoahu.ko nveio.com/climateready oahu?cid=134#page=81

81	Suggestion	ENV	Mahalo for your feedback. ENV has been added as a	https://resilientoahu.ko
			partner in the final draft.	nveio.com/climateready
				oahu?cid=135#page=81
81	Question	is the power to operate these solar or wind?	Mahalo for your question. HECO supplies electricity	https://resilientoahu.ko
			to our wastewater treatment plant sites, with Kahe	nveio.com/climateready
			and Waiau Power Plants working to meet the	oahu?cid=266#page=81
			electrical demand of Honouliuli Wastewater	
			Treatment Plant (HWTP). As seen in the EIS for	
			HWTP, alternative energy sources were examined	
			for future integration. Combined heat and power	
			(CHP) was seen as the first source for investment,	
			with solar photovoltaic (PV) identified as another	
			feasible alternative source of energy. Location and	
			energy demand largely determine the most energy	
			efficient and sustainable source of energy.	
85	Suggestion	You should add an individual action about	Mahalo for your feedback and suggestion. We added	https://resilientoahu.ko
		reusing gray water (washing machine water) for	this as an action people can do.	nveio.com/climateready
		watering plants etc.		oahu?cid=98#page=85
86	Suggestion	The statement that "nearly 90% of food on	Mahalo for your comment. A 2013 peer-reviewed	https://resilientoahu.ko
		Hawai'i is imported" is not based on any study:	study calculated that 88.4% of food in Hawai'i was	nveio.com/climateready
		it is a made-up and undefined statistic.	sourced from imports, ~81% from the Continental	oahu?cid=201#page=86
		Nevertheless, UH studies indicated that about	U.S. and ~6% from foreign countries (Loke and	
		two-thirds of our fresh produce (by weight) is	Leung, 2013).	
		imported.		
86	Suggestion	Most wildfires hurt ranchers, not crop farmers.	Mahalo for your feedback. Droughts affect both	https://resilientoahu.ko
			ranchers and crop farmers. On Oʻahu, pastures make	nveio.com/climateready
			up a smaller proportion of the overall agricultural	oahu?cid=203#page=86
			footprint compared to the neighbor islands, which is	
			why our strategies focus on crop farming and	
			traditional indigenous practices.	

86	Suggestion	If a hurricane were to hit O'ahu, most crops would be destroyed as happened on Kaua'i in 1992 due to Hurricane 'Iniki. Increased food production in Hawai'i would provide many benefits, but the lesson from 'Iniki and many other weather-related disasters is that increased food self-sufficiency can reduce food security.	Mahalo for your feedback. You are correct that in the event of a hurricane, many locally grown crops would also be affected. Please see Action 8.6 for more discussion on food supply, storage, and distribution. Additionally, Action 16 of Ola Oʻahu Resilience Strategy is focused on increasing emergency food supply and storage.	https://resilientoahu.ko nveio.com/climateready oahu?cid=204#page=86
86	Question	Shouldn't hydroponic farming be mentioned as a way to cope with climate change? Hydroponic farming provides higher yields than field farming, uses much less water, and the production is unaffected by storms provided the greenhouse remains standing.	Mahalo for your suggestion. Hydroponics are a great way to adapt to climate change and are included under the umbrella term of "Climate Smart Agriculture." Please refer to Action 8.2 for more information on Climate Smart Agriculture and the use of technology.	https://resilientoahu.ko nveio.com/climateready oahu?cid=205#page=86
86	Suggestion	mulch from fire breaks to be available to community members needing it for soil mitigation, compsting. encouraging composting of food waste in households and well as schools and restaurants.	Mahalo for your comment. Please refer to the O'ahu Compost Project mentioned below Action 8.6. https://www.resilientoahu.org/ocp	https://resilientoahu.ko nveio.com/climateready oahu?cid=267#page=86
86	Suggestion	Subsidize locally grown food that is sold only instate.	Mahalo for your suggestion. There are a series of grants and loans from both the City and state developed and available to support locally grown food. Recently, the Office of Economic Revitalization (OER) awarded 66 grants to small farmers, ranchers and growers who qualified for the City's \$3 million agriculture grant. The O'ahu Agriculture and Conservation Association is a great resource for viewing the various grants and loans applicable to our farmers and ranchers. https://www.oahuaca.org/farmers-and-ranchers	https://resilientoahu.ko nveio.com/climateready oahu?cid=307#page=86

87	Suggestion	growing food sources as vegetation along	Mahalo for your question. The City has historically	https://resilientoahu.ko
		public corridors. bananas, papaya, fruit trees	expressed concern with keeping up with the fruiting	nveio.com/climateready
			season of all fruiting trees. Fallen fruit may become	oahu?cid=268#page=87
			a safety concern. It is also for the same reason that	
			the City does not allow coconuts to grow to	
			maturity; falling coconuts are a danger to people	
			and property.	
88	Suggestion	resources for home gardening to farmers, small	Mahalo for your suggestion. It is important to	https://resilientoahu.ko
		scale up to large scale	provide resources for small scale to large scale	nveio.com/climateready
			farmers, please see Action 8.4 to read about the	oahu?cid=269#page=88
			creation of a resource network for farmers.	
88	Suggestion	I think agroecology more accurately describes	Mahalo for your suggestion. Climate-smart	https://resilientoahu.ko
		the city's approach than CSA, which has been	agriculture (CSA) as recognized by the Food and	nveio.com/climateready
		critiqued internationally for emphasizing	Agriculture Organization of the United Nations (FAO)	oahu?cid=302#page=88
		technical issues over social ones and is actively	has three main objectives: sustainably increasing	
		opposed by civil society orgs working for	agricultural productivity and incomes; adapting and	
		equitable food system change. CSA lacks any	building resilience to climate change; and reducing	
		criteria or benchmarks, so even industrial ag	and/or removing greenhouse gas emissions, where	
		practices can (and do) get passed off as CSA.	possible. We have changed the action's description	
		Agrocology has clearer principles	to make the connection to agroecology clearer and	
			clarify that the proposed Climate Smart Agriculture	
			Resource Guide (referenced in Action 8.2) will	
			identify specific tenets of CSA and agroecology that	
			should be promoted on O'ahu. The term "climate-	
			smart" is also used by the USDA, which could	
			provide important future resources to implement	
			this work.	

89	Suggestion	Most plants evolved when CO2 levels were	Mahalo for your feedback. Please review the	https://resilientoahu.ko
		much higher, and they thrive on higher levels of	,	nveio.com/climateready
		CO2. Yields increase substantially with higher	increased CO2 on agricultural production. However,	oahu?cid=206#page=89
		levels of CO2, and the plants are more resistant	the purpose of a climate adaptation strategy is to	
		to droughts. Earth has become greener	prepare for the impacts that stem from increasing	
		because of higher levels of CO2.	emissions. This report is focused on those impacts as	
			outlined in the science (Climate Commission Brief).	
			https://climate.nasa.gov/news/3124/global-climate-	
			change-impact-on-crops-expected-within-10-years-	
			nasa-study-finds/	
89	Suggestion	equipment Co-Ops	Mahalo for your suggestion. This action calls for the	https://resilientoahu.ko
			creation of a study that identifies local, climate-	nveio.com/climateready
			related challenges to agriculture, which may include	oahu?cid=270#page=89
			access to equipment, data needs, economic and	
			political barriers to climate-smart agriculture. Based	
			on the results of the study, recommendations for	
			resources such as equipment co-ops will be	
			identified.	
91	Question	Can the city plant fruit bearing trees in	Mahalo for your question. The City has historically	https://resilientoahu.ko
		common areas in community gardens? Like	expressed concern with keeping up with the fruiting	nveio.com/climateready
		along pathways between garden plots?	season of all fruiting trees. Fallen fruit may become	oahu?cid=83#page=91
			a safety concern. It is also for the same reason that	
			the City does not allow coconuts to grow to	
			maturity; falling coconuts are a danger to people	
			and property.	
92	Suggestion	food import-dependent	Mahalo for your comment. We have made this	https://resilientoahu.ko
			change.	nveio.com/climateready
				oahu?cid=298#page=92

94	Question	Will these updated flood maps be required by the City/County to be used in the design of new and retrofitted developments and roads? The design industry needs guidance on adapting utilities etc to climate change as it's already affecting them but codes and standards don't reflect this yet.	Mahalo for your question. Yes, the City uses these updated flood maps for guidance and to enforce requirements in new and retrofitted developments. As seen in the Revised Ordinances of Honolulu (ROH), for all new construction and substantial improvement the City uses updated flood maps as guidance for where the lowest floor is constructed and where utility equipment is placed. Also, the annual coastal erosion rate used to determine the amount of shoreline setback for a property is found from the Hawaii Shoreline Study web map.	https://resilientoahu.ko nveio.com/climateready oahu?cid=216#page=94
94	Suggestion	mature green spaces in one area stimulate the transition in the adjacent area (eg. shade creates a temperature gradient which affects soil moisture content. the adjacent area needs less water to grow another tree. and so in turn there is an ever larger green space. this needs planning.	Mahalo for your suggestion. Action 12.1 is focused on maintaining and growing the City's urban tree canopy. We incorporated your suggestion as an expected benefit.	https://resilientoahu.ko nveio.com/climateready oahu?cid=271#page=94
95	Suggestion	Planing for replacing non potable water uses such as outdoor irrigation to recycled water could be considered a climate mitigation strategy because of the projected changes in rainfall due to climate change. This would move the City towards compliance with Act 170 SLH 2016, which requires planning for replacing 100% of nonpotable uses in county buildings by 2045	Mahalo for your feedback. Adaptation activities have many co-benefits with mitigation and we appreciate you highlighting one of them.	https://resilientoahu.ko nveio.com/climateready oahu?cid=129#page=95
96	Question	One Water Panel seems to be mostly City Departments. Any suggestion on incorporating the State programs to it? State also have a lot of projects that are impacted by Climate Change. DLNR has a lot of impacted land and watersheds. I would think that Climate Ready	Mahalo for your question. Honolulu's One Water Panel was initially convened to address challenges faced by the City's stormwater, wastewater, groundwater, freshwater, graywater, and recycled water infrastructure. Currently, the One Water Panel is focused on cross-agency collaboration to create	https://resilientoahu.ko nveio.com/climateready oahu?cid=120#page=96

		·	-	·
		Oahu should include State/City and maybe	resource and financial efficiencies. However, the	
		Feds? Don't know enough about the One Water	Panel is working to collaborate with the State more	
		Panel Role to comment further	closely moving forward, as it turns toward more	
			specific projects and policy issues.	
96	Suggestion	feedback between groups so that changes can	Mahalo for your support of the One Water Panel,	https://resilientoahu.ko
		be responsive in a timely manner	which was convened to facilitate exactly this type of	nveio.com/climateready
			communication and coordination.	oahu?cid=272#page=96
97	Question	Does the Mayor's Office endorse this plan? A	Mahalo for your feedback. Climate Ready Oʻahu has	https://resilientoahu.ko
		signed commitment or framework from the	the full support of the Mayor! A letter from him and	nveio.com/climateready
		Mayor would support this action.	from the City's Chief Resilience Officer have been	oahu?cid=109#page=97
			added to this final draft.	
97	Suggestion	Please integrate a discussion on Critical	Mahalo for your suggestion. Discussions on sea-level	https://resilientoahu.ko
I		infrastructure SLR level so that there is a	rise and critical infrastructure will take place as part	nveio.com/climateready
		general buy in by all City and State	of the implementation of actions in Strategies 10	oahu?cid=122#page=97
		departments	and 11. As a note, through Mayor's Direction 18-2,	
			all City departments are already directed to use the	
			City Climate Change Commission's Sea Level Rise	
			Guidance for planning benchmarks for sea level rise.	
98	Suggestion	need a period here, for consistency?	Mahalo for your comment. We have made this	https://resilientoahu.ko
			change.	nveio.com/climateready
				oahu?cid=299#page=98
99	Suggestion	Does this also apply to Waikiki, our GDP	Mahalo for your feedback. This action calls for the	https://resilientoahu.ko
		generator? If so, I think that's not a fair way to	creation of a toolbox of funding mechanisms, since	nveio.com/climateready
		have business pay for all the infrastructure. All	different approaches might work best in different	oahu?cid=121#page=99
		of Hawaii need Waikiki to succeed for us to	places. As a note, Waikīkī already has a Special	
		exist, the way we know it. So, I don't think that	Improvement District in place (www.wbsida.org),	
		we should overly penalize businesses. They	which has been a major partner in efforts to address	
		might make a business decision to pull out of	shoreline erosion in Waikīkī. The Wakīkī Beach	
		Hawaii.	Special Improvement District is actually an excellent	
,			example of the type of region-specific work that can	
			funded by tools from this action.	

100	Question	Are there any incentives for private landowners to plant shade trees?	Mahalo for your question and support of Action 9.5. Please also see Action 12.2 for more information	https://resilientoahu.ko nveio.com/climateready
			about potential for incentives to address heat.	oahu?cid=82#page=100
100	Suggestion	tree lined boulevards	Mahalo for your comment. Shading of parking lots	https://resilientoahu.ko
			and streets includes increasing tree cover.	nveio.com/climateready
				oahu?cid=273#page=10
				<u>0</u>
100	Suggestion	bike path options. pedestrian streets . farmer	Mahalo for your suggestion. We agree and support	https://resilientoahu.ko
		markets as gathering places	multi-modal transportation, which Action 12.3	nveio.com/climateready
			addresses these options and incorporates cooling	oahu?cid=274#page=10
		spaces as community where the needs are met	solutions.	<u>0</u>
		within a short distance so no car traffic is		
		needed per community. honolulu is not a		
		community in this sense. neither is the north		
100	Suggestion	shore. Require street tree planting as part of complete	Mahalo for your feedback. Including trees in	https://resilientoahu.ko
100	Suggestion	streets projects. Include DPR-DUF Director in	complete streets project is a great idea! In fact,	nveio.com/climateready
		the Complete Streets Ordinance to more	"trees and landscaping" are one of the 10 core	oahu?cid=304#page=10
		purposefully consider new tree planting during	principles of the City's complete streets program, as	<u>0</u>
		complete streets projects.	laid out in the Complete Streets Ordinance. You're	<u> </u>
		Complete of color projects.	correct that the DPR Director is not currently	
			identified in that ordinance, and that is something	
			that we will keep in mind as we move toward	
			implementation.	
100	Suggestion	Shading must be more clearly mandated, not	Mahalo for your feedback. Trees provide so many	https://resilientoahu.ko
		just as reducing heat island effect but reducing	co-benefits, including helping to reduce energy use	nveio.com/climateready
		energy use. HECO doesn't measure projected	and cost. We have added your suggestion to the list	oahu?cid=305#page=10
		energy reduction due to shading, and I think	of expected benefits.	<u>0</u>
		the state should mandate that. Dramatically		
		reduce our energy use first and then see how		
		much energy we need after that has been		
		exhausted. Prioritize trees over bike lanes and		
		sidewalks for our everyday commutes.		

101	Suggestion	Recommend an action for CCSR to engage with developers and P3 for planning and designing resilient development. Developers will be moving away from Waikiki and looking towards places like Ewa i.e. easier to build. Future development needs guidance to avoid poor planning decisions that result in less resilient communities.	Mahalo for your feedback. Climate Ready O'ahu envisions more resilient communities through climate-informed planning, codes, and standards. Please refer to Strategies 9 and 11, as well as Actions 9.3, 9.5, 11.1, 11.2, 11.4, and 12.3 for more information.	https://resilientoahu.ko nveio.com/climateready oahu?cid=112#page=10 1
101	Suggestion	rebuild (don't need a hyphen)	Mahalo for your comment. We have made this change.	https://resilientoahu.ko nveio.com/climateready oahu?cid=300#page=10 1
103	Suggestion	buildings that use the existing energy free solutions to heat abatetrees, solar AC, window allowing the tradewinds to circulate air	Mahalo for your feedback. We support green solutions and less energy-intensive solutions wherever possible. Please see Action 12.2 for more information.	https://resilientoahu.ko nveio.com/climateready oahu?cid=275#page=10 3
104	Question	If an owner undertakes such activities, does it then make it harder to cool houses? Are we making property fire-safe but then less protected from the urban heat island effect? (and thus those with means will use more air conditioning?)	Mahalo for your question. A minimum 5-foot buffer is recommended to lower fire risk. However, there are many other ways to mitigate heat risk in or on your house such as cool roofs or trees in your yard (more than 5 feet away). For more information please refer to Action 12.2	https://resilientoahu.ko nveio.com/climateready oahu?cid=225#page=10 4
105	Suggestion	I think that there is a need to have a discussion of critical facilities (water pump stations, wastewater treatment plants and pump stations, roadways leading to these critical facilities) having to be designed to the 6 ft SLR. Department heads at the City/State need clear guidance on what to design for. We don't want Departments to make decisions in a vacuum.	Mahalo for your feedback. Please refer to Action 10.6 for more information on the use of climate change design guidelines for City projects. Adaptation pathways, as noted here, offer a framework for planners, engineers, and architects to design for anticipated climate impacts in a consistent but context-appropriate way.	https://resilientoahu.ko nveio.com/climateready oahu?cid=118#page=10 5
107	Question	Suggest that State DOT also be part of this discussion because they have roadway infrastructure that might affect the City's	Mahalo for your suggestion. Discussions on sea-level rise and critical infrastructure are incorporated as part of the implementation of actions in Strategies	https://resilientoahu.ko nveio.com/climateready

		critical infrastructure. How do you coordinate DOT long range plan with this Adaptation Pathway? For areas dense in critical facilities like Sand island (sand Island wastewater treatment plant, harbor infrastructure), how do we coordinate their construction?	10 and 11, which include better coordination between the State and City.	oahu?cid=119#page=10 7
107	Suggestion	impressive	Mahalo for your support!	https://resilientoahu.ko nveio.com/climateready oahu?cid=276#page=10 7
110	Suggestion	The guidelines should also be a resource during the construction phase, not just planning and design. During the construction phase, value engineering can occur due to supply chain issues and other problems resulting in less resilient strategies i.e. cheaper. Climate Change guidelines also used during construction may be able to alleviate value engineering propositions.	Mahalo for your feedback. This idea will be shared with the Department of Design and Construction.	https://resilientoahu.ko nveio.com/climateready oahu?cid=107#page=11 0
111	Question	Did the house near Sunset Beach fall because of a 3-inch rise in sea level over the past 50 years? Or did it fall because it was built in the wrong place with the wrong type of foundation?	Mahalo for your question. This event can be attributed to both factors. See Strategy 11 about directing development to safer and higher ground. Sea level rise (SLR) is a slow-moving but relentless change, and small increases in sea level can translate into very large impacts on land. Just 3.2 ft. of SLR would inundate 9,400 acres of land on O'ahu. Actions such as requiring freeboard in special flood hazard areas and the adoption of a sea level rise overlay zone work towards improved building designs based upon sea level rise vulnerability.	https://resilientoahu.ko nveio.com/climateready oahu?cid=200#page=11 1

114	Question	Military usage of roadsDo they pay road task	Mahalo for your question. Action 11.3 primarily	https://resilientoahu.ko
		by weight of their vehicles?	focuses on impacts on infrastructure caused by	nveio.com/climateready
			flooding and erosion related to sea level rise, not by	oahu?cid=277#page=11
			vehicle weight. This issue is not related to climate	4
			adaptation.	
115	Question	is the impact of military target use on	Mahalo for your question. The expected benefit,	https://resilientoahu.ko
		ecosystems assessed or questioned?	preserve and protect sensitive rural ecosystems, is	nveio.com/climateready
			associated with managed retreat. Military actions	oahu?cid=278#page=11
			are not assessed with this Action, as they are not	<u>5</u>
			associated with managed retreat.	
116	Suggestion	Most global warming will occur in the northern	Mahalo for your comment. Climate Ready O'ahu is	https://resilientoahu.ko
		latitudes, over land, in the winter, and at night.	focused on hazards we will experience here on	nveio.com/climateready
		Even assuming a major temperature increase	Oʻahu. Here are some Hawaiʻi specific projections:	oahu?cid=207#page=11
		for earth, temperatures changes in Hawai'i are	Model projections for late 21st century for Hawai'i	<u>6</u>
		likely to be modest.	indicate that surface air temperature over land will	
			increase 2° to 4°C (1.8° to 7.2°F) with the greatest	
			warming at the highest elevations and on leeward	
			sides of the major islands. (Climate Change Brief,	
			footnotes 70-72). Under continued ("business as	
			usual") greenhouse gas emissions, elevations above	
			3,000 m (9,800 ft.) in Hawai'i are projected to reach	
			up to 4° to 5°C (7.2° to 9°F) warmer temperatures by	
			the late 21st Century (Climate Change Brief,	
			footnote 73).	

116	Suggestion	The CDC reports that cold weather causes more	Mahalo for your feedback. The National Weather	https://resilientoahu.ko
		deaths in the U.S. than does warm weather.	Service reports that excessive heat is the leading	nveio.com/climateready
			weather-related killer in the United States. As you	oahu?cid=208#page=11
			point out, the CDC does report that excessive cold is	<u>6</u>
			the bigger killer. A peer-reviewed article (Dixon, P.G.	
			et al, 2005) examined these conflicting conclusions	
			and found that the CDC's data did not account for	
			the large seasonal trends in death rates (i.e. higher	
			in the winter). Once corrected for this trend, a	
			pattern emerged: deaths spiked following heat	
			waves, while they barely moved following excessive	
			cold. Regardless, it is clear that excessive heat, not	
			cold, has the greater potential to cause deaths on	
			O'ahu, so it is necessary for us to prepare for the	
			impacts of extreme heat.	
118	Suggestion	Are there rebates for cool roofs? I suggest	Mahalo for your feedback. There are no current	https://resilientoahu.ko
		revising this. Sharing an air conditioner or cool	rebates for cool roofs; however, rebates and other	nveio.com/climateready
		roof does not align with an equitable	financial incentives for cool roofs will be explored as	oahu?cid=105#page=11
		recommended action i.e. these strategies	part of Action 12.2 to increase affordability and	<u>8</u>
		should be realistic and affordable for all during times of climate shock.	ensure accessibility for frontline communities.	
			We will look at successful examples in other cities.	
			For example, an energy provider in Phoenix called	
			SRP, is offering rebates for cool roofs and will be an	
			example to learn from as we implement this action:	
			https://www.srpnet.com/energy-savings-	
			rebates/home/rebates/cool-	
			roof#:~:text=Rebate%20calculation,roof%20coverag	
			e%2C%20up%20to%20%24600.	
123	Suggestion	As an island with consistent sun exposure	Mahalo for your feedback and support of Action	https://resilientoahu.ko
		annually and high energy costs, the City should	12.7. This action calls for maximizing installation of	nveio.com/climateready
		prioritize this no matter the vulnerability or	solar PV over parking lots, and complements the	oahu?cid=106#page=12
		conditions unless determined to be truly life-	Climate Action Plan's Action 6.2, which calls for an	<u>3</u>

				T
		cycle cost ineffective. Recommend CCSR to	increase in renewable energy generation on City	
		further promote HCAP Action 6.2 as this seems	land and buildings by 200%. Identifying sites with	
		like low-hanging fruit for the City to prioritize.	the highest heat vulnerability provides an equitable	
			starting point for further implementation.	
123	Question	does this include the military bases? if so why	Mahalo for your question. Carbon emissions are	https://resilientoahu.ko
		not? this needs to be part of this doc. the	addressed in the City's Climate Action Plan. The	nveio.com/climateready
		impact of the military carbon foot print needs	State and City's 2045 target for zero emissions	oahu?cid=279#page=12
		to be assessed. As a state we need to be aware	includes all emissions in the state, including from	<u>3</u>
		and hold accountable contributions to carbon	military activities. The City's greenhouse gas	
		emissions. mitigation includes reducing carbon	inventory also includes the military's emissions in its	
		emissions	total. You can find most up to date inventory in the	
			City's Annual Sustainability Report.	
125	Suggestion	I enjoyed scrolling through this document. It is	Mahalo for your support!	https://resilientoahu.ko
		very aesthetically pleasing and easy to go		nveio.com/climateready
		through, navigate, and read. Mahalo for all the		oahu?cid=184#page=12
		hard work from all of the contributors!		<u>5</u>
125	Suggestion	We still import about 85% of Oahu's food. This	Mahalo for your feedback. We agree on the	https://resilientoahu.ko
		is unsustainable and subject to myriad possible	importance of bolstering O'ahu's food sovereignty,	nveio.com/climateready
		disruptions. Increased emphasis should be put	which Strategy 8 has six actions designed to improve	oahu?cid=244#page=12
		on food self sufficientcy.	the growth and climate resilience of our local food	<u>5</u>
			system.	
		Suggestion: At the State level, pass legislation		
		that prevents HOAs from banning vegetable		
		growing in front yards or anywhere else on		
		one's property. Vegetables are not on their		
		approved plant list.		
125	Suggestion	Strategy 8 - We import 85% of our food. As part	Mahalo for your suggestion. In Ola Oʻahu, our	https://resilientoahu.ko
		of a resilieance plan, the city/state should have	Resilience Strategy, Action 16 calls for establishing	nveio.com/climateready
		a plan in place for equitable food rationing that	an Oʻahu Emergency Food Supply and Storage	oahu?cid=245#page=12
		can be implemented in the event of an	Strategy, helping identify and reach ALICE (Asset	<u>5</u>
		emergency that seriously disrupts our food	Limited, Income Constrained, Employed) families	
		supply.	and other underserved communities.	

125	Suggestion	Strategy 7 - Facilitate homeowners to install rain catchment from roofs and storage containers that can be sealed against mosquitos and other unwanted materials and which can be reserved for household emergency use.	Mahalo for your feedback. Rain catchment is a great way to better utilize water resources. BWS offers incentives for installing rain catchment such a rain barrels. For more information on that program see Action 7.3. For more information on expanding use of non-potable water, such as rainwater, please see Action 7.4.	https://resilientoahu.ko nveio.com/climateready oahu?cid=246#page=12 5
125	Suggestion	Strategy 12 - Revise building code to make passive roof vents (ridge vents) and wide overhangs (3.5 ft. to 4 ft.) required for all new residential dwellings. This will noticably reduce interior temperatures, especially on upper level of two story buildings. Encourage and facilitate similar retro-fitting of existing dwellings.	Mahalo for your feedback. These vents are designed well to support passive cooling, and they should be encouraged for both reducing interior temperatures and improving energy efficiency. When updating the building code, decision makers often balance improved performance against increased cost. Strategies 9 and 10 are aimed to increase the integration and funding sources for infrastructure best designed to climate resilience.	https://resilientoahu.ko nveio.com/climateready oahu?cid=247#page=12 5
126	Question	I live behind and work below Wa'ahila Ridge on the UH Campus. Every day I drive or walk past the dry grasses and ha'ole koa on Dole Street and wonder when the ridge will burn again. The amount of dry fuel abutting the states flagship university is troubling and it would only take a small spark and a good breeze to start a massive fire. What is being done to prevent this predictable disaster?	Mahalo for your feedback. Action 1.1 focuses on increasing education on climate risks, including wildfire risks, and Action 2.2 describes how Firewise communities can collectively address known fire risks.	https://resilientoahu.ko nveio.com/climateready oahu?cid=101#page=12 6

126	Question	Thank you for your outreach efforts &	Mahalo for your feedback. This report emphasizes	https://resilientoahu.ko
		summaries. The 'our' and 'collaborative' terms	collaboration because it reflects what the	nveio.com/climateready
		should not bring false hope that this Office is	community told us was important. Following	oahu?cid=303#page=12
		going to see community concerns addressed.	adoption of this report, one of the first things we	<u>6</u>
		How can we get our public/private systems to	will do is develop meaningful metrics that will	
		effectively support the Report's goals as	provide transparency on the implementation of the	
		building code violations, lack of reality	actions.	
		affordable housing & development continues in		
		spite of water availability concerns?		