

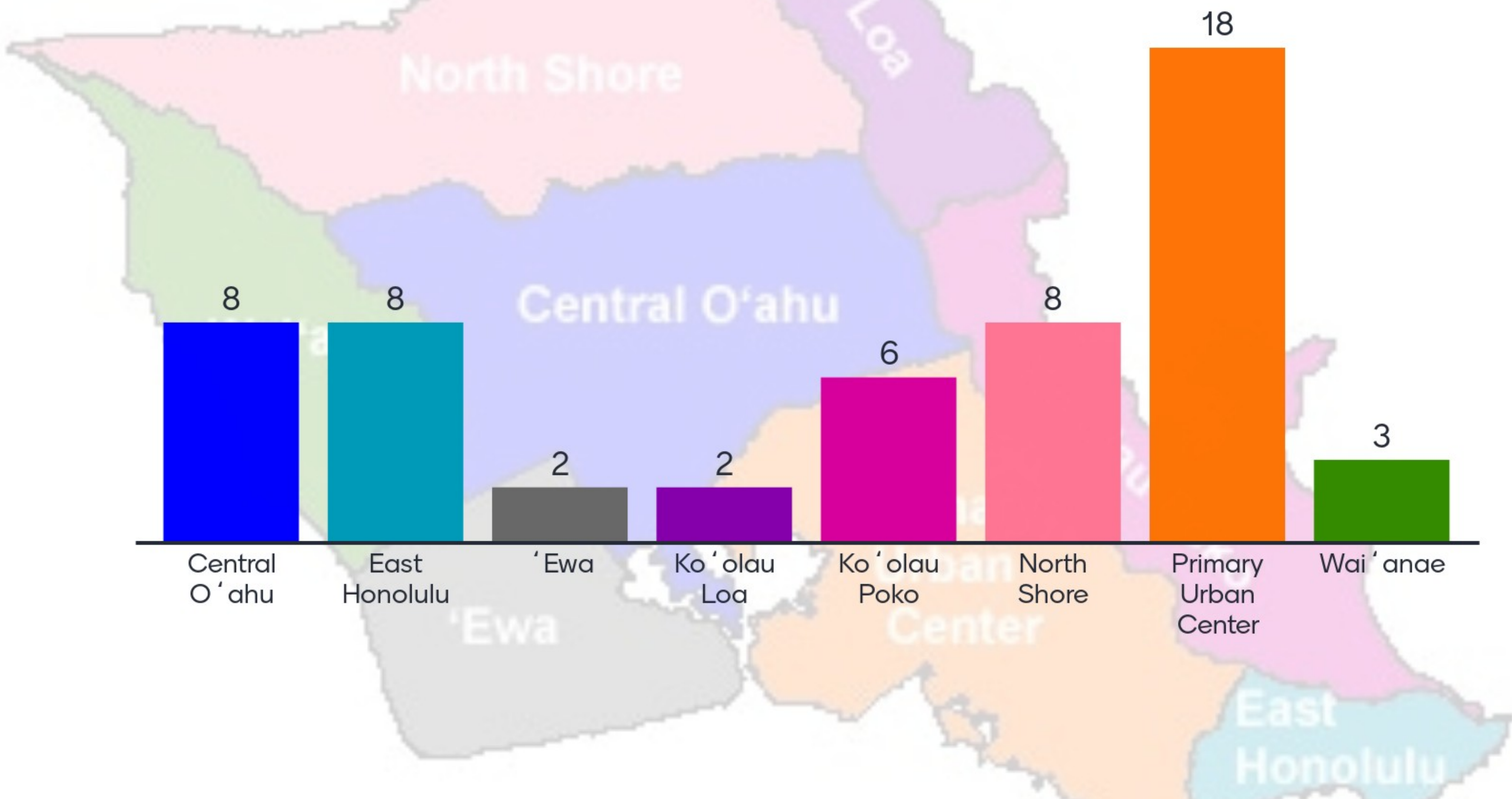
Climate Hazard Impacts

Discussion 1

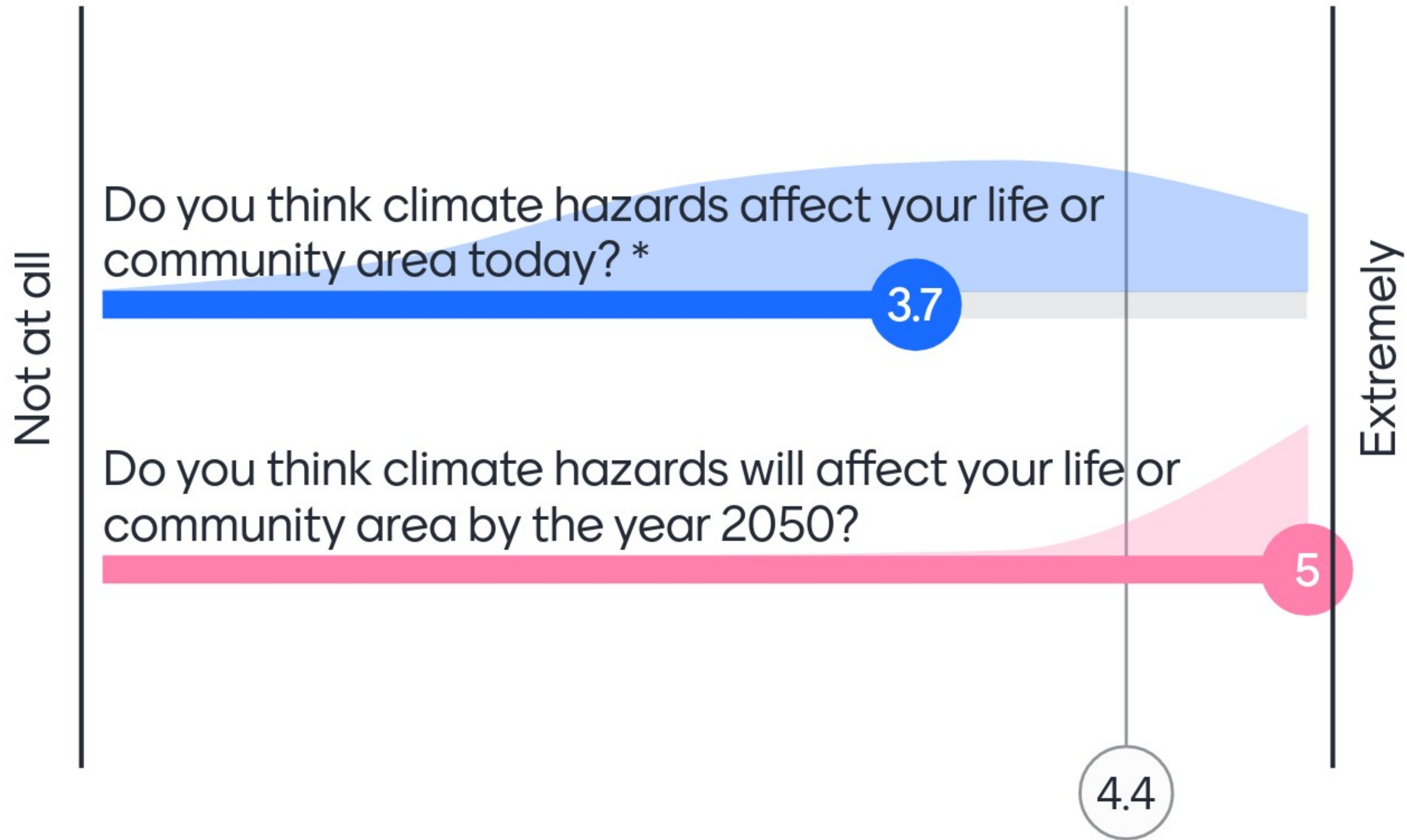


O'ahu Community Plan Areas

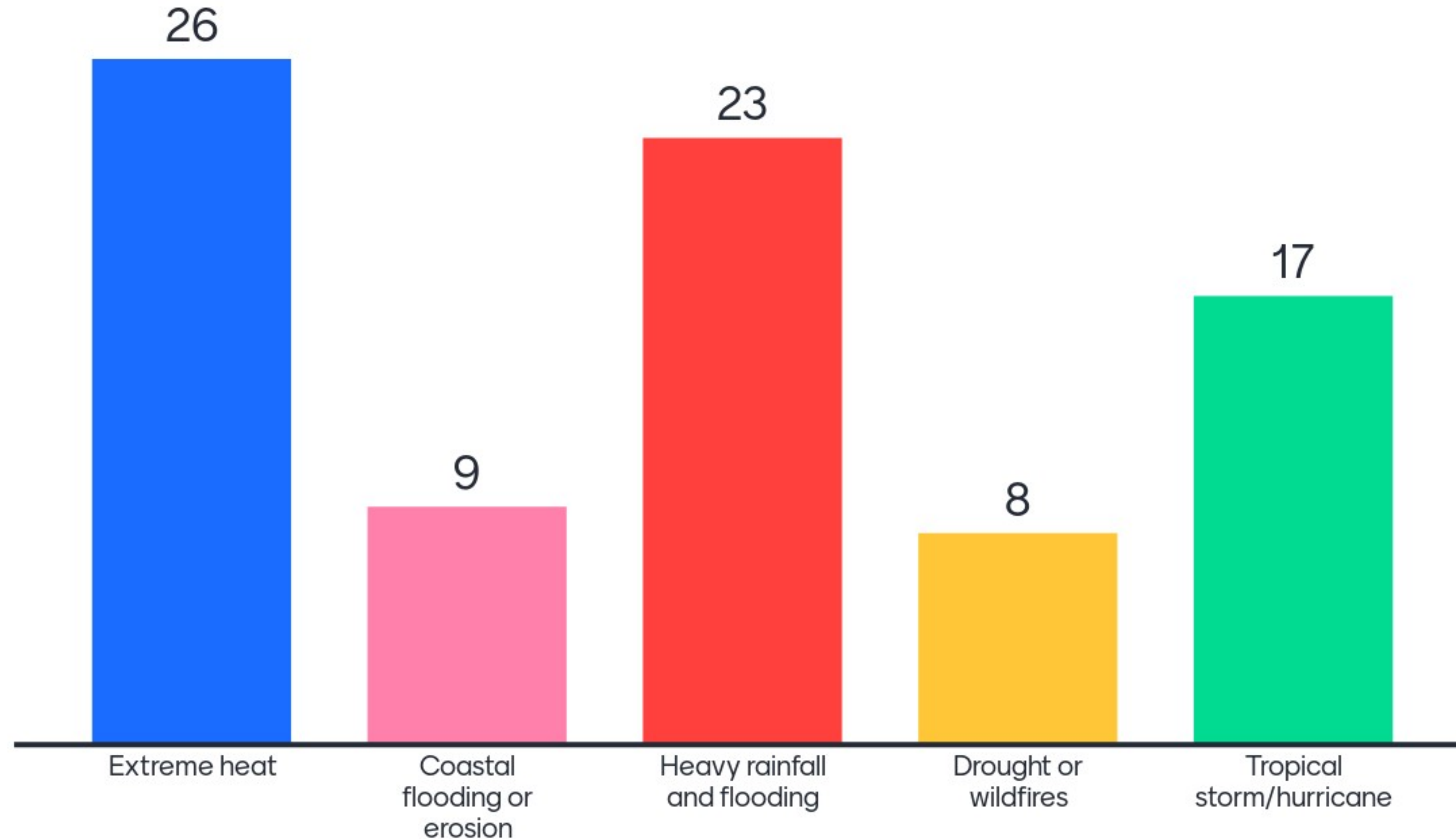
Using the Community Plan Area map above, select the Area(s) you feel most connected to on O'ahu.



Climate Hazards & Their Impacts



Has your household been impacted by any of the following? (Choose as many as are relevant.)



How have you been impacted by these events?

Indirect impacts thus far.

It's too hot to walk outside....

Concern about safety of home during heavy rain.

roof damage; some flooding

Higher electricity costs to run AC to combat heat

Heat is greater in our house, trade winds have historically been all we need.

Been through a direct hit from a tropical cyclone.

Rain can be tough on older apartment buildings and homes in Waipahu. Leaks, not being able to get to school due to flooding, etc. etc.

Trees have fallen -- don't blame the tree, blame the choice of the tree, the care (or lack thereof).

How have you been impacted by these events?

loss of electricity, flood damage to building, damage to infrastructure

Shifting needs for asset mgt

sea level rise and storms affecting shoreline businesses and infrastructure along the shoreline

Infrastructure damage, discomfort, fear

Changing the family lifestyle to accommodate those events

Drought has impacted our native forests, making them weaker and more vulnerable to invasive species and fire. Heat has made everyday life uncomfortable.

Increased energy use to cool the house

Need for new infrastructure: doors replaced after storms, fans installed after heat days, french drains to reduce future internal flooding.

Needing to buy AC unit given extreme temperatures last summer

How have you been impacted by these events?

No major impact yet

House has only fans. Pretty miserable these last few years. In 2007, fireworks started fires just behind my house.

some flooding, potential increases with increases in SLR

Heavier rainfall caused home/roof damages. Hotter days creates concerns for the elderly in our family--always reminding them to drink water.

In 2018, high rainfall totals created significant flooding along the coast. We also have everything from bleaching events, to erosion, and excessively hot days.

Removal of large canopy trees means no shade and more heat.

Worries about water supply due to drought. Conserving water.

Could not afford air conditioning during heat spells

FEAR

How have you been impacted by these events?

Less rainfall impacting farming and water table levels

exercise only when it's cooler (morning or evening)

Emergencies more frequent

coastal erosion and loss of beach, neighborhood flooding, road closures due to erosion flooding, power outages as a result, family needing to relocate from other areas to come here due to these issues, hot weather

North shore home threatened by coastal erosion and sea level rise; heat in old house where air conditioning was previously not needed

Hurricane Douglas didn't cause a direct impact to us but we spent all day preparing

Extreme heat requires ac use. Flood results in run off dirty costal water and damage to reefs. Erosion impacts are reclaiming private and public lands. Damage to related recreational resources.

Flooding of access road Landslide post 2018 4/13 24 hr stormFires

Financial impact to CapEx and OpEx

How have you been impacted by these events?

emergency power suppleness by gas copany during disasters

Loss of potable water available due to damage during tropical cyclone

Trees can help mitigate runoff so less need for other types of infrastructure if "green infrastructure" is the investment activity.

Higher temps in our ocean so affects our fishing and "icebox"

It ' s hotter than when I was growing up. Can ' t afford AC

Prepare for more extreme weather events. Heavy flooding in neighborhood

More frequent hurricane threats

Vulnerable communities

Our Civic Club members mentioned changed in fishing and farming

How have you been impacted by these events?

Where I currently live, I've noticed changes in rainfall patterns and extreme heat usually on a daily basis recently. Whenever I commute to the North Shore I've noticed a lot of beaches impacted.

The number one issue will be brush fires , especially close to homes.

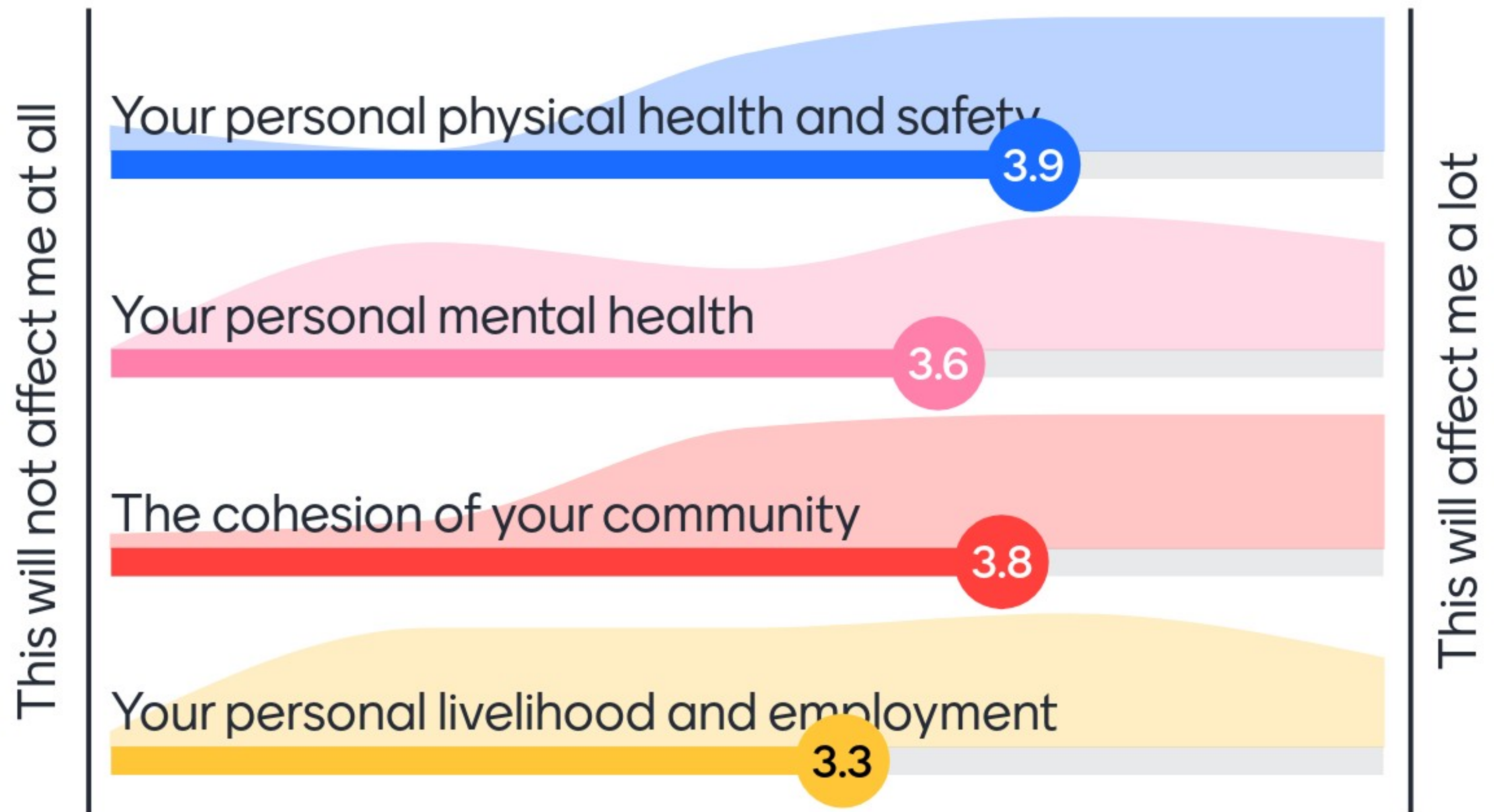
Roads will likely be blocked, transportation issues

Yes

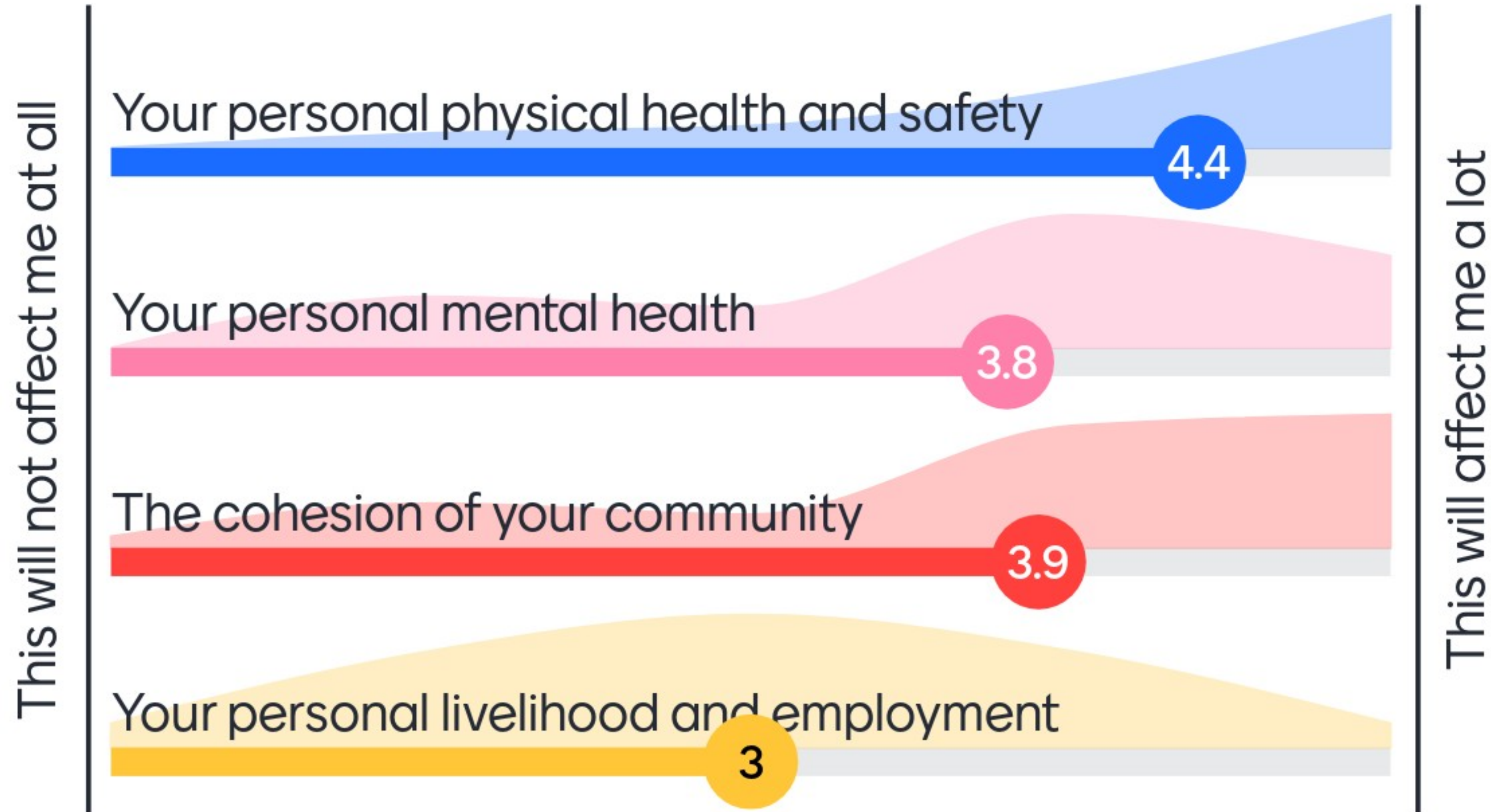
Definitely affects our community as heavy rainfall creates runoff in our red dirt and washes through properties.

It will likely be that improvements will be done in the Waikiki and downtown areas so that businesses can keep operating. Other communities will unfortunately have to wait...

How do you think tropical storms and hurricanes will impact...?



How do you think hotter temperatures will impact...?



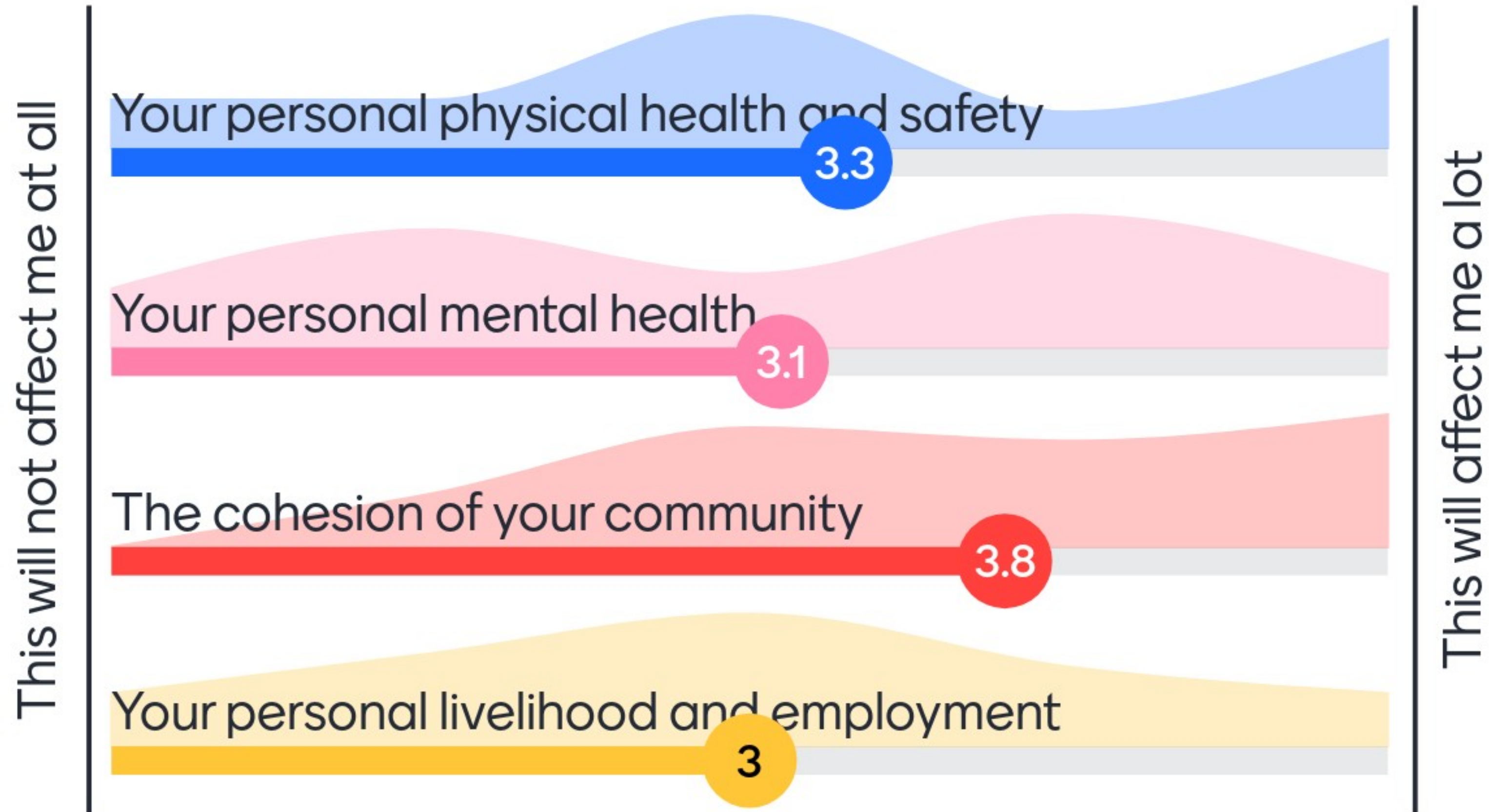
How do you think flooded and/or eroding beaches and coastal infrastructure will impact...?



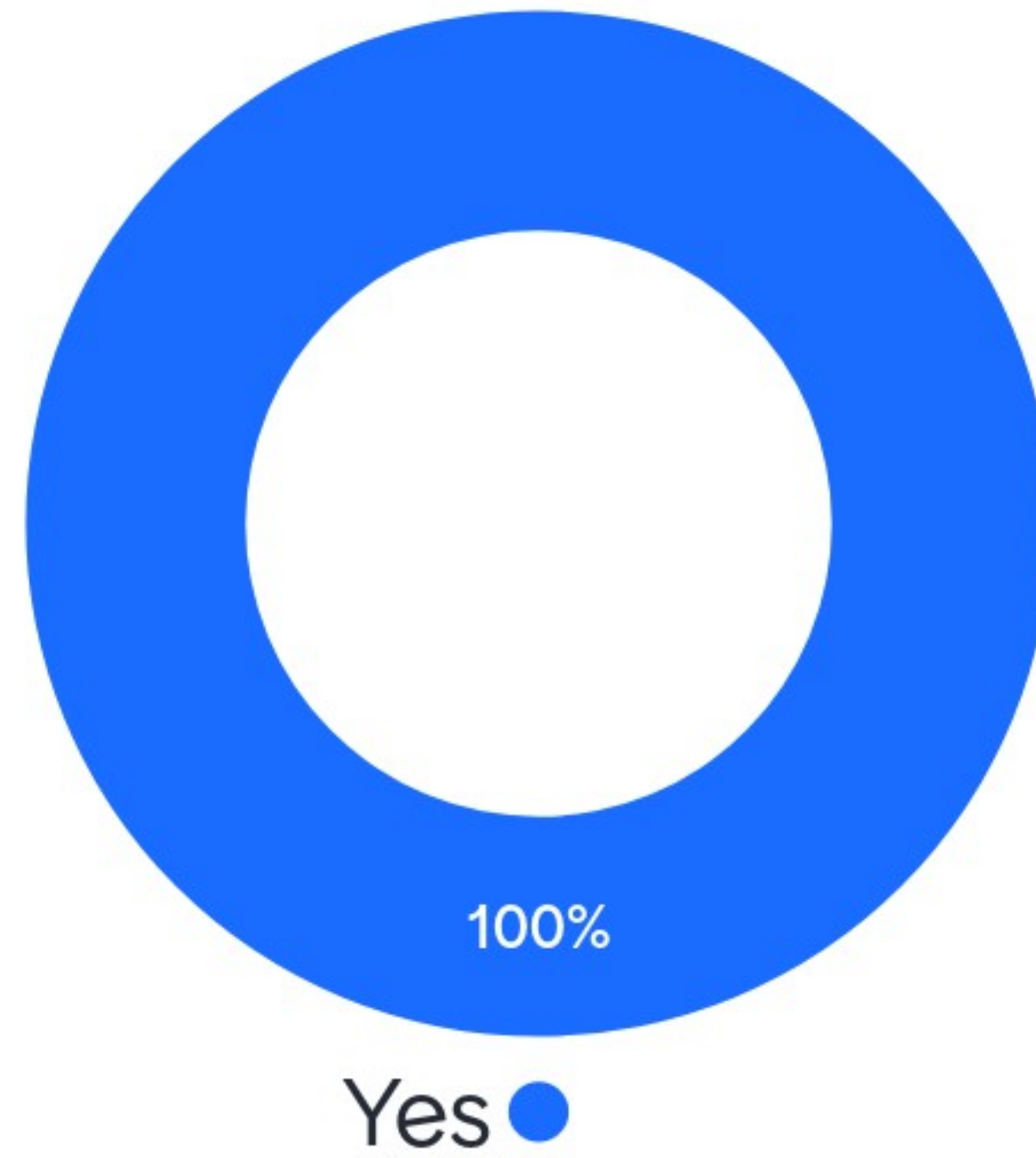
How do you think extremely heavy rainfalls and landslides will impact...?



How do you think droughts on the leeward side of the island will impact...?



Do you think different types of communities are affected differently by climate change?



What (if any) concerns do you have that climate change impacts will affect individual communities unequally?

Disparity of available resources and support for communities farther away from the urban core

Communities with less current/past investment will be less prepared for future impacts

Responses will be driven by money and influence rather than science.

Social justice and economic justice - poorer communities may not have the same resources.

Economic. Racial. Environmental Justice -- the haves will be taken care of; the have nots will suffer. For example: Covid-19 impact.

Inequitable investments across communities

kupuna lack of access to services, essential needs

Likely to have a larger impact on communities with less resources.

Shoreline communities will be greatly affected. All our roads are near the water...

What (if any) concerns do you have that climate change impacts will affect individual communities unequally?

How energy infrastructure can unequally affect different communities that have to bare its burden

Increasing divisiveness between and amongst communities

Major concerns. Affluent people make laws that increase osts and affect poor people.

Socioeconomic disparity

Sea level rise will impact coastal areas more significantly and infrastructure in those communities

Poor and underrepresented communities will be heavily impacted by food security, flooding, and heat, but will likely lack the focus of government to help address their issues.

Poor and minority communities will not have the personal resources to adapt to or recover from the impacts of climate change.

Lower income communities will have greater challenges adapting to climate

accessibility and affordability of resources to prepare and respond

What (if any) concerns do you have that climate change impacts will affect individual communities unequally?

Inability for voices to be heard

Communities have different values and natural resources

Inequality of resources for rural communities

Typically under served communities will continue to be underserved. Let's flip history on its head.

Distribution of resources, development of new challenges based on the individual nuances of place, economic and racial disparities etc

Heat Islands are different depending on where on the island you reside.

Inequity based upon community affluence.

property damage, insurance rates, food security, recovery efforts

disparity of resources

What (if any) concerns do you have that climate change impacts will affect individual communities unequally?

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Access to critical infrastructure (medical, food, etc)

Community buy-in will be a challenge

As the COVID response is showing, many efforts protect economic interests over individual needs. This is unlikely to change without setting that change as a goal.

Some communities have the ability to source resources and some do not

underrepresented communities, or groups who cannot easily afford direct investment or buttressing for improvements or maintenance will be much more heavily affected.

Funding may be allocated ineffectively

resources for services and funding for infrastructure, community wellness, food sustainability, demand on communities to provide for others

I have a lot of concerns about inequity, too many to type here. Basically more affluent people and communities will have better access to mitigation and relief.

What (if any) concerns do you have that climate change impacts will affect individual communities unequally?

Institutions failure to engage key communities

People with economic stability and access to resources will have the capacity to respond that others do not.

Government mandates and prohibitions affect people who do not have a meaningful choice of where to live or where to work. Impacts in affluent neighborhoods are different from other neighborhoods.

Demographics Survey Questions



Demographics Survey, Part 1

What is your age?

How do you identify?

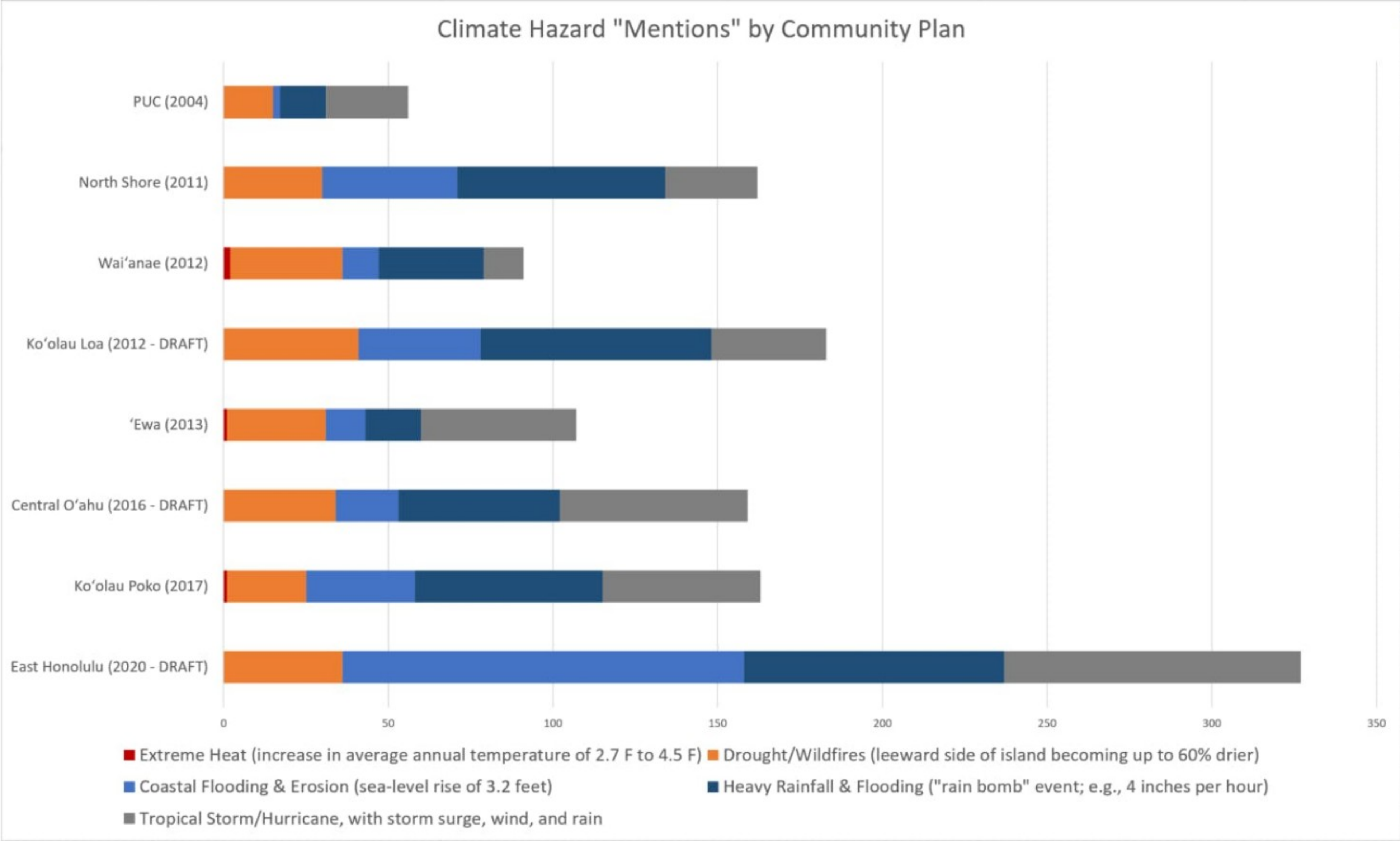
How long have you been a resident?

Demographics Survey, Part 2

Including yourself, how many people live in your household?
Which of these best describes your total household income?

Climate Change Adaptation Guiding Principles

Discussion 2



Climate Hazards Mentioned In Community Plans

Climate change adaptation: What does it mean for your organization, network, community, and/or you?

Safety

Public Perception

resilient Hawaii

Public Education

Cross-sector partnerships are key

Fairness

resilience

Equity

safety

Climate change adaptation: What does it mean for your organization, network, community, and/or you?

reliability

The most important thing to focus on

Safety

Resilience

We need to prepare and educate the community, so they can understand, adapt and overcome.

Community survival

Opportunity to be more rooted in this place and our root culture and values.

Health

If all fully considered they represent hope given the very real threats.

Climate change adaptation: What does it mean for your organization, network, community, and/or you?

Ensuring an equitable transition for communities to ready themselves for the realities of climate change impacts.

Recognition that we are isolated

equitable

serving all customers

getting back to roots

Heat kills more people than any weather related events in the USA. Trees aren't the only solution, but they are a contributing solution.

Cooperation between communities will be key

Preparedness

Relationships, Respect, Humility

Climate change adaptation: What does it mean for your organization, network, community, and/or you?

Education

preparing for the impacts while maintaining service

Resiliency built in to future care of lands protected

using design to guide us, a step-wise process of testing and experimentation, site-based, situation dependent, being ready and being together, collaboratively bought-in on solid plans,

Be proactive. Don't wait for someone else to help. Government moves too slowly. Plant a lot of trees.

community

we will need to overhaul our building codes and zoning codes dramatically to allow for new technologies to help with mitigation

Maintain standards of living

Keeping what we cherish while addressing new challenges

Climate change adaptation: What does it mean for your organization, network, community, and/or you?

Adapting our living practices to better equip our communities for long-term sustainability and resilience to combat climate change.

Knowing that the burden of taking on the climate crisis will not be on the backs of the poor

Economic realities

prepared

ensuring there are enough resources for our children/grandchildren

Major industries affected should be part of this group: Agriculture, Tourism, Transportaiton, Airlines, auto industry, construction, shopping cetners, restaurants, etc.

Measures to protect the endangered wildlife

Ensuring shelter for everyone

Roles and Responsibilities

Climate change adaptation: What does it mean for your organization, network, community, and/or you?

For my organization, land protection and park strategies that can contribute positively to climate adaptation for Hawaii

remove our current thinking about infrastructure. Rethink our infrastructure plan , or possibly get rid of it.

Planning

Preparedness

paradigm shift; mindset elevation; behavioral adjustments; lifestyle changes; education and action; long term visioning and preparation in order to position us strongly for any adversity

Resiliency, Keep culture thriving, Protect our Home, Address Environmental Racism, Engage community, Educate, Preparedness, Protect Cultural Resources

Honoring traditional lifestyles recognizes some of the long-term adaptations

Understand the costs

any decision made comes down to how we see each other and treat each other and must be based in aloha

Climate change adaptation: What does it mean for your organization, network, community, and/or you?

Public Education

Outdoor recreation, parks are critical for public health and welfare.

Understanding how our org's lands can assist with community resiliency needs

Landowner incentives to adapt to sea level rise

No more penthouses until there is no one on the pavement. Addressing radical climate change requires radical redistribution of where society places value. Equity is not the goal per se, it is the outcome of a more just & humane world.

Involving the community in solutions

Building community resilience by addressing climate-induced drought, flooding, sea-level rise, thawing permafrost, storm surge, and the many other impacts of climate change.

Mataw Hefal

Zoning codes to prescribe more trees

Climate change adaptation: What does it mean for your organization, network, community, and/or you?

Protect our infrastructure

solutions from within (Community) and manifested through strategic and strong relational partnerships

Further protection of our ag valley

Hawaii Gas should be part of this working group; as resources are 5 of the State's renewable energy resources; and the Gas company comes to the aid of communities during disasters. the two

Beaches, ocean recreation is a key part of Hawaii's culture -
- saw that in the threat to the "cohesion of community" response at 4.5 -- highest impact.

ensuring that public investments to transition our key infrastructures end up in public hands.

Supportive of redevelopment/retreat

UNPLUG HONOLULU from the grid

Nature based solutions

Climate change adaptation: What does it mean for your organization, network, community, and/or you?

Survival

Our organization sees climate change adaptation as necessary. It is extraordinarily expensive. We have a plan to live with climate change in a way that will be favorable to all community plans - but requires massive change to the status quo.