

AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION COMMITTEE

Council of the County of Maui

MINUTES

October 9, 2025

Online Only via Teams

CONVENE: 9:01 a.m.

PRESENT: VOTING MEMBERS:

Councilmember Gabe Johnson, Chair
Councilmember Tom Cook, Member
Councilmember Alice L. Lee, Member
Councilmember Yuki Lei K. Sugimura, Member
Councilmember Nohelani U‘u-Hodgins, Member (In 9:07 a.m.)

EXCUSED: VOTING MEMBERS:

Councilmember Shane M. Sinenci, Vice-Chair
Councilmember Tamara Paltin, Member

STAFF:

Ellen McKinley, Legislative Analyst
Kasie Apo Takayama, Senior Legislative Analyst
Criselda Paranada, Committee Secretary
Megan Moniz, Legislative Attorney
Lenora Dinneen, Council Services Assistant Clerk
Ryan Martins, Council Ambassador

Residency Area Offices

Roxanne Morita, Council Aide, Lāna‘i Residency Area Office
Mavis Oliveira-Medeiros, Council Aide, East Maui Residency Area Office
Christian Balagso, Council Aide, West Maui Residency Area Office
Buddy Almeida, Council Aide, Makawao-Ha‘ikū-Pā‘ia Residency Area Office
Bill Snipes, Council Aide, South Maui Residency Area Office

ADMIN.:

Michael Petersen, Deputy Director, Department of Environmental Management
Cecile Powell, Program Manager, Environmental Protection & Sustainability
Division, Department of Environmental Management
Kristie Wrigglesworth, Deputy Corporation Counsel, Department of Corporation
Counsel
Noah Jackson, Executive Assistant, Department of Management

OTHERS:

Dr. Charles “Chip” Fletcher, Dean, School of Ocean and Earth Science and
Technology, University of Hawai‘i at Mānoa
Tonya Graham, Executive Director, Geos Institute
Darla Palmer-Ellingson, CEO, 360 Green Living
Jennifer VanderVeur, Grants Specialist, Hawai‘i Climate Change Mitigation &
Adaptation Commission

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

Testifiers

Testifier 1 (The Royal House of Hawai'i)
Cristina De Leon, Coordinator, Teran James Young Foundation
James Langford
Kimberly Thayer
Jasee Law

(25+) additional attendees

PRESS: *Akakū: Maui Community Television, Inc.*

CHAIR JOHNSON: . . .*(gavel)*. . . Aloha. Will the Agriculture, Diversification, Environment, and Public Transportation Committee meeting of October 9th, 2025, please come...come to order. The time is now 9:01 a.m. Members, in accordance with Sunshine Law, if you're not in the Council Chambers, please identify by name who, if anyone, is in the room, vehicle, or workspace with you today. Minors do not need to be identified. Also, please see the last page on the agenda for information on meeting connectivity, and remember to silence all cell phones, please. Good afternoon...or good morning, everyone. I look forward to chairing a productive meeting. I'm Gabe Johnson, your Committee Chair. Also joining us today is Council Chair Alice Lee. Aloha, Councilmember.

COUNCILMEMBER LEE: Aloha, Chair. Looking forward to your meeting as well. Thank you.

CHAIR JOHNSON: Thank you, Chair Lee. Let's move on to Committee Member Tom Cook. Aloha, Councilmember.

COUNCILMEMBER COOK: Aloha. Good morning. There's no testifiers in the Kihei Regional Office.

CHAIR JOHNSON: Okay. Thank you for that. And let's move on to Committee Member Yuki Lei Sugimura. Aloha, Councilmember.

COUNCILMEMBER SUGIMURA: Aloha. And I'm taking the meeting Upcountry in Kula at my Kula office, and there's nobody on this floor. Thanks.

CHAIR JOHNSON: Thank you so much. Of course, Vice-Chair Sinenci is excused, and Committee Member Nohelani U'u-Hodgins is welcome when she comes on. Non-Voting Committee Members, Councilmember Tasha Kama and Councilmember Keani Rawlins-Fernandez are, of course, always welcome to our Committee. From the Administration, we have, from the Department of Environmental Management, Michael Petersen, Deputy Director. We have Cecile Powell, Manager, Environmental Protection and Sustainability Division. From the Department of Management, we have Erin Wade, Deputy Managing Director. And from Corporation Counsel, we have Kristie Wigglesworth [sic], Deputy Corporation Counsel.

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

From our Committee Staff, we have Ellen McKinley, Legislative Analyst; Kasia Apo Takayama, Senior Legislative Analyst; Megan Moniz, Legislative Attorney; Criselda Paranada, Committee Secretary; Ms. Lei Dinneen, Assistant Clerk; and Jean Pokipala, Assistant Clerk, in the afternoon, if we do extend to the afternoon...which I don't think we will, Members, just to let you know. On the agenda today, we have one item, ADEPT-1(10), Climate Change Impacts on Maui County. This item is informational, and no legislative action will be taken today. We will open public testimony after the presentations on the agenda today.

ITEM 1(10): CLIMATE CHANGE IMPACTS ON MAUI COUNTY

CHAIR JOHNSON: Thank you, Members and Administration, for being here, and let's proceed with our agenda. ADEPT-1(10), Climate Change Impacts on Maui County. Members, climate change is real. It is here, and its impacts will get worse for your children, their children, and their children's children. Harsh reality check, I know, but it shouldn't surprise the Members sitting in this body. We can see and feel climate change impacts intimately as people close to the land, living on an island home with such precious and fragile natural resources. In contrast, anyone paying attention to national news can see how the President of the United States has made the choice of ignoring and defunding anything green, placing identity and crony politics above what is best for a sustainable relationship with our natural world. As our presenters today will illustrate, this choice is disastrous, and unfortunately, the chances of meeting the optimistic goal of limiting global warming to 1.5 degrees Celsius to avoid the worst impacts of climate change has all but dwindled to nothing. More than before, the burden, responsibility, and opportunity of climate action falls to us on our local community. It doesn't just fall on us because every fraction of a degree of global warming matters and should be prevented, it falls on us because when temperatures reach unbearable heat that endanger keiki and kūpuna, and frequent natural disasters threaten lives and homes, sea level rise swallows important historic, cultural, and recreational spaces, and our natural resources and ecosystems no longer sustain vibrant populations of fish and native species. When all of these things happen, or continue to happen, it will be our community, and our people who are vulnerable and suffering the consequences. It will be our choices as leaders that address these challenges to help make Maui County a livable place for our residents and working class now, and into the future. My hope, Members, is that the presentations today will affirm just how important and urgent our work is, and how in every decision we make--from legislation, to budget amendments, to exemption approvals, to rezoning--we must center equity and sustainable relationship with the land. Climate action and a sustainable relationship with the land is not just a "nice to have," it is a necessity. Members, joining us today, we have Dr. Charles "Chip" Fletcher, Dean, School of Ocean and Earth Science and Technology, University of Hawai'i at Mānoa. He is the former chair of the Honolulu...Honolulu Climate Change Commission, a prominent public speaker, and contributor to local and national media. Chip's research and teaching focus on climate change, coastal community resiliency, and natural coastal systems. The results of his work are used by government agencies for administrating coastal policy, establishing construction

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

guidelines, and planning resilient infrastructure projects. Fletcher's team has modeled the impacts of sea level rise, including coastal erosion, seasonal nonstorm wave overtopping, hydrostatic flooding, and urban flooding risks from groundwater inundation, storm drain backflow, and direct marine flooding. We also have Tonya Graham, Executive Director of the Geos Institute. The institute's team completed the Climate and Community Trends Primer for Maui County in May of 2022, the Climate Change Vulnerability Assessment for Maui County in December 2022, and the resilience strategies in the Climate Action and Resiliency Plan approved by Maui County. Ms. Graham served for four years as a city councilor in Ashland, Oregon, where she is currently the mayor. Presenting with Ms. Graham, we have Darla Palmer-Ellingson, Chief Executive Officer of 360 Green Living, a certified environment, social, and governance consultancy, and was the Communications Coordinator for the County of Maui's Climate Action and Resiliency Plan. She has a long history of community development projects in Hawai'i and the U.S. mainland, and is currently completing an MS in sustainable management. And finally, we have Jennifer VanderVeur, Grant Specialist for the Hawai'i Climate Change Mitigation & Adaptation Commission. Jen seeks funding for climate resiliency projects through Hawai'i and across all the CCMAC mitigation strategies. She also has...she also connects organizations working on similar projects, strengthening networks, and builds relationships that will foster the critical mass and movement needed to implement climate actions. If there's no objections, I'd like to designate these individuals as resource persons under Rule 18(A) of the Council, given their expertise in climate change impacts on Maui County. Any objections?

COUNCILMEMBERS: No objections.

CHAIR JOHNSON: Thank you, Members. Okay. Let's see if Dr. Fletcher is on the call. If he can turn his camera on, we can see him.

MR. FLETCHER: Yes, I'm here.

CHAIR JOHNSON: Thank you for joining us, Dr. Fletcher. Please proceed with your presentation.

MR. FLETCHER: Okay. I am going to share my screen.

CHAIR JOHNSON: Okay.

MR. FLETCHER: And *(pause)* please let me know if you can see my first slide.

CHAIR JOHNSON: Yeah, we see a graph. And as...as we're getting you set up, I think I saw Councilmember U'u-Hodgins join the call, so let me recognize her and we can continue. Councilmember U'u-Hodgins, are you here?

COUNCILMEMBER U'U-HODGINS: Aloha, Chair. I am here. I am driving to you, and I will see you folks in person in a little bit, and I'm watching and listening along. Thank you.

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

CHAIR JOHNSON: Thank you so much. Okay. Doctor, please continue with your presentation.

MR. FLETCHER: Thank you very much. So, I'd like to first touch on a few global issues, and then quickly get into some specific issues with regard to Maui and the State of Hawai'i. As you alluded to, Chair, the global average surface temperature last year, in 2024, broke 1.5 degrees C, which is the long-identified United Nations benchmark for stopping warming before it reached potentially uncontrollable and extremely unsafe amounts. CO2 emissions continue to rise. Last year, the rate of CO2 accumulation in the atmosphere rose 86 percent above the previous year. This was the fastest in recorded history. Despite decades of deploying clean energy around the planet, CO2 accumulation is rising at ever-faster rates. Limiting warming to 1.5 degrees Celsius requires global emissions reductions now of 9 percent per year. This target is no longer considered practical. I would remind the listeners that during the COVID pandemic recession in 2020, CO2 emissions were reduced only 5.4 percent compared to the previous year...and now, to stop warming at 1.5, it would require reductions of 9 percent. So, it's really not a practical target any longer. Two degrees Celsius above the pre-industrial background is the new target we are shooting for, and even that is in jeopardy. Why? Here is our history of renewable energy deployment since 1970, and here is our history of fossil energy use since 1970. Basically, despite the promise of a green revolution, oil, gas, and coal still account for 82 percent of the global energy mix. Clean global energy demand...well, global energy demand is rising at 2 to 4 percent per year, but clean energy deployment is increasing at only 1 percent per year. Coal still accounts for over a quarter, or 25 percent, of the world's total energy consumption, and economists argue that energy transitions, such as the ones that...the one that we are in, often simply add new sources rather than replace old ones, and this accelerates overall consumption. Experts suggest that true solutions require drastically reducing energy and material use, not simply relying on new sources of energy. The United States is a prime example. Here we see monthly change in energy produced in the U.S. since the year 2000. The green graph illustrates the deployment of clean energy, which is truly miraculous. Look at this history of the deployment of green energy in the United States. Unfortunately, tracking parallel with it is the deployment of dirty energy in the form of crude oil and natural gas. Globally, developing nations are demanding ever more energy as they seek to build new transportation systems, medical systems, education systems. AI data centers are drawing on ever more need for power as they expand into a new world of AI digital communication. We are requiring new forms of electricity in order to charge electric vehicles. And last year in the United States, the number one demand for new energy was for air conditioning. Here in Hawai'i, since 1950, the temperature has risen about 3 degrees Fahrenheit. You can see that this record is characterized by high variability. We have extremely warm years, followed by extremely cold years. A lot of this is related to variation in the trade winds, and also the El Niño and La Niña process. In Maui County, since 1950, the temperature has risen a bit less, about 1.7 degrees Fahrenheit. We also have average daily wind speeds around the State of Hawai'i declining. The number of trade wind days is declining, and the direction of the trade winds has become more easterly and less northeasterly. This

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

means that how trade winds interact with our ridge lines are producing reduced cloud cover, and this is leading...this is potentially one cause of reduced precipitation. In Hawai'i, annual rainfall since 1920 has declined 20 percent. Rainfall is highly variable, as you see, from year to year, but there is a robust downward trend. Heavy rainfall, which produces floods and droughts, have become more common. Consecutive wet days and consecutive dry days are both increasing in Hawai'i. So, the pattern is that we will see extremely wet conditions that are very intense. Much of that intense rainfall tends to run off into the ocean, rather than soak into the ground and recharge our aquifers. And then these days of rainfall are spaced widely apart, with many consecutive dry days, allowing for the spread of drought, and also the drying of fuel loads on the landscape. As Maui knows too well, invasive grasses will spring up in the course of a single rainfall of a day or two, and then they will rapidly dry out during the ensuing drought that takes place, and they become a heavy fuel load for wildfire. In Maui County, precipitation has declined as well. On Maui Island, the decline is about 20 percent since 1920. On Moloka'i, it's 24 percent, and on Lāna'i, it's about 26 percent. We also see an increase in the area burned by wildfire statewide. The area, in fact, burned by wildfire has tripled since 1950 statewide, and in Maui County, the area has quadrupled since 1950. We also are vulnerable to hurricanes. Let's not forget 2018, when Hurricane Olivia cut right...right through Maui, right on top of a wildfire that occurred at the same time...and we had Hurricane Lane, which was headed straight down the throat of Honolulu, and at the last minute was sheared off and turned west. You can see the very busy nature of the hurricane tracks in 2018. This general track is shifting to the north, so that hurricanes that used to pass well south of the Hawaiian Islands are now tending to migrate further north, which puts them on a greater probability of intersecting with the Hawaiian Islands. This is a model of future hurricane, tropical storm...or excuse me, tropical cyclone occurrence. It is projected to strongly increase in the central North Pacific. These yellow and red colors indicate 70 to 90 percent increase in tropical cyclones in the waters around Hawai'i. This map, if we return globally for a minute, shows temperature change relative to the global average, and the clear message here is that continental areas are warming much faster than the global average. This, of course, is resulting in continental scale heat waves, continental drying, melting snow and ice, which contributes to sea level rise, extreme weather events, global drought, and the ocean being cooler than the air is absorbing heat as rapidly as it can, and this leads to thermal expansion, which drives sea level rise. This is the record of ocean temperatures since 1960. You can see, in the last decade or two, an extremely strong year-after-year rise in ocean temperatures. This is the upper 2,000 meters, so this is fundamentally the surface waters of the ocean that are heating very rapidly. Now, the ocean, of course, consists of very deep water, and surface waters will cycle down into the abyss. Warm surface water circulates into the deep sea, causing thermal expansion through its entire journey through the deep sea. This journey takes over 2,000 years. Deep water that enters the abyss in the North Atlantic and in the southern ocean travels for millennia, and eventually rises in the North Pacific...in fact, in waters around Hawai'i. The University of Hawai'i Aloha Ocean Time series has measured ocean water on the seafloor with an age of 2,400 years. The whole time this water is circulating, it is thermally expanding, which essentially means that sea level rise is unstoppable from a human time frame. This is

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

the record of sea level change as recorded by satellites since 1992. The rate of sea level rise has doubled in 30 years. Thermal expansion is driving this, melting of ice on Greenland and Antarctica, and also the melting of alpine glaciers around the world. And new reports this past summer, new research are...is telling us that humanity's pumping of continental aquifers, largely to irrigate food that we produce for ourselves, the excess water from which flows eventually back into the ocean is now the second-leading driver of sea level rise above the melting of ice around the world. Thermal expansion is the most important driver of sea level rise, and then humanity transferring aquifer, freshwater from continents into the oceans, is the second leading cause of sea level rise, followed by the melting of Greenland, Antarctica, and global alpine glaciers. A few years ago, the Intergovernmental Panel on Climate Change told us that sea level is committed to rise for centuries to millennia due to continuing deep ocean warming and ice sheet melting, and will remain elevated for thousands of years. And the hundreds of scientists that wrote that sentence all had to agree that they had high confidence in that statement. It is an unstoppable reality. Maui County, all of the counties of Hawai'i, and every coastal community around the world is wrestling with this as we attempt to catch up to this reality with our management plans. Let me quickly go through the multiple impacts of sea level rise before I finish my talk. This is just a cartoon of a coastal community. You can see the buried pipes here, which are the stormwater drainage infrastructure of this community. Also, notice that there is a coastal aquifer, typically of brackish water, that underlies this community. Now, as sea level rises, as you see to the left of the diagram, that saltwater will flow back up this drainage infrastructure, preventing it from draining the urban community. This is called storm drain failure. And if enough seawater backs up, it can actually flow out onto the streets, which is known as storm drain backflow. We see this already happening in many areas of urban Hawai'i. This happens to be Waikiki, also a district up near the airport in Honolulu during high tide. And if you open a manhole cover in Waikiki, you see very often, at high tide, it's filled with water. In fact, 71 percent of storm drain outfalls in Waikiki are submerged below water during present high tide. And with only two feet of sea level rise, which is projected to occur as early as 2060, 100 percent of outfalls in Waikiki will be unusable during high tide. We also have seasonal wave flooding, which can flood a community. And as this is the Ewa Beach community on O'ahu, under one foot of sea level rise in the year 2050, we have modeled wave run-up. This is not storm surge from a hurricane, this is just a regular south swell arriving in the summertime. You can see the blue fringe here, where it is intersecting with coastal homes and seawalls. But by 2060 and 2070, with two to three feet of sea level rise, and then four feet of sea level rise, which is a minimum estimate for the end of the century, every single summer, swell events are going to be pushing through the first block of houses and homes on this south-facing shoreline. And the same is going to be true for every coastal community throughout Hawai'i. We also have coastal erosion, which I know Maui is very familiar with. This is the north shore of O'ahu, Sunset Beach, experiencing high tide erosion in the wintertime. A reminder to everybody that if you respond to coastal erosion by protecting the land with seawalls, you will kill the beach. That beach has to be free to migrate landward. Sea level is rising. If the beach is forced to stay in the same location, it's going to drown. It's going to erode. We need to get out of the way of the migrating shoreline if we want beaches for our future. And you need to think not only about

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

tourism, but about where Hawaiian families go, you know, on the weekends, during vacations, when they have little babies they want to take outside. We all go to beaches. This is a national...excuse me, a natural trust, a public trust that we must maintain. It's our fiducial responsibility. We also have groundwater inundation that as sea level rises, it pushes up this aquifer that underlies our communities. Here's one of our researchers, Dr. Shellie Habel, measuring groundwater surfacing underneath a resort in Waikiki. This water is nearly full ocean water salinity. She's measuring the salinity. You notice the hotel has a pump here that they've installed to pump out this water. And also notice that they've started wrapping their vertical posts with cement. These vertical posts are filled with rebar, which rusts very rapidly. And by wrapping them with this round cement covering without rebar, they are taking a step towards preserving the corrosion that will affect these...the structural member of the hotel. And then, of course, when it rains and our drainage system has failed, you have flooding. This is Waikiki, December 5th, 2021. We had a king tide. We had onshore wind. The drainage had completely failed, and we had two to three feet of water on Kalākaua Avenue in the center area of Waikiki. In the summertime, when the ocean water is warm, it is thermally expanded. So, we tend to have higher king tides than the king tides we have at the...at the end of the calendar year. King tides typically occur on the order of a couple times a year when the...the moon is closest to the earth. And then if it happens to rain at high tide and all drainage has failed, typically at the end of the day, where the highest tide of the summer occurs, you'll...you'll block traffic. And these folks attempting to leave Waikiki and Honolulu at the end of the day are prevented from getting back to their homes, prevented from picking up their children at school, prevented from taking care of kūpuna at home who may need assistance. This situation is happening now. So, all of these impacts need to be considered, and they are all...they all call for separate adaptation responses. And I'll just end with this image. My research group models all of these different types of flooding. If you look on the left side, this is our publicly-available viewer. This slider bar shows four feet of sea level rise simulated. And over on the right side, you can see these different types of models that we have run. One is called passive flooding. We also have groundwater inundation, drainage backflow, annual highway flooding, compound flooding, and we have a erosion hazard model that we run as well. Every one of these little red dots is a single storm drain that no longer functions under four feet of sea level rise at high tide. We are working our way around the Island of O'ahu with this modeling, and our next target is to start with West Maui. We have made...we have written Federal proposals to start this modeling for West Maui, one to the National Wild...Fish and Wildlife Federation...Foundation, and we are looking for funding so that we can bring this type of modeling to the Island of Maui. And with that, I will thank you for your time, and I will stop sharing.

CHAIR JOHNSON: Thank you, Dr. Fletcher, for your presentation. And I'm just going to ask if any Members have any clarifying questions, then we'll move on. So, I don't see any hands, so thank you so much. Let's see...Ms. Graham and Ms. Palmer-Ellingson, thank you for being here. If you're on the call...I see cameras getting turned on. If you folks are ready, the floor is yours.

MS. GRAHAM: Thank you. And aloha, Chair Johnson and Members of the ADEPT Committee.

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

We appreciate the opportunity to share with you our findings from the work that we did with Maui County a couple of years back. I will go ahead and share my screen, and you can tell me if you are seeing --

CHAIR JOHNSON: Yeah.

MS. GRAHAM: -- the presentation come up.

CHAIR JOHNSON: Yes, we can see...

MS. GRAHAM: Are you seeing it there?

CHAIR JOHNSON: We can see your presentation.

MS. GRAHAM: And now it should...it should go to a full screen. Do you see a full screen now?

CHAIR JOHNSON: It's loading, and there's the full screen. Got it.

MS. GRAHAM: Wonderful. Thank you.

CHAIR JOHNSON: Thank you.

MS. GRAHAM: So, the...the first thing I would like to do is simply to orient all of us that we completed, with our partners and the County of Maui, the Climate and Community Trends Primer and the Climate Change Vulnerability Assessment in 2022. We're going to share the results of those two assessments, but keep in mind that we were working with numbers that were earlier, so some of the things that I will be sharing may be...be providing slightly different numbers than what Dr. Fletcher did. In any of those cases, Dr. Fletcher's numbers will be the more recent numbers, and those should hold. What we're going to do is go ahead and move through those projections pretty quickly so that we can talk more specifically about the vulnerabilities that were identified in that assessment. So, the first harkens back to what Dr. Fletcher was talking about, which is that through the middle of the century, the impacts between the higher emissions and lower emissions trajectories are...are pretty close to...to the same. But when we get out to the end of the century, that's when we start to see these major shifts that really are driven by the emission scenarios. And even though it is...the window is closing for that, I think it's important to remember that the ability to adapt is very much connected to how well we limit the eventual extent of the climate crisis, particularly as it relates to island communities. So, we already heard about the...the changes. Our dates are going to be slightly different, so I won't spend very much time here, but the average annual temperature is increasing, and that also means that the spikes in temperature are increasing. So, you're seeing more situations where school children are having difficulty being in classrooms because of the heat. That kind of thing is happening, health impacts from...from those changes. Also, the number of days above 90 degrees is spiking, as Dr. Fletcher shared. And then the average annual precipitation is...is coming down, it's being reduced. But again, the...the precipitation

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

that does come is coming in bigger bursts, and those are also more troublesome, both for you all as the...in the community, and also for the...the nature and the systems that support you. The decline in trade winds has already been discussed. By our information we had, it had cut...been cut in basically in half by 2019. And again, that leads to more heat and drought. So, the overall projection of...or the...the overall reality of what has been measured so far, you saw all these...this information with Dr. Fletcher. In addition, about 85 percent of the beaches have significant erosion from sea level rise. So, that...that statement that Chair Johnson made at the front, that climate change is real and it's here, is absolutely the case for Maui County. So, in terms of projected future changes, all of this pretty much models what you heard from Dr. Fletcher. The...what is one of the interesting things is that you'll...you are going to see both a continued reduction in...in precipitation in both the wet and the dry season, but it's expected to be more pronounced in the dry season, which, of course, leads to that wildfire risk. At the same time, the frequency of heavy rains and flooding is going to go up as well. And that's one of the things that often people have a hard time understanding how both of those things can happen. But again, that comes back to the fact that the...that the precipitation is coming in bigger bursts. And then we also are expecting the frequency of coral bleaching events to...to be daily by mid-century, ocean temperatures increasing, and of course, that leading to declines in ocean fishery productivity. One quick thing before we...we move on to the community characteristics is that the IPCC projections give us ranges. And one of the things to keep in mind is that what we're seeing, what was...was measured up through 2010 at least, was that the change in sea level rise was actually right at the very top of what those projections indicated might be possible. So, one of the things that we're seeing across the...across the world is that many of the changes that are projected to arrive at a certain time are actually coming sooner than they were projected. At this point, I'd like to hand it over to Darla Palmer-Ellingson. She was on our team that did the work with Maui County a couple of years back. She's going to take us through a series of slides that identify community characteristics that are important to be thinking about as we then move into the conversation of what vulnerabilities come from those projections and those...those changes to climate conditions as they arrive on...on top of the community realities that you're all working with. So, Darla, I will pass it over to you.

MS. PALMER-ELLINGSON: Thank you very much, Tonya. So, just very quickly, our natural systems are the backbone of island life. For generations, Hawaiians followed an island worldview. Resources are limited and precious, and guided by a system designed for sustainability. Our landscape runs from wet windward slopes to dry leeward slopes, and with big contrasts...some areas get quite a bit of rain, some are quite dry. And we have long coastlines and high peaks, with Haleakala rising to over 10,000 feet. So, everything is connected, mauka to makai. Next slide, please. Maui County's population reached over 168,000 in 2021, a slight increase up from 2020, and the population grew approximately 8 percent from 2010 to 2020. And it breaks down to approximately 35 percent white, 29 percent Asian, 24.2 percent as two or more races, 10.6 percent as Native Hawaiian or Pacific Islander, 11.6 as Hispanic or Latino, .8 percent as Black or African American, and .6 as American Indian or Alaskan Native...and also, 1 percent...or 19 percent of our population is above 65, and 19 percent is under 18. Next slide.

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

Flooding is mostly fall through spring here, and...which is October through April for us. South and west shores can get standing water, as we've seen quite a bit. For natural disasters, we have hurricanes and tropical storms that affect all islands, storm surge exposure, as...as we had just heard, especially on Maui and Molokai. Tsunami risk has an annual chance of 1 to 10 percent, with 61 events in the last 220 years, and our alert system includes a County-generated three-minute tone. Next slide. For infrastructure highlights, Hawai'i gets 35 percent of its power from renewables, with a goal of 100 percent by 2045. Regarding water, County districts draw from different sources, including surface water, groundwater, aquifers, streams, and wells, and is all treated and disinfected before delivery. Coastal roads face sea level rise, which we've heard about. The State does plan to move vulnerable segments uphill, including 4.5 miles of Honoapi'ilani Highway on Maui. Next slide. So, our physical and mental health is affected by heat and smoke, disasters interrupt care and power, stress rises for our economy and jobs, climate events cool tourism, disrupt agriculture and fisheries, and raise costs. Small businesses see downtime. Our vulnerable populations, including kūpuna, medically fragile, keiki, low-income renters, and houseless populations face higher risks. And I'm going to turn this back to Tonya for the next slide.

MS. GRAHAM: Thank you, Darla. So, when we think about the climate projections that have been shared today, we also look at what...what is the community...or what are the community characteristics that Darla just shared that those are coming in on top of, and we look at them by community system. So, we're going to now look at the five different systems that we evaluated in our process. And we did the evaluation by hosting a series of talk story evenings, and also looking at a variety of assessments that have been done by the County and by individual communities. So, when we look at 'āina and kai, we...we...we know a lot of these things from news stories that are already happening. So, loss of coral reefs is right at the top of that concern in terms of what is vulnerable. Also, harm to all water systems, so beach and shoreline habitats, but also watersheds. And what you see in the parentheses is what are the...the drivers that are linked to climate that are...that are the primary reasons that we're seeing these changes, or that we are looking to these vulnerabilities. We have impacts to groundwater, seeps, springs, and freshwater wetlands. And of course, these lead to declines in native forest and alpine habitats, which threatens native and endangered species, estuaries, tidal wetlands. The larger...larger storms lead to landslides and erosion along steep slopes. We can see the potential for negative impacts to anchialine pools, and the negative impacts to seabirds. When we look at the cultural system, and...and the culture just of the...of...of Maui, what we see is that there is...at the right at the top of the list, is negative impacts to cultural and spiritual practices, particularly those that are connected to your natural systems. We see the loss of historically and culturally important sites, including burial sites, risk to food gathering and food production, displacement and destruction of resources. And this is really about what is the identity of the community there. Out-migration and in-migration, both breaking family bonds and causing cultural divisions, potentially. We see subsistence fishing at risk, and then just negative impacts to the...the island way of life that people...that is a big part of how they know they are home. When we look at human systems, we see a very significant vulnerability in terms of food access and food security. This is linked not only to the

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

reality of what is happening there on the islands, but also what is happening to the supply chains that deliver food, and medicine, and those sorts of things to the people of Maui. We see an increase in the overall cost of living. Disrupted communities are more expensive to live in, and of course, that is seen in...in housing shortages as well. Loss of water power and communications services, so emergencies causing those. And then negative impacts to mental health...and we're seeing this across the globe as people struggle with the impacts of a...of a changing climate. We see the potential for increasing pests and diseases, overwhelming the service providers in emergency response, having a harder time recruiting healthcare workers. That's already been the case, but that is likely to become more exacerbated. And then negative impacts to physical health, and then the needs around public safety and evacuation. In terms of infrastructure, of course we've seen the information about the coastal roads, the damage that's right at the top of the list, but also to drainage, reservoir, and other infrastructure. Critical supply chains, which I had mentioned in relation to food, and then the groundwater supply. Of course, there's a lot of different elements that are...that will be challenging that. There's an increased risk of electric service disruption in the isolated communities. Buildings, especially buildings along the coast, will be at much greater risk. But also, damage to park facilities and restricted beach access, as was mentioned earlier. This is where the people of the community go as well, and so what...what does that mean when...when their beaches are not accessible or are changing rapidly? We see impacts to water supply and infrastructure, wildfire potentially damaging a variety of different types of infrastructure, as we have seen, and potential for increased damage to utilities that are...that are dealing with these larger storms. And then just the higher temperatures and the higher draw on the electrical system increasing brownouts, and then seeing just an increased damage to utility infrastructure. In terms of the economy, agriculture was at the top of the list in terms of the risks, and primarily because of the drought and increasing salinity of the water. But there are a number of things that are driving that. Government budgets stressed. We know that government...local government doesn't have enough money right now to meet the...the realities that are being called on by their citizens, and so looking at how that is likely to change going forward as more and more disruptions come on. Household and individual economics harmed, particularly by the loss of subsistence lifestyles and resources. And then there's just the financial strain across the board. So, on low-wage workers, on small businesses, on the tourism industry, freshwater supply challenges has an impact on your economy, and of course, we see just the economic reality to the tourism element of this with resorts being threatened...coral reefs and marine life...as...as you see that decline, it is likely to also have an economic harm associated to it. So, we think about any commercial operations that are at risk of shock because of the disruptions, and also the long-term stresses, economic harm to specific sectors. And then the...the County has goals of creating walkable, you know, economically efficient areas, and that may become more difficult to meet. And then, of course, the harm to local fisheries. When we were doing this process, we...we consulted with a number of County of Maui assessments to inform the work that we were doing, as well as this list of community assessments that had been done by various community organizations that were...that all were brought together in the assessment for vulnerabilities. And I'm going to hand it back to Darla for just...very briefly to talk about some of the things that have been

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

seen there since our work was done in 2022. Darla?

MS. PALMER-ELLINGSON: Thank you very much. Hey, I just wanted to mention we might have said Maui just to keep within the time frame, but our outreach did include all three populated islands in the County. And if we could go to the next slide.

MS. GRAHAM: So, did you want to talk about the additional stressors or...

MS. PALMER-ELLINGSON: Oh. Sure.

MS. GRAHAM: Is that not up?

MS. PALMER-ELLINGSON: It...it...it is up.

MS. GRAHAM: Okay. Yeah, we can just...I'll go through these very...just very quickly. So, these are some of the things that we identified during our process that were additional stressors that would impact the ability of the County of Maui and the communities within it to respond. And then, Darla, I'll give this back over to you for this one.

MS. PALMER-ELLINGSON: Okay. Thank you so much. Okay. So, many people in the community and...and some of the folks in the County I've been able to speak to in the last couple of weeks, top of mind is wildfire risk and water shortages. And I know you've gotten the data on this already. And, you know, we just want to make sure that we really connect this to climate change. And as we heard, there's a long-term drying trend. Hawai'i is getting drier. Rainfall and streamflow have declined significantly over the past 30 years. Regarding the August 2023 fires, they were stringently analyzed, highlighting the role of pre-existing drought and very low humidity. Winds accelerated the spread, and it's illustrative of how warming and drying come together to set the stage for that disaster. But also, by comparison, almost two years to the day to the 2023 fires, a portion of Kā'anapali hillside burned. Then just recently, on September 23rd, over 300 acres burned above Pā'ia Town. And I've driven through there several times. And, you know, had we had a storm, it could have been a duplicate of what happened in West Maui. And also in Pā'ia, as you know, the buildings are attached. So, these are things to keep in mind when discussing mitigation and resiliency in Maui County's Climate Action and Resiliency Plan. And I'm going to toss it back to Tonya to finish up.

MS. GRAHAM: That's it. I would just like to say thank you again for inviting us to share this information. We're happy to answer any questions.

CHAIR JOHNSON: Okay. Thank...

MS. GRAHAM: And I'll stop sharing now.

CHAIR JOHNSON: Thank you, Ms. Graham and Ms. Palmer-Ellingson. I tell you, there's so much to...that we're experiencing, and those slides really are...I had an example in my

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

mind of every...every point that you guys brought up. So, thank you for that. Any clarifying questions from the Members? I don't see any hands. We're going to move on to...let's see, let's move on to Ms. VanderVeur. Thank you for being here today. And if you're ready, you can start your presentation. Thank you so much.

MS. VANDERVEUR: Thank you so much for having me. While she's pulling up the presentation, I'll just tell you a little bit about CCMAC. The Hawai'i Climate Change Mitigation and Adaptation Commission is a unique entity. We're headed by...we're co-chaired by DLNR and Department of Planning. And we have representation from all the different State's agencies, Department of Transportation, Agriculture, kind of across the board, as well as the different counties. And for this presentation, I'm going to kind of talk a little bit about some of the Federal changes that we've seen in funding for climate, what the State is working on. I'll talk a bit about the Grants-to-Project Bridge, which I manage, and what actions the County can take. So, I'm sure you're all aware of the enormous changes that we're having to funding across the Federal Government. I...every day, I get an email from the Federal funds information for states. Prior to this administration taking over, I would get 30 to 40 grants that came available every day across the board from HUD to...to Agriculture, you name it. There was a wide variety from all of the different agencies. And after the administration changed, I was getting one to two grants per day, generally around Department of Defense, finding fraud in SNAP, things of that nature. It's slowly been increasing. I'm starting to see Waste Management Grants and things like that. But overall, there's been a dramatic decline. So, using that Federal information for states, I did a rough calculation on about how much money climate change projects have been reduced, and that's over \$38 billion have been cut from EPA, NOAA, and Department of Interior, all the different climate projects. So, the...the commission that I work for, four of our staff is funded through the Climate Pollution Reduction Grants, which no longer exist. So, a lot of the work that I'm going to talk about was funded through a program that isn't there anymore. So, there's a long list of tax credits that will be ending, and I'm going to share some of those. So, hopefully we can utilize some of those. These impacts are really going to impact our nonprofit sector. When you lose that amount of Federal funding, the philanthropic community can't step up to that level, and then you increase your competition for all of our nonprofits in trying to get that funding. So, I'm really worried about that. We're also seeing huge reductions in research funding, and we're seeing impacts to the university in their ability to conduct vital research that we need. And basically, all of this Federal cuts is really going to impact more of our rural communities, our smaller counties that don't have the tax revenue, that don't have the ability to kind of make up some of these differences. So, we're going to see a lot of these impacts throughout the...the State and counties. As the presenters already addressed, climate impacts are really already impacting our State. Sea level rise is something we're already experiencing. The higher temperatures, the rain. Ocean acidification is a really big one. My background is marine biology, and I always feel like, you know, our...our reefs and the...the protection that they offer us is kind of underestimated. And all of these impacts are really going to hurt our community. They're going to increase the cost...oh, did it switch? There we go. They're going to increase the cost for our community. We already know it's very difficult to afford to live in Hawai'i. It's going to create a variety of safety

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

issues for our communities, and it will impact their health. And so, what the State is doing is really looking at, you know, these main things through an equity lens to make sure that we're enabling our communities to stay in the islands. So, we've been working on this for a few years, and I don't know why the main picture there, which is supposed to be the...the State's community...or I mean the State climate action pathways. Basically, it took information from all the counties, and built out our State community...or our State action pathways. And again, this was funding...done through funding with the EPA. And when we talk to our communities about what are their main concerns for the impacts of climate change, you can see sea level rise, flooding, things that we're already experiencing, the communities are...are voicing. Invasive species, loss of native habitat, and then, you know, just the high cost for infrastructure and energy. So, the CCMAC basically looked through the different sectors at what are the different actions that we can take in the immediate, the midterm, and long-term, to transition to a more climate change-adapted or...to be ready for climate change. And so, when you look at the different...for example, waste. You know, we live on islands, land is limited. Reducing the amount of waste that's going into our landfills through composting, and reducing the amount of waste is really going to start to help us. And so, we have to look at what are some of the...so let me try to get my mouse to work. So, these are kind of like, what are the immediate actions we can take, building up to the longer-term actions. And at the very end are some of kind of those bridge actions that we take, right? Transitioning to green energy isn't a switch that you can flip. You're going to have to slowly build out that infrastructure. And in doing so, look at other alternatives to help you meet those goals. And so, there's a number of these that we have shared out and got feedback from the community. And we are just implement...or we're just integrating the information that we received from community input. This is...I think we just took this down, but we had an opportunity for the community to submit their thoughts on the initial actions. So, kind of the...the immediate actions that we need to take to address this. And one of the other ways that we're really trying to help the community in moving forward with these projects is the Grants-to-Project Bridge. And this is basically a public-facing resource that community, nonprofits, State, County, anybody can share different projects that they're working on that are related to climate change. That triggers me to look for partners that are working on complementarily or similar work, as well as look for potential funding. And because of the recent changes, initially I was primarily trying to bring Federal funds into the State. Because that has changed so much, now we're expanding that and looking at philanthropic groups, looking at business collaborations, really trying to find a way to keep that bridge funding for our nonprofits, and for some of the critical projects that we need to implement. So, I...I'll share a QR code. I welcome you to share this out with any organizations that you know that are working on climate-related projects. And really, in Hawai'i, that's a lot of things are climate-related, right? So, please feel free to share this. We have over 40 projects that have been submitted. And I'm going to share a little bit of examples of how we can individually combat climate change. A lot of these actions, to have a greater impact, are going to be needed to be done by the State and the County agencies. And so, we're going to kind of get into a little bit more of what that can possibly look at...look like. So, one way is to utilize some of the projects that have already come through our Grants-to-Project Bridge for Maui County, and look at

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

potential funding sources for those, and look to incorporating climate mitigation and adaptation actions through all of our CIP projects. So, making sure that we have multimodal transportation, making sure that we're reducing heat stress by making sure we have trees planted along these areas, and green spaces, making sure that our County is using green energy and energy efficiency. And then looking for Maui County actions that are outlined in the Climate Action Plan, and finding funding and implementing those projects. In addition...I'm waiting for that to catch up. . . .*(laughing)*. . . In addition, really kind of removing some of the barriers, helping streamlining permitting so that we can implement more solar. Like I mentioned, increasing opportunities for multimodal transportation so that we can reduce the use of fossil fuels on the island. Looking for gaps and opportunities in green jobs. I recently was meeting with UH, and they're expanding some of their green jobs, and I'm kind of trying to get them to incorporate other components of green jobs that aren't traditionally seen as green jobs, like wastewater infrastructure management, things like that, that are actually really green jobs. And...and we need...especially with our cesspool transitions that are coming up, we really need to get that workforce developed and...and have the personnel to fill these roles. Fleet conversion, changing all of our vehicles over to electric vehicles. And again, kind of making sure that in...within our buildings, we're using energy efficiency, trying to establish waste diversion wherever we can, and really making sure that we're implementing all of this through an equity lens. So, a couple of examples. When I first started this position, we were putting together a \$50 million grant for projects across the State. And a few of those projects were actually from Maui County. So, one of them, I'll get into in a little bit, but agroforestry improvements, and really looking at how we're using our...our ag land and...and that fallow ag land. As Dr. Fletcher mentioned, you know, when we have these big rains, that water is rushing off, right? So, looking at ways that we can reduce that runoff because that's not only, you know, taking away our...our vital top soils, it's not allowing that water to infiltrate, and it's also smothering our reefs with all that sediment. And agroforestry will also provide other benefits, like carbon sequestration. If the County can support more circular economy efforts, that can really reduce the greenhouse gas emissions, bringing things to us when we can produce them locally, supporting green manufacturing hubs. I had the opportunity to go to the Guam Green Growth Innovation Hub, which is amazing. They have basically created a community center where people can use equipment, where they have plastic that can be broken down and constructed into new items. So, you can have innovation and technology happening on a local scale. They have green waste diversion, which is used to make a variety of products. So, there are a lot of ways that we can repurpose and provide economic opportunities for our community. And then looking at like cross-sector approaches to that. So, for example, one of the projects that we were trying to fund on Big Island was a community of different, you know, organizations working together. One was a cattle rancher, a farmer, and the university. And the project there was to use the cattle carcasses in creating biochar and soil amendments, and looking at how that was improving soil quality, sequestering carbon, and reducing waste. So, there are multiple ways that we can start to kind of look at what are some of these cross-sector ways that we can support our local economy. That way, we're not bringing in mulch that's infested with invasive species and things like that, right? So, another project that was submitted to our organization from the County was a mobile biochar

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

unit, and this is really a beneficial project. It will help remove invasives that, you know, can be hazards in storm events when trees are breaking, clogging drains, destroying our culverts. That biochar can then be used again as soil amendments to also help keep soil on the land, and to help water storage. And so, this could be used, you know, to go to some of our problem areas, but then it could also be used to deal with some of our green waste, could be converted into biochar, which could be used by our nonprofit organizations, or DOFAW, and...and other agencies like that. One of the biggest needs...again, I come from a conservation background, and one of the biggest needs is native plants. As...as we all know, it was sad that after the fire, we couldn't plant native plants and native grasses. We didn't have the seed stock, right? So, really supporting the development of native plant production through seed farming, through propagation, things like that, will really help us relieve this bottleneck that's basically impeding our ability to scale restoration at the rate and on the scale that we need to have impact during what we're calling this critical decade, right? If we're not able to implement some of these things now, the rainfall, the weather patterns will change so much that it will be hard to establish those new forests, and...and rebuild those systems. So, helping restock our native plant availability is a really big need. And I would love for you guys to share any projects, any organizations that are working on projects. This is my contact information. I have a lot longer email, but I gave you guys the short one there. And so, please feel free to share the Grants-to-Project Bridge with other organizations. The more people that we have submitting projects, the easier it is to find those collaborations, make those partnerships. I'm currently working on a grant that has almost all of the main Hawaiian islands in it to increase native plant seed production. So, we have nonprofits from Hawai'i, Maui, Molokai, O'ahu, working on a Lāna'i group, and Kaua'i as well. So, really trying to expand our network of who is growing native plants and increasing that seed supply, but also having those kind of hubs for the islands where they're going to, again, kind of scale that effort up individually. So, I also wanted to share some tax credits that will be ending. And these are tax credits that are still available, and that can be used until the different dates specified. So, you know, there...there...there are still funds available for doing like fleet conversion and things like that. And I highly urge the County to take advantage of these. They probably won't be coming up again for a while, if ever...so highly recommend that. And we're happy to help in any way we can. This is some contact information.

CHAIR JOHNSON: Well, thank you so much, Ms. VanderVeur, for your presentation. If I'm looking at the list of floods, fires, storms, drought...I mean, our problems are biblical, right? And to...to work on this is going to be a heavy lift. Now, Members, do we have any clarifying questions? We do have one from Chair Lee. Go ahead.

COUNCILMEMBER LEE: Thank you. Let's see. Ms. Graham? No, not Graham...VanderVeur. Okay. You just mentioned Native Hawaiian plants, and you're looking for hubs to grow, you know, these types of plants and seeds. So, what minimum size of farms are you looking at, or acreages are you looking at?

CHAIR JOHNSON: Ms. VanderVeur?

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

MS. VANDERVEUR: You know, at this point, I feel like there's so few that any...any scale would help. Here on Maui, I know of a few that are all probably less than an acre. And so, I think land is definitely a limiting factor for a few of the groups, but I...I think there's such a need that anything would work. And I could see creating kind of a cohort of multiple groups if it is a larger parcel so that that...those efforts could be sped up. But honestly, I think at this point, any...any amount of space would help the issue.

COUNCILMEMBER LEE: All right. Thank you. Thank you.

CHAIR JOHNSON: Thank you. Okay. We're going to turn this over to the Administration, who's been following along, and see if we can get some comments from the Administration. Let's see if Ms. Wade is on the call. Ms. Wade, are you on the call?

UNIDENTIFIED SPEAKER: . . .*(inaudible)*. . .

CHAIR JOHNSON: Okay. Then we can move on to the folks who have joined us today from Department of Environmental Management. Mr. Petersen and Ms. Powell, do you guys have any comments to the presenters, or anything you'd like to add?

MR. PETERSEN: Thank you, Chair. First of all, I'd like to thank Dr. Fletcher, Ms. Graham, Ms. Palmer, Ellingson, Ms. VanderVeur. You know, it's...it took us through a...a journey through such a large problem for us, you know, starting from the hard data, alarming data and projections that we're going to come up to face here shortly. Then we...we got the presentation that showed us how it affects the everyday life for the people here in Maui. And then lastly, Ms. VanderVeur posed one of the biggest questions, you know--how do we fund some of these solutions, and create change, and work through this problem? But for our Department, we're slowly putting the pieces to our EP&S Division together. Cecile is our new Program Manager for EP&S. We have a new division...or section head. His name is William Jay, who just came on board for our Environmental Protection section. So, he started about six weeks ago or so. So, we're slowly gaining the bandwidth to tackle some of these topics. And the one thing that I'd like to say is, I...I'd like to welcome collaboration with any of the presenters or the groups because this is such a large problem. It's something that, you know, our Department can't tackle it alone, and it affects almost every part of our daily life...our daily life. So, again, thank you for the presentation. Appreciate it. I'll turn it over to Cecile for some comments.

CHAIR JOHNSON: Ms. Powell?

MS. POWELL: Thank you, Deputy. Thank you, Chair Johnson. I am very motivated, and happy to have received this [*sic*] presentations today. So, thank you for your time and your expertise on this. I have been with the County for quite a while, since '07, a lot in the waste stream management systems. I do know that it takes a lot of brilliant people working together to move in a common direction. So, these past months, that's pretty much what we've been pursuing within EP&S, making sure that we're not working in silos, and that there's mortar...mortar between the silos...like we're working in the same

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

direction together okay? . . .*(laughing)*. . . With that said, I noticed that, you know, your grantees that you've been working with, we have very similar programs within our division. So, I would like to touch bases with all the presenters here. As we're moving forward, and we're developing our action steps and, you know, even our...our dashboard on our Climate Action Resiliency Plan is coming out at the end of December, going live, and that has ongoing updates. As we're moving forward, we'll be updating it live, and we want to make sure that we're all in tune with each other...and not only that, in tune with our Integrated Solid Waste Management Plan, and also in tune with our Food and Nutritional Security Plan as well. Because all of those components really need to be working together...in order for us to be successful, it's going to take all of us.

CHAIR JOHNSON: Thank you so much. Well, I'll just say, your Chair is really happy to hear the Department wanting to work with our presenters. Because these folks are the experts, and to have you guys being willing to, you know, meet with these folks and learn from them is great. That doesn't make this role of this body not...like we have work to do as well--the budget, the codes--we have a role in this, but I just love to hear that the departments are willing to work with our presenters. I don't see any clarifying questions for the departments, and we're going to move on to public testimony. Okay. Oral testimony via phone or video conference will be accepted in addition to in-person testimony. Individuals wishing to testify in person may sign up with a Staff member at the entrance of the Chamber. For those joining the meeting via Microsoft Teams, those wishing to testify can let Staff know by using the raise-your-hand function if you wish to testify. Once you have been added to the testifier log, Staff will lower your hand. Testifiers wanting to provide video or audio testimony should have joined the online meeting via the TinyURL link, or by calling into the phone number noted on today's agenda. Written testimony is encouraged and can be submitted via the e-comment link at mauicounty.us/agendas. Oral testimony is limited to three minutes per item. If you're still trying to testify beyond that time, you will hear a second timer go off after 30 seconds, and I'll kindly ask you to complete your testimony. We ask that you state your full name and organization, but if you prefer to testify anonymously, Staff will identify and refer to you as "Testifier." Please also indicate the agenda items [*sic*] or items you wish to testify on. Once you're done testifying or if you do not wish to testify, you can view the meeting on *Akakū* Channel 53, Facebook Live, or mauicounty.us/agendas. Thank you for...for your cooperation. The Chair will maintain decorum at all times. Any person who behaves in a manner that disrupts, disturbs, or impedes the orderly conduction...conduct of this Council meeting can, at the discretion of the presiding officer or a majority of present Councilmembers, be ejected or banned from the Councilmember...or the Council meetings, or if participating remotely, muted or dropped from the meeting. Examples of disruptive behavior including [*sic*] heckling, shouting, use of profanity, threatening, or slandering remarks made to any Member, Council Staff, or general public. Committee Members, I'll now proceed with oral testimony. And Staff has been monitoring individuals joining today's meeting by phone and video, and we'll do our best to take each person up in an orderly fashion. Staff, do we have any testifiers today?

MS. APO TAKAYAMA: Yes, Chair. We currently have four individuals signed up to testify. The

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

first is The Royal House of Hawai'i, to be followed by Cristina De Leon.

CHAIR JOHNSON: Okay. Royal House, are you ready?

. . . BEGIN PUBLIC TESTIMONY FOR ADEPT-1(10) . . .

TESTIFIER 1: Aloha. And this is --

CHAIR JOHNSON: Aloha.

TESTIFIER 1: -- The Royal House of Hawai'i, and I'm an heir and descendant of Hewahewa, royal...royal patent Hewahewa, Helu 3237 of Kaonoulu ahupua'a. And I'm just wondering, and I have a question, if...who do those lands belong to? And...because I know factually that it is royal patented by Kamehameha III, and those royal patents could never be disrupted, changed. And it's supposed to be going back to the descendants and heirs, but it hasn't. And all the titles that are on the TMK are all...majority...majority of them all are frauded if they are not a descendant of that person because they're all frauding our royal patents, which is real property, supposed...supposed to be. And...and those people would be the ones to know how to take care of the land because those are documents from before the plantation era and all of that, and that was before all these farm...like these fields, I guess, I don't know, plantations, and they...and it shows like how they took care of the land, and it belongs to them, and it's...we have been frauded all this time. And even on Kaonoulu ahupua'a, there's even like others trying to...for example, trying to do quiet title land claims, which is frauded, completely fraud, and it is illegal, highly illegal on an international level. None of us heirs were ever contacted, and there needs to be a discussion with all the heirs of Hawai'i because all of Hawai'i is royal patented, allodial titled, and it's supposed to be returned back to the heirs from the first person that at least bought it, but still hasn't. And...yeah, all the development also, there was no discussion with us, it was all frauded and illegal. And please return the...all the lands to the royal patent heirs and descendants because they forever own it forever. And mahalo.

CHAIR JOHNSON: Thank you so much for your testimony. Members, any clarifying questions for our testifier? Seeing none. Staff, will you call the next testifier, please?

MS. APO TAKAYAMA: Yes, Chair, the next testifier is Cristina De Leon, to be followed by James Langford.

MS. DE LEON: Aloha. My name is Cristina De Leon, and I am the sustainability coordinator for the Teran James Young Foundation. It's a nonprofit in Wailuku working towards peace and sustainability. I wanted to thank the presenters and the ADEPT Committee for holding this important meeting. Even though we're facing many pressing challenges, it's vital that we continue to prioritize climate change for all the reasons that the presenters laid out so clearly today. And too often, we think of climate change as a distant and hypothetical issue, but as we heard today, it's actually happening now. The

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

impacts are already here, and they're only going to intensify if we don't act. So, in addition to the solutions that were mentioned today, I think it's also crucial that we support regenerative agriculture. These practices not only restore soil health and biodiversity, but they also have the proven ability to sequester carbon far more efficiently than commercial methods. Regenerative agriculture is one of the few tools that we have to both mitigate...mitigate climate change and build resilience in our food systems. So, we need to support farmers in making this transition through education, financial support like grants and subsidies, and by removing the regulatory and logistical barriers that stand in the way. The time to act is now, and by investing in regenerative agriculture, we not...we're not only supporting farmers, we're investing in a healthier, more sustainable future for everyone. Thank you.

CHAIR JOHNSON: Thank you so much, De Leon...Ms. De Leon. Do we have any clarifying questions for our testifiers [sic]? Seeing none. Thank you once again for your testimony. Staff, will you call the next testifier, please?

MS. APO TAKAYAMA: Yes, Chair. The next testifier is James Langford, to be followed by Darla Palmer.

CHAIR JOHNSON: Mr. Langford?

MR. LANGFORD: Aloha. Thank you so much. What a wonderful meeting. This is top shelf, guys. I want to share a lot of love for the presenters. The...that material is exquisite, and I would love for them to do presentations on...for all of the committees, if possible. That's good stuff. So, my question is, I...so I've written 54 grants at the \$50 million level, and when I found out about the CBDG [sic] grants, I read about it, and my autism kicked in and, you know, got on and researched everything. So, the...the...the...I would love to know the spirit of collaboration is...is...is really recurring. So, how does one...or how do we approach to present? And if the folks there had like a hot list that you guys...in each of your seats have a list for what your people want, I would love to...to...to consolidate...like, I mean, it's like 2.5 billion in grant money that...that I passed the grant specs for. So, applying it, you know, with the new MEO person, et cetera, how does one...how...how...how does one go about presenting to you folks with more succinct data that is relevant to each one of your chairs? Is my...so, I'm sorry to...I don't know, I'm asking because I don't know how.

CHAIR JOHNSON: Sure.

MR. LANGFORD: Is that something that we could talk about briefly, sir?

CHAIR JOHNSON: Okay. Mr. Langford, you can testify now, and we...we usually don't answer questions, but at this point, you can just certainly send me an email, and we can start a discussion through emails, and then we can move forward, okay? Just send me an email, and we'll talk about it.

MR. LANGFORD: Okay. So, testifying that...that...this...this style of meeting and how you

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

folks are...are handling this is...is a really good direction. And in order to collaborate with the folks, like The Royal House as well, I do have solutions that can honor the titling company's concerns, perhaps.

CHAIR JOHNSON: Okay.

MR. LANGFORD: So, those are...so I'll send you an email, sir --

CHAIR JOHNSON: Great.

MR. LANGFORD: -- and I'm testifying like that that's what I have for you going forward.

CHAIR JOHNSON: Thank you, Mr. Langford.

MR. LANGFORD: Okay. Thank you kindly, folks.

CHAIR JOHNSON: Thank you.

MR. LANGFORD: Yes, sir.

CHAIR JOHNSON: Members --

MR. LANGFORD: Thank you, Chair.

CHAIR JOHNSON: -- do we have any clarifying questions for our testifier? Seeing none. Thank you once again for your testimony. Staff, will you call the next testifier, please?

MS. APO TAKAYAMA: Yes, Chair. The next testifier is Darla Palmer, to be followed by Kimberly Thayer.

CHAIR JOHNSON: Darla Palmer is one of our presenters.

MS. PALMER: I have actually...

CHAIR JOHNSON: You want to testify?

MS. PALMER: Oh, yes. Me again. I had actually asked to testify after the CARP discussion. I don't know if there's going to be additional opportunity for that.

CHAIR JOHNSON: No, but if you want to...I mean, how do we handle a presenter who wants to testify? We just have them speak when it's their turn, when we get into the discussion?

MS. MCKINLEY: Chair, she is able to speak as...as a resource, but she can also submit testimony now.

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

CHAIR JOHNSON: Oh, you can submit testimony. So, go ahead, Miss...Ms. Palmer.

MS. PALMER: Okay. I'll...I'll just wait and speak during the discussion --

CHAIR JOHNSON: Okay.

MS. PALMER: -- if there's an opportunity.

CHAIR JOHNSON: That'll be great.

MS. PALMER: Thank you.

CHAIR JOHNSON: Thank you. Okay. Staff, will you call the next testifier, please?

MS. APO TAKAYAMA: Yes, Chair. The next testifier is Kimberly Thayer.

CHAIR JOHNSON: Ms. Thayer? *(pause)*

MS. THAYER: Yes. Hello. Aloha, everybody.

CHAIR JOHNSON: Aloha.

MS. THAYER: Nice to see you all. Thank you for the...all the presentations today. I am working...or my team is working on the community forest plan for Maui Island. And a lot of the information that was presented is very much in line with everything that we are endeavoring to do with this forest plan, and being very aware of climate impacts, and how more tree planting can address, and alleviate, and hopefully solve a lot of these problems. And so, I would love, Member Johnson, if we could get in touch with everybody to make sure all of our plans are crosswalked, and aligned, and supportive of each other. And yeah, just in the spirit of collaboration. Because our community forest can be very much in line with the Climate Action Plan, and the Food Security Plan, the Solid Waste Management plan...they can all work together very nicely. And we are working on, as a component of the plan, some satellite and LiDAR imagery analysis. And so, we have some really interesting surface temperature data in relation to existing tree canopy in our communities, and differences even down to like the census block group level...and so, thinking about tree equity in those ways. So, yeah, I'm just really excited and hopeful that we can work together with everybody. So, thank you again for the opportunity.

CHAIR JOHNSON: Well, thank you, Ms. Thayer, for all the work that you do. We're working on creating a new division within the County, Division of Forestry. And it's a very hot topic, no pun intended, on...on how we move forward on that. So, thank you so much. Members, any clarifying questions for our testifiers? Seeing none. Thank you so much once again, Ms. Thayer, for your testimony. Staff, will you call the next testifier, please?

MS. APO TAKAYAMA: Chair, I see an individual approaching the podium.

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

CHAIR JOHNSON: Okay.

MR. LAW: Aloha kakahiaka, aloha kākou...oh sorry, kākou, and aloha *Akakū*. Good to see you, Mr. Johnson, this morning. I know you're working hard. I've seen that big old climate change report out there in the press binder. I was kind of...I knew you were working, I was just kind of wondering what you was working on all that time. And thank you, Mr. Pearson [*sic*], Miss...Ms. Powell, or Mrs. Powell, for being here. Jasee Law from Kula Uka, Waiakoa ahupua'a. I live up on Haleakala, and I can see the ocean from down there. You really can't see it rising that much, but when I go along...I see pictures of the shoreline. And thank you for that presentation, you other guys...Chip, and Tonya, and Jennifer. That's...that's really good stuff. Like Mr. Langford said, I hope the United States people are watching that because...and all over the world, actually, because Hawai'i is like a part of the world, even though we're not part of the United States, and it really is...we...hopefully we can teach the rest of the world what's...what's happening and how...try to figure it out. And Mr. Johnson, thank you for telling us the inconvenient truth. Back in...back in the day, I remember there was a Bush-Gore election, and that was a turning point in the...in the...in the history of the world. And I don't know about...you guys know what happened. I wasn't...I didn't count the ballots down there in Florida, but I think George Bush's brother down there as the Governor of Florida had a lot to do with the direction that things were turning. I have experienced climate change, if that's what we're calling it now, up there on Haleakalā. It used to be cold at night in the wintertime, and now I don't have to use that many blankets to sleep or even...sometimes I don't even have to put my socks on. So, if you had eyes and ears over the past 25 years, you knew this day was coming. So, in...in my personal testimony, and I really kind of feel like what can I do? I've been trying as much as I can to do my kuleana, which is recycling. I'd like to plant more trees. I've been trying to find people up there in Kula around...around my neighborhood that can...that I can do it with. I can't really carry trees. I mean, I could do one at a time. I don't know which trees to plant, but I do know Oprah Winfrey's got a little native nursery farm up there, so I'll kind of try to go with her again, and see what's going on over there. In...in personal testimony, I walked down Na'alaie Road, and that's where her nursery is, and the cops came twice because...I didn't find out who it was, but I'm pretty sure somebody goes to church up there, the Roman Catholic guys --

CHAIR JOHNSON: All right, Jasee.

MR. LAW: -- called the cops on me just for walking down the road. So, I'm throwing it back on the churches again.

CHAIR JOHNSON: All right.

MR. LAW: I know you're familiar with that area, Mister...

CHAIR JOHNSON: I know. I hear you.

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

MR. LAW: The churches...and I'm saying the Roman Catholic Church of Kula and the King's Cathedral of Kula, when I look --

CHAIR JOHNSON: All right.

MR. LAW: -- in their dumpster --

CHAIR JOHNSON: Jasee Law, come on now.

MR. LAW: -- they're not recycling, so...

CHAIR JOHNSON: We got to stay on topic.

COUNCILMEMBER SUGIMURA: I object.

MR. LAW: Yeah, that's part of it.

COUNCILMEMBER SUGIMURA: Chair, I object.

MR. LAW: I know it's a small part, but that's all I can do.

CHAIR JOHNSON: All right.

MR. LAW: That's what I'm saying.

CHAIR JOHNSON: Thanks for your testimony.

MR. LAW: Every molecule matters.

CHAIR JOHNSON: I hear where you come from.

MR. LAW: I must be going off because that's the first time you ever had to keep me back on course, so I'll try to keep my...my row straight, Mr. Johnson. Thank you.

CHAIR JOHNSON: Thank you. Let me see if I got any clarifying questions.

MR. LAW: I'd rather be on your farm helping you right now, so...

CHAIR JOHNSON: . . .*(laughing)*. . . You and me both.

MR. LAW: And Mr. Ellison, I hope you're listening to what Mr. Johnson says.

CHAIR JOHNSON: All right. Let me see if I have any clarifying questions for you. Seeing none. Thank you for your testimony.

MR. LAW: Thank you for your time, sir.

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

COUNCILMEMBER SUGIMURA: Chair? Chair?

CHAIR JOHNSON: Oh, do we have a --

COUNCILMEMBER SUGIMURA: Chair?

CHAIR JOHNSON: -- hand from...

COUNCILMEMBER SUGIMURA: Chair, do you not hear me?

CHAIR JOHNSON: Go ahead, Councilmember Sugimura.

COUNCILMEMBER SUGIMURA: . . .*(inaudible)*. . . hear me?

CHAIR JOHNSON: Yes.

COUNCILMEMBER SUGIMURA: Thank you. So, Chair, I object to this testifier making cracks to my...about my community in his testimony. Please do not allow him to speak.

MR. LAW: Is that a question?

COUNCILMEMBER SUGIMURA: Please do not allow him to speak.

CHAIR JOHNSON: Jasee Law, just...

COUNCILMEMBER SUGIMURA: That's a statement.

CHAIR JOHNSON: She's making a point, and I...I agree with her. You got to stay on topic. And I...you were on topic 99 percent of the time. You just got to stay on topic, Jasee. I'm not asking for a response from you. Just please stay on topic. Thank you. We can talk after if you like.

COUNCILMEMBER SUGIMURA: Chair, please don't allow...

CHAIR JOHNSON: Okay.

MR. LAW: I'm not sure...

COUNCILMEMBER SUGIMURA: Chair, please don't allow testifiers to take personal opinions about organizations in my community, as he has...and alluded to, and please stop him. Please do not --

CHAIR JOHNSON: Okay.

COUNCILMEMBER SUGIMURA: -- allow him to testify.

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

CHAIR JOHNSON: Your point's taken, Councilmember Sugimura. Jasee Law, thank you. I don't have anything else for you. You can have...

MR. LAW: I'm not sure what...I'll need a clarification on that.

CHAIR JOHNSON: Thank you, Jasee Law.

MR. LAW: Thank you, sir.

CHAIR JOHNSON: Thank you. Let's see. Staff, any more testifiers?

MS. APO TAKAYAMA: Chair, Staff has not received any further request for testimony at this time. If anyone would like to testify, please raise your hand by clicking on the raise-your-hand button, or pressing star-5 via phone. Last call for testimony...three, two, one. Chair, seeing no individuals wishing to testify at this time.

CHAIR JOHNSON: Okay. Members, seeing there's no more individuals to testify, I will now close public testimony. Any objections, Members?

COUNCILMEMBERS: No objections.

. . . END PUBLIC TESTIMONY FOR ADEPT-1(10) . . .

CHAIR JOHNSON: Okay. Why don't we start with Councilmember U'u-Hodgins so we can start a discussion, and then we'll take our recess, okay? Councilmember?

COUNCILMEMBER U'U-HODGINS: Thank you very much. I appreciated everyone's presentation today. It was very in-depth, and it was a lot of information. Yesterday I met with AES, and they are trying to do some solar projects in Kihei. And they were explaining that with the Federal changes in their tax credits, they have four years to entitle, permit, and construct in order for them to get all of the existing tax credits that there is, or else they lose like 30 percent of their cost benefits, which ultimately will trickle down to like losing more and costing us more. As a County, there's only so much we can do with the world and all of its changing, one of which is, we control our own permitting system. So, how can we help companies like AES or Rooftop Solar, and expedite the permitting process?

CHAIR JOHNSON: Department? *(pause)*

MR. PETERSEN: Thank you, Councilmember. I think I would have to defer that question to permitting. You know, we...we would definitely support any expedition, you know, of permits, especially when it comes to renewable energy.

COUNCILMEMBER U'U-HODGINS: Thank you.

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

MS. POWELL: And also, if anyone was to introduce a bill that would lax, you know, certain...how do I put this? Let's say that their...their parameters are a little stricter than other municipalities, you know, and someone was to introduce a bill to kind of like negate that a little bit --

COUNCILMEMBER U'U-HODGINS: Okay.

MS. POWELL: -- that would be an effective measure.

COUNCILMEMBER U'U-HODGINS: Okay.

MS. POWELL: It takes longer, but it would at least be an effective measure.

COUNCILMEMBER U'U-HODGINS: Sure.

CHAIR JOHNSON: Can I see if Ms. Erin Wade is on the call? Maybe she could respond? She's still not here? Because I did see Noah Jackson join the call, and maybe Mr. Jackson, if you're available to respond?

MR. JACKSON: Hey, Councilmember, can you hear me?

CHAIR JOHNSON: Sure. Let me just designate Noah Jackson as a resource under 18(A) of the Council. Any objections, Members?

COUNCILMEMBERS: No objections.

CHAIR JOHNSON: Mr. Jackson, do you think you could respond to that question from Councilmember U'u-Hodgins?

MR. JACKSON: Thank you for the question, Councilmember. And I'm sorry, I'm just jumping in, pinch-hitting for my boss, but I...we will take it down, and we can get back to you in writing. But that's definitely a great question, regarding is there ways we can expedite permitting, specifically for these types of solar projects.

COUNCILMEMBER U'U-HODGINS: Okay. Great. I know that they're going to reach out to you folks, and probably request a meeting with all the directors. And you can go to their existing space and figure out what's been working, and what maybe they need to fix, so when they do their entitlements for their next project, it might go smoother. But I just wanted to throw that out there because that was a conversation I had yesterday. Thank you. Thanks, Chair.

CHAIR JOHNSON: It's a really valid point you bring up. So, Members, how about we take a ten-minute recess? We were in discussion, so we're allowed. At 10:45, we will come back. 10:45 a.m. This ADEPT Committee is now in recess. . . .(gavel). . .

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

RECESS: 10:35 a.m.

RECONVENE: 10:51 a.m.

CHAIR JOHNSON: . . .(*gavel*). . . Will the ADEPT Committee of 10/9/2025 come back to order. Time is now 5:51 [*sic*]. I hope we're all refreshed, ready to rock and roll, and ask impertinent [*sic*] questions, and have this discussion. We're going to move on to Councilmember Tom Cook, who's next. So, Councilmember, the floor is yours.

COUNCILMEMBER COOK: Thank you, Chair. Thank you for the presentation. Very detailed, very broad, and deep, and alarming. I see...as a representative for South Maui, and being the Chair of Water and Infrastructure, I see very present, obtainable actions that the County can do...utilizing our stormwater runoff to recharge the aquifer, for fire protection, reforestation. And so, hopefully, we collectively can get the political will to prioritize in this. It's...it's...it's kind of sad, and almost depressing for me, how challenging it is to get the permits and all the intergovernmental cooperation to execute something that we probably all would agree is beneficial, and that it's obtainable, that it's been done in the past, on a bigger scale, different scale, different places. So, I look forward to working with Member Johnson and everybody because I really think that the R-1 water that we have available in South Maui, the Mālama Haleakalā and Michael Reyes programs that have successfully been implemented to demonstrate the methodology for utilizing R-1 to pasture and for reforestation. So, I know this isn't a question, so...per much, but it's an outreach to ask to please keep in touch with me so that we collectively can get our stormwater and wastewater to be resources, and not wasted. So, thank you.

CHAIR JOHNSON: Okay. Does anybody want to respond to that? Okay. Ms. VanderVeur?

MS. VANDERVEUR: I would be happy to meet with you and chat with you about that. There's also, working on the West Side, a similar project was proposed to bring some of the R-1 water up for restoration purposes. So, I think there's definitely a need, and I would be happy to help with that.

CHAIR JOHNSON: Okay. Great. Let's move on to Councilmember Sugimura. If you're ready, the time is now yours. (*pause*) Oh, you're muted, Councilmember. There we go.

COUNCILMEMBER SUGIMURA: Oh, sorry. In your action...in your action plan, you have items that are high priority. One of it is permitting, but there's also many more. So, in...in that, the Administration does not have a...a...I forget what the committee was...oh, what the division was called in the Mayor's Office anymore. Who is overseeing this plan in the Administration?

CHAIR JOHNSON: Department? Maybe...if you guys don't know, we can go to Mr. Jackson, but if you want to respond, feel free.

MR. PETERSEN: Thank you, Councilmember. Cecile, our new EP&S manager, is responsible

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

for this program.

COUNCILMEMBER SUGIMURA: Oh. So, Cecile, in her many jobs, will be implementing the...the various action items, are you saying?

MR. PETERSEN: Yes, that's correct.

COUNCILMEMBER SUGIMURA: Or...okay. So, has Cecile had a chance to review it and decide what the priorities may be, or should we wait for another opportunity, another try?

MR. PETERSEN: I'll...I'll turn it over to Cecile to speak on this.

COUNCILMEMBER SUGIMURA: Thank you, Mike.

MS. POWELL: Thank you, Deputy. Thank you, Councilmember Sugimura. We have had an opportunity to review. I have been involved with the CARP in the past. We do have William Jay, who's the head of the EP section. He will be the one who's going to be working with a consultant to update the plan. We're also working with IT to update the...to provide a dashboard that does have all of our strategies and action items through each one. We have them categorized as municipal building energy...pardon...secure...security for the people. We have...for waste, we have transportation, and agricultural land use, and natural resources, education and outreach, as well as...one more here...funding sources so far, categorized with action items and strategies going for each of the priorities in those sections in order of priority.

COUNCILMEMBER SUGIMURA: So, you have it...you have it categorized, and you're going to be working on it. I'm sorry, I did...I did --

MS. POWELL: Correct.

COUNCILMEMBER SUGIMURA: -- remember that you said William Jay was...he's brand new, Environmental Protection hire...is that right?

MS. POWELL: Yes, he is...he is brand new. And so...so, what's going to happen is we are prepared to update the CARP, and then with that, that would be our...our set of guidelines to develop our programming in accordance with that, you know, implementing it through our grants program and partnering throughout the community, networking with other groups, and just, you know, moving forward under the direction of the Department Director and Deputy, and you folks as well, of course.

COUNCILMEMBER SUGIMURA: Thank you. So, Chair, would you ask for a copy of that categories that they have then dissected, the action plan?

CHAIR JOHNSON: Yes. . . .*(timer sounds)*. . . So, when you guys are ready, you could send it to the Committee, and then we can distribute it, okay?

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

COUNCILMEMBER SUGIMURA: Thank you.

CHAIR JOHNSON: All right. Thank you, Councilmember Sugimura. Let's move on to Chair Lee, if you're ready.

COUNCILMEMBER LEE: No questions right now. Thank you.

CHAIR JOHNSON: Okay. Thank you, Chair Lee. So, I'll...I'll move on to my...my set of questions. Dr. Fletcher, if you're still on the call--and if any of the presenters want to turn their cameras on so we...we can see your faces, so that we can be ready to ask you guys all the questions. First off, Doctor, I know you're a busy person. I want to thank you once again for joining us. I mean, that...the slideshow you...you presented, if people aren't moved by that, I don't know what's going to move them. Because it really is kind of intense, the things we're facing. So, I have a question. In your presentation, you mentioned El Niña [sic] and El Niño, if I'm doing that right. How does that fit into what we have to prepare for? We know...do we know when those events are coming? Isn't it like a certain set of years? Can we prep for those in addition to all the other things?

MR. FLETCHER: So, they are not predictable until you're about six months away from the event.

CHAIR JOHNSON: Oh, boy.

MR. FLETCHER: They aren't perfectly cyclical. They average around, you know, five to ten years, eight years-ish, switching back and forth. The...the thing to worry about is the super El Niño, and they come along every decade or so. Hang on one second.

CHAIR JOHNSON: Sure.

MR. FLETCHER: Could you close my door?

CHAIR JOHNSON: Never heard of a super El Niño. Boy.

MR. FLETCHER: Yeah. So, 1982 was a super El Niño. I think '96, there was...there have been...there have been a couple. And yes, we can prepare. Because we know during both El Niño and super El Niños, we have extremely hot conditions. We tend to have more tropical cyclones, hurricanes. We tend to have more intense rainfall. Sea levels tend to be higher because the ocean is warmer in this part of the Pacific. And it's basically preparing for extremes. And, you know, that's what we should prepare for anyway.

CHAIR JOHNSON: Right.

MR. FLETCHER: It's the extremes in weather, the extremes in ocean weather, as well as atmospheric weather, that we need to prepare for. And, you know, the discussion you guys are having is absolutely appropriate. Preparing for climate change is about

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

housing. It's about feeding our people. It's about clean energy. It is about waste management. It's about all the things that you folks do, and getting those completed as quickly as possible, and as robustly as possible, and as solid as possible to weather the extreme weather, whether it's...whether it's heat --

CHAIR JOHNSON: Yeah.

MR. FLETCHER: -- we have extreme heat coming, or high winds, or intense rains.

CHAIR JOHNSON: You know, right now, I just got a news report that the Honoapi'ilani Highway is suffering from king's tides. And they're slowing down traffic. The water is coming over, crashing on the road. If you...if you had El Niño, king's tides, and what's happening in climate change, I mean, I can't...I mean, is...is there like a...like a universal design in a way that managed retreat just pulls us all off the shore? Is there something that is in the tool...toolbox that just addresses all of those things? Or is it just do the housing, do the farming? Do...you know, there seems to be so much, and it's a moving target.

MR. FLETCHER: Well, taking one action very often can accomplish several types of mitigation. So, requiring all coastal houses to be up on post-and-pier so that there's freeboard underneath the house. It adds to cooling. It means that waves running up can go under the house rather than cause damage. It's...and moving portions of the highway, which DOT is in the process of trying to accomplish and to fund, you know, that'll bring...that should...if you can remove the hardening that's there when the highway is moved, that can bring back the sandy beach, that can bring back the monk seals and the turtles. You know, you get many sort of co-benefits with one --

CHAIR JOHNSON: Yeah.

MR. FLETCHER: -- big solid action.

CHAIR JOHNSON: Thank you, Doctor. My time's up, and I'm going to turn it over to some other Councilmembers, see if they have any more questions. So, we'll go back to Councilmember U'u-Hodgins.

COUNCILMEMBER U'U-HODGINS: Thank you, Chair. I'll continue asking Dr. Fletcher questions. Thank you very much for your presentation, by the way. You were talking about some of the things that the structures in Waikiki has to do to best prepare for whatever's coming next. Do you know how much some of the hardening of those structures cost? Because you were explaining how they're like hardening the foundations. You were showing that pump down at the bottom of one of the hotels.

MR. FLETCHER: Yeah.

COUNCILMEMBER U'U-HODGINS: Do you know how much that stuff costs?

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

CHAIR JOHNSON: Doctor?

MR. FLETCHER: So, we have found that almost every building in Waikiki that has a basement, and very often it's just the first floor of the ones that haven't been raised, are using pumps. Those pumps are not expensive. I don't have an exact figure for you, but, you know, I'm sure they're hundreds of dollars.

COUNCILMEMBER U'U-HODGINS: Okay.

MR. FLETCHER: So, that...that's a common tool to use in the short-term. In the longer term, for a large structure like the resorts --

COUNCILMEMBER U'U-HODGINS: Yeah.

MR. FLETCHER: -- any time you want to renovate, say, a wing, or a portion of the structure, raise it at the same time as part of the renovation. Raise it so that there's freeboard underneath. And then slowly, over the years, you get the entire building improved in terms of mitigation.

COUNCILMEMBER U'U-HODGINS: Okay. Thank you. I'm asking because if anybody's paying attention to what Maui County has been dealing with, we're looking at converting some of the shoreline structures to long-term rentals, and they're multifamily units, and how much that may cost someone when they're living close to the shoreline like this, considering, you know, everything we're dealing with. I never also heard of a super El Niño, and you said it happens every decade, or near about every decade. And so, it was '82, '96. When's the next one? It feels like it's right now sometimes. Or I'm just going through, like, really menopause, but one of the two. Let me do a quick search on super El Niños to see if I can give you the dates. And it is not at all predictable --

CHAIR JOHNSON: Oh, boy.

MR. FLETCHER: -- until you're a few months out.

COUNCILMEMBER U'U-HODGINS: Okay. I'm going to look that up. For now, I guess we just invest in fans or something. Thank you.

CHAIR JOHNSON: Thank you, Councilmember. Okay. Let's move on. Okay, we got a question from Chair Lee. Go ahead, Chair Lee.

COUNCILMEMBER LEE: Thank you. Still with Dr. Fletcher. And thank you all for your fantastic presentations. You mentioned, Dr. Fletcher, that there are two main contributing factors to sea...to sea level rise. The first one is melting glaciers, and the second one is aquifer water going back into the ocean. We have a lot of that here on Maui, and that's an area of major contention. See, a lot...there's some people in the population that want to have the water go back down into the ocean, and then there are others who would love to have a portion of it, or a lot of it, stay...stay on land to recharge

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

the aquifers, and also to provide housing. And so, where do you stand with this situation where there's this major competition for the same water?

CHAIR JOHNSON: Dr. Fletcher?

MR. FLETCHER: So, the...I'll answer your question in one second. The super El Niños were 1982 to '83, 1997 to '98, and 2015 to 2016. And again, they're not predictable or cyclical. With regard to the aquifer water, we do not scale up to be a significant source of sea level rise through our water use. Continental aquifers are multiple times --

CHAIR JOHNSON: Sure.

MR. FLETCHER: -- larger than...than our island, so I don't think this is an issue that we need to concern ourselves with. But I will say, with regard to your question, that every drop of water is precious. We need to figure out how to reuse water. We need to figure out how to trap that gift from the sky and, you know, slow it down and retain it so it recharges our aquifers. As you've seen, precipitation is decreasing, drought is increasing, temperature is increasing. We need to rethink our whole water management system. And you might look to the Honolulu City & County Government. They are engaging in what's known as One Water, where they look at all forms of water, and develop management plans based on the concept that all water has similarities and reuses into new sectors.

COUNCILMEMBER LEE: Thank you. Yes, I agree. I just received a report from the Honolulu Board of Water Supply, where they have a conservation policy such that it's so successful that they are able to serve people, an increasing population...an increasing pop...and we have more water than them and way fewer people...you know, fewer residents. And yet, there's this constant battle for water. But...but my other question to you is, you talked about sea level rise and the coastline, homes and so forth. Whose responsibility do you think it is? Is it the Governor's?...I mean, the government's responsibility, or the homeowners, or the property owners to take care of the issues concerning sea level rise along the coastline?

CHAIR JOHNSON: Dr. Fletcher?

MR. FLETCHER: I'm not a lawyer, but in my opinion, it is the government's responsibility to take care of the beaches and the natural environment because they are a public trust resource. And it is not the government's responsibility to take care of private property in the sense of protecting it from sea level rise. The homeowners...the responsibility falls on the homeowners, in my opinion, through the permit system that the County and the State and the...and the Federal Governments have created.

COUNCILMEMBER LEE: Of course, those properties were permitted many years ago before sea level rise became an issue, and climate change became an issue. I don't think that County permits can predict, you know, global changes like that. Yet, you say we're still responsible in a way?

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

MR. FLETCHER: Not for the private properties, no.

COUNCILMEMBER LEE: Okay.

MR. FLETCHER: The...so, the typical reaction is to build a seawall, and those were outlawed by the State in 2020.

COUNCILMEMBER LEE: Okay. Thank you very much. Thanks, Chair.

CHAIR JOHNSON: Thank you. Councilmember Sugimura, second round. *(pause)* Oh, you're muted. There we go.

COUNCILMEMBER SUGIMURA: Okay. Can you hear me now?

CHAIR JOHNSON: Yep.

COUNCILMEMBER SUGIMURA: Okay. So, just going back to my first question, on the supportive action, Ms. Powell, it is number 162, and is considered a high priority for permitting. So, your question, going back to that first question about permitting, I think it was Member Cook who was talking about it, but it is already one of the high priorities in the action plan. So, we look forward to hearing more. And when I first met Dr. Fletcher, it was years ago when we were taking up community facilities district, and...and you were the resource, were the expert on what's happening with the ocean. And just talking about exactly what Chair Lee was asking you about is, how do we contend with the private landowners and the ocean, and it being...and meeting. The district that had the loudest voices, and still do, is Kahana Bay. So, Dr. Fletcher, do you now have any more new information on that? That was years ago when...when...when I first got to meet you, or the Council first got to meet you and your expertise.

CHAIR JOHNSON: Doctor?

MR. FLETCHER: No, I don't have any...no more information. I mean, the general rule of thumb, and it's almost a scientific law at this point, that we need to get away from the shoreline. We need to back away from the shoreline for the safety of our people, for the safety of our infrastructure and our investments, and also, to allow the shoreline environment to recover. It will recover. Sea level rise does not kill beaches. Beaches can survive sea level rise if they are allowed to migrate landward with the rising ocean, and we need to get out of the way. We could end up...for instance, Tutuila in American Samoa has chosen to armor all of its shorelines with seawalls. They no longer have any beaches except in one location --

COUNCILMEMBER SUGIMURA: Wow.

MR. FLETCHER: -- and we are moving quickly in that direction, unfortunately, because we

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

allowed decades of seawall building before we outlawed seawalls in 2020.

COUNCILMEMBER SUGIMURA: What about sand? What about putting back sand?

MR. FLETCHER: Sand nourishment is an option. They're doing that in Waikiki. In places where you have man-made beaches, like Waikiki, I look at it as environmental maintenance, putting the sand back on where it has disappeared. But then where you have natural beaches, putting sand there is a short-term solution, especially, say, let's look at Kā'anapali Beach. That's going to be a short-term solution that should be accompanied by plans to retreat. It shouldn't just be considered a one-off. It's very expensive. It also leads to strip mining of...of offshore sand fields, which have their own ecological purpose. If...if the community decides to put sand at Kā'anapali Beach, I think it should be accompanied by retreat plans for those resorts and those structures there so that it's a whole package. The whole thing is, we must recognize that sea level rise is accelerating, and it's not going to go away. So, putting sand there is nothing more than a short-term step.

COUNCILMEMBER SUGIMURA: Wow. That is...sounds very expensive.

MR. FLETCHER: Yes, I'm afraid it is. I'm afraid it.

COUNCILMEMBER SUGIMURA: For both sides, government...government and, you know, whatever private properties, you know, resorts and everybody else. But I stand with Member U'u-Hodgins as Bill 90...Bill 9, which is short-term vacation rentals, and we're trying to put...make that available for residents to live in. I think it's so dangerous based upon your heavy statements that you're making today. So, thank you very much. No other questions.

CHAIR JOHNSON: Okay. Thank you so much. I'd like to ask a question for Ms. Graham or Ms. Palmer-Ellingson if they're on the...they're still there. Let's see, Ms. Graham. Okay. Hi. My question is in...in regards to, you know, your experience working in municipalities, is there maybe something you can speak on to what municipalities should we model? Is there someone out there doing great? Is there someone...or in your experience, your lived experience, is there something that you can give us a kind of advice on how do municipalities like ourselves navigate this? Do you have like a model city . . . *(laughing)* . . . or a model community that has done really well? Because...I mean, sometimes we do that, right? We look at other communities and districts, and say that they seem to be getting that right, and we can kind of cherry pick if it fits our...our community.

MS. GRAHAM: So, I would say, first of all, it's an excellent question. And I think where we're at in the overall movement of this...of this climate change reality is that we are...communities across the world are now facing multiple strains that are happening. They're already here. And so, that...that...that lead-up time has been diminished for many communities. I don't have a particular community to point you to, but what I can say is that it's important, and there was some discussion of this earlier, of...of where do

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

these strategies land, and how do you make sure that they're moving forward? In some ways, it's a...it's a cultural shift to where, in reflection to what Dr. Fletcher was saying, you know, there...there has to be retreat from the coastlines. And so, there are some principles that need to be simply embedded in the decisions that...that local government makes. But in terms of the planning actions, and the things that you've all decided to take on in terms of your strategies, some of those strategies that the...that the people of Maui need are things that are not going to necessarily be done by the city government or the County Government. And so, having a partnership with other community partners, where everyone is pulling toward completing the elements of that plan, is a particularly important piece. Otherwise, you run the risk of...of...if the plan is...is sent to a particular department, and there are a lot of things in the plan that that department can't actually do --

CHAIR JOHNSON: Right.

MS. GRAHAM: -- then they run the risk of having some of the really most important strategies languish. The other thing that I would encourage you all to do is to keep the conversation happening with the larger community. We just heard made mention of that you're looking at your short-term rental question. The...the larger community needs to understand what is driving some of the hard decisions that your municipal government has in front of you because they will be asked to make changes in their life. They may be asked to make investments. And so, it's going to be very important that they understand the future that you're trying to build, and the risks that you're trying to...to work around as you move your way through that process. So, I think a big part of it is the structure of how you do your implementation.

CHAIR JOHNSON: Yeah. Okay. Well said. I'm reading this book, *Abundance*, by Ezra Klein. And one of the things that they mention in it is kind of mind-blowing, is that in red states, it's easier to build a solar farm than in blue states because of our environmental reviews and all the bureaucracy. But the red states don't want to build solar farms, you know. So, it's kind of like...it's real frustrating to see that. Like I...I kind of feel the vibe of my Council that sometimes it's the red tape, the bureaucracy that we want to...we want to get rid of because we...it takes 10, 15, 20, 30...all these years to do a thing because of our bureaucracy. And I...I...sometimes that's really mind-blowing to me when I'm reading this...this...I'm reading the book, and it's totally the story of this Council here, so... But I...I...I see Councilmember Tom Cook's hand up, and I hope I didn't skip you. So, the floor is yours, Councilmember.

COUNCILMEMBER COOK: Thank you, Chair. My question's for Dr. Fletcher. *(pause)* Thank you, sir. So, kind of a variety of shoreline...not shoreline hardening, but your thoughts on T-groins and offshore breakwaters. And what I'm pointing at, some of the areas...like North Shore O'ahu is one extreme. And on Maui, we have areas where it's very...relatively shallow for a prolonged period going out. And is there...are things...are other mitigating factors part of the recipe for this transition for higher sea level and higher tides?

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

CHAIR JOHNSON: Dr. Fletcher?

MR. FLETCHER: Yes, of course. And...I mean it...it all gets very complex. T-head groins are in the plan for Waikiki. I know that they are in the plan for West Maui. The theory behind them is that they create sort of an abatement effect where, in fact, we do see, in natural abatements around Hawai'i, a reduced rate of erosion. We can even see accretion where sand is collecting there. And so, the idea with T-head groins is that they would stabilize the sand that you put on the shoreline. What I'm afraid of is that as sea level continues to rise, eventually that sand will erode away, and it will become too expensive to replace it every year, and you're left with these gigantic T-head groins. Take a look at the New Jersey shoreline, and you can see dozens and dozens of abandoned groins that litter the shoreline there because they could not find the money to continue the...to nourish the sand. So, I think that if you're going to build a T-head groin, you should consider a bond or something to remove it, or some sort of mechanism to guarantee that there's always sand. And eventually, the sea level rise, you know--and I'm talking about still this century--is just going to jump past the current shoreline, the T-head groins will be totally offshore, and then--you know, then you're stuck with something that's not functional anymore. A groin will trap sand that would have been going to someone else's shoreline. So, a groin only works with sand that you put there. And you have to pay attention downstream to make sure you're not causing accelerated erosion down there. So, these...these things are very tricky. With regard to offshore breakwaters, offshore breakwaters reduce the wave energy, and...and landward of them, behind them, they create a wave energy shadow, and sand will...will accrete there. Well, that sand would have been going to someone else. And so, you know, sand is a zero-sum game. You can trap it with...with these engineering devices, but who are you taking it away from? That really has to be thought about.

COUNCILMEMBER COOK: Thank you...thank you, sir. One aspect of it . . .*(timer sounds)*. . . and welcome your opinion...if I could finish this sentence, Chair?

CHAIR JOHNSON: Sure.

COUNCILMEMBER COOK: The...the beneficial aspects...here we wouldn't use concrete and stuff, they've used big boulders--like the Lahaina Harbor and the Kahului Harbor--to do this type of mitigation, that it would potentially have an enhancement to the marine environment for...since our reefs are under pressure, that you'd have a place for fish, and all the different ecosystems of the ocean to potentially help us. So, that's part of the equation. Do you have any thoughts on that?

CHAIR JOHNSON: Doctor?

MR. FLETCHER: No, I think you're right. You're creating more rugosity, which is little caverns and, you know, micro-topographic variation on the seafloor, and the...the animals and plants that live in that sort of an ecosystem will quickly populate the rubble mound structure that you build. That's true, but we have to be careful. We can't play Mother Nature too much. We have to be careful. What...what is being lost? What is

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

being destroyed? And do we truly feel that we're compensating for that in a way that's sustainable and enduring through time?

COUNCILMEMBER COOK: Thank you, sir. Thank you, Chair.

CHAIR JOHNSON: Okay.

MR. FLETCHER: Yeah.

CHAIR JOHNSON: Wise words, Doctor. You know, Members, we did a couple rounds. I think a lot of good questions were asked. I kind of want to turn it to the presenters to have them have one last say, like a final thoughts, and then we could adjourn the meeting, if Members are okay with that. So, why don't we start with Ms. VanderVeur? I appreciate you joining us and presenting, but do you have any final wise words for this body?

MS. VANDERVEUR: Yeah. I think just looking for those multiple benefit projects that can really enhance a number of issues, and really funding those, and collaborations through that. And then I just wanted to say, Council Chair Lee, I will talk with some of the different groups that I'm working with, and kind of get a better like estimate of land used for doing seed farms, and...and what...like what amount of land --

CHAIR JOHNSON: Great.

MS. VANDERVEUR: -- they would really need. But I think, you know, as...as many projects that have those multiple layers of benefits, that prioritizing those, I think, is a...is a great way to go.

CHAIR JOHNSON: Mahalo for those words. Why don't we move on to Ms. Graham and Ms. Palmer-Ellingson? I...I appreciate you guys joining...joining us. I know you're super busy, so thank you so much. Do you have any final words for our Committee?

MS. GRAHAM: One of the things that I noticed when I was working on this project is that Maui County is...is very complex when you look at the...all of the different vulnerabilities that are happening in your place. When we work with people in the mainland and communities there, often there'll be one or two major drivers that are much larger than everything else. And what we see in your...in your communities is that you have...you have a large number of serious vulnerabilities because of...because of the characteristics of your County, and the communities in it, and where they're located, and just what's...what's coming. So, I would encourage you to make sure, when you're looking at any sort of infrastructure improvements, if you're looking at moving facilities, or structures, or utilities, or any of those things, that you really dig deeply into the projections for the end of the century. Because any infrastructure that you're looking to have last for a long period of time needs to really take into account that longer-term trajectory, and we...we often don't do that. We tend to fall into the issue of just back-casting, and saying what has worked here in the past. And so, really making sure that...that your infrastructure investments are taking into consideration the...the

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

most...those highest, kind of most severe risks. And then again, just encouraging you to include your community. There are lots of good ideas, and there are resources out in the communities with the people, and that can be brought to bear in that wider-ranging strategy element. What are...what are the things businesses can do? What are the things that homeowners can do? What are the things that school districts and teachers can do? Because it's...it's...it's coming in, in all forms, to your communities. And you're already starting to experience it...which, of course, you know. But it's been my...my great honor to work with all of you, and to...to help bring that information, and to just see how the community...the depth of care that...that your communities have. So, I think you all are in good hands with the people who are there.

CHAIR JOHNSON: Thank you, Ms. Graham.

MS. GRAHAM: Darla --

CHAIR JOHNSON: Ms. Palmer-Ellingson?

MS. GRAHAM: -- may have something.

CHAIR JOHNSON: Yeah.

MS. PALMER-ELLINGSON: Yes. I wanted to point out that carbon reduction is, you know, a top priority in climate change, and there are a lot of coast...successful coastal community projects that we can point to for that. So, that's information that, you know, we...we can share. Also, I wanted to just briefly talk about CARP in general. It was completed in December 2022 and later codified, and hopefully our vulnerabilities that we talked about today exemplify that we don't have time to wait. In addition, one of the first priorities identified in the plan is to reestablish and staff a County climate change and resiliency and sustainability office. And at a minimum, that is to include a chief resiliency officer, deputy resiliency officer, energy commissioner, environmental coordinator, green building and resilient housing specialist, and a grants and contracts person. So, I'm mentioning this because we're at budget time, and this...this staffing needs to be put in place now.

CHAIR JOHNSON: Yeah.

MS. PALMER-ELLINGSON: You know, again, the...the time frame is extended. I'd also encourage the County to reestablish the...the CARE Committee so all these issues have a central place to be discussed. And also, that is the connection to public involvement. On the same note, it was mentioned about building a dashboard, and I wanted to point out that a dashboard and website was already established through the CARP process, and it has an Esri backbone. It was established at great cost. It was made public, and since taken down. It still exists. But I just wanted to say, it's there. So, hopefully we're not reinventing that. And on a similar note, if priorities in the CARP plan are being changed, then that should be done with transparency. And what made me think of that is the point about LNG and the State's sharing today. LNG is not part of Maui County's

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

CARP, and it should be questioned what Maui County partners the State's talking about when promoting LNG as a bridge fuel. LNG was discussed in the CARP process, and it requires build-out and cost...and for the same cost, clean renewable energy can be expanded. LNG is a fossil fuel, and it also has embedded carbon from shipping. So...and it's really unlikely it's going to be pulled back once it's established. So, I just hope that we can really take that into consideration. And that's all my comments.

CHAIR JOHNSON: Well, thank you for those comments. I appreciate you joining us today. Let's move on to Dr. Fletcher. Thank you for joining us. I know you're busy. I really appreciate your time. Do you have any final words of wisdom for this Committee?

MR. FLETCHER: Yeah. Thank you to all of you. It's actually been a privilege to interact with you. And I've...I've worked with Maui County for over 30 years, and the whole time it's been a privilege. I continue to be impressed by the government structure, as well as the...the public. You certainly know about wildfire. You know about sea level rise. I want to remind you that heat, H-E-A-T, heat is a huge issue. The highest temperature...I believe the highest temperature recorded on Maui was at the Kahului Airport. It was 97 degrees. And of course, there's an urban heat effect there. But at 104 degrees Fahrenheit, photosynthesis begins to experience irreversible damage, which is relevant to our food sovereignty issues. And so, how do we grow food when it's too hot to grow food? You can go uphill where it's cooler, or you can go inside with industrial agriculture, which is actually a fairly advanced technical mechanism that is clean. You don't use fertilizers. You don't need pesticides. And that could be an area to consider investment in, or at least accelerated permitting, for your food future. This...earlier this summer, the Central Valley of California experienced 126 degree Fahrenheit temperatures, and it basically brought their food production to a halt.

CHAIR JOHNSON: Wow.

MR. FLETCHER: They provide 25 percent of all food in the United States. So, you know, our supply lines of food are threatened already. And growing more food with awareness of the challenges is going to be important for every island. Thank you.

CHAIR JOHNSON: Thank you, Doctor. As small as it was, we did have our first Lānaʻi Farmers Market on County-owned property this past weekend. And it...it's...it made me feel good that we are trying. It's small, but still, we're trying.

MR. FLETCHER: That's fantastic.

CHAIR JOHNSON: Okay. Let's turn it over to the departments. Do you guys have any final thoughts, comments, concerns? Oh, before you start, let me just say this. This is Deputy Director Petersen's first time in the Chambers. We want to welcome him as a newly hired Deputy Director. And you have to spin a lot of plates, and welcome aboard. . . .(laughing) . . .

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

MR. PETERSEN: Thank you, Chair. I think for our Department, the main takeaway today would be the need for collaboration. The great presentations today, you know, magnified the need for that collaboration. And like I mentioned earlier, this is a monumental task to undertake. And it's going to take all of us--all the departments, the public, all the experts, everyone--to bring the minds together, and join forces, and figure out the best path forward. Thank you.

CHAIR JOHNSON: Right on. Mahalo. Mr. Jackson, have any advice, final thoughts, comments?

MR. JACKSON: . . .*(laughing)*. . . No. I just would like, from the Managing Director's Office, to thank the presenters. I know it sounds like you guys all have a lot going on. So, I appreciate you guys being here. And just thankful for Mike and Cecile and their team. And they're...they're managing CARP, but we stand ready to help coordinate the overall projects with departments. So, I know we had a conversation about that last year. And we look forward to work...we look forward to working with everybody on it.

CHAIR JOHNSON: Thank you. Thank you so much. Ms. Powell?

MS. POWELL: Thank you, Chair Johnson. I...I did want to digress a little bit. We do have new staff we just hired...we onboarded six new employees in EP&S. And we do have an expansion position dedicated to the CARP, as well as the EP section head as well. And the intention of the updating of the plan is through consultant, and through a panel of experts, and through, you know, the appropriate processes for that. So, we're certainly not taking on just with a small little crews *(phonetic)*, where the strategic plan of the update is a collaborative effort, and it's all designed to be that way.

CHAIR JOHNSON: Wonderful. Okay. Members, I think we had a really good discussion today and that takes us to the end of the agenda. Members, without objection, I will defer this item.

COUNCILMEMBERS VOICED NO OBJECTIONS (excused: TP and SS).

ACTION: DEFER pending further discussion.

CHAIR JOHNSON: Okay. That takes us to the end. Staff, do we have anything else? Okay. The time is 11:34. The ADEPT Committee is now adjourned. . . .*(gavel)*. . .

ADJOURN: 11:34 a.m.

**AGRICULTURE, DIVERSIFICATION, ENVIRONMENT, AND PUBLIC TRANSPORTATION
COMMITTEE MINUTES
Council of the County of Maui**

October 9, 2025

CERTIFICATION

I, Daniel Schoenbeck, hereby certify that pages 1 through 43 of the foregoing represents, to the best of my ability, a true and correct transcript of the proceedings. I further certify that I am not in any way concerned with the cause.

DATED the 12th day of November 2025, in Wailuku, Hawai'i



Daniel Schoenbeck