

## Attendees

- Marc Asano,  
Hawaiian Electric
- Amy Adrian,  
Hawaiian Electric
- Jim Alberts
- Shannon Alivado,  
Hawaiian Electric
- Amand Uowolo
- Amir Angha
- Ali Arabnya
- Leo Asuncion
- Steven Bergfeld
- Nancy Bernal,  
Hawaiian Electric
- Bernard Sadoulet
- Bill Moore
- Tracie Black
- Kahikina Burgess,  
Hawaiian Electric
- Jonathan Chin
- Colton Ching,  
Hawaiian Electric
- Warren Ching
- Gregory Chun
- Clay Trauernicht
- Craig Clouet
- Cheresa Coles
- Corey
- Shayna Decker,  
Hawaiian Electric
- Derek Wro
- Bao Duong,  
Hawaiian Electric
- Erik Takayesu
- Ernest Lau
- Erwin Kawata
- Gene Albano
- Henry Curtis
- Hsun-Ying Kao
- Jacob Tavares
- Jacqui Hoover
- James Landgraf
- Jeff Spohn
- John Stufflebean
- Kauilehuamelemele  
Kauhane
- Kawika Uyehara
- Taesun Kim
- Erin Kippen,  
Hawaiian Electric
- Kurt Matsumoto
- Naomi Kuwaye
- Gregg Lemler
- Marcey Chang
- Maria Tome
- Matthew McNeff
- Michael Angelo
- John Moore,  
Hawaiian Electric
- Ryan Nakata
- Neil Yamamoto
- Nicole Galase
- Ka'ala Farm Nohea  
Stevens
- Wendy Oda
- Keith Okamoto
- Kristen Okinaka,  
Hawaiian Electric
- Darren Pai,  
Hawaiian Electric
- Parrish Purdy
- Peter Davis
- Sara Tekula
- Lily Sadataki
- LeeAnn Silva
- Kainoa Stafford
- Jamie Suzuki
- Taylor Lau
- Sharri Thornton,  
Hawaiian Electric
- Nathan Todaro,  
Hawaiian Electric
- Tony Traini
- Kazuo Todd
- Kurt Tsue, Hawaiian  
Electric
- Nadja Turek
- Ty Fukumitsu
- Uyiosa Osa-Iduma
- Kimberly Vaituulala,  
Hawaiian Electric
- Michael Walker
- Kevin Waltjen
- Warren Mamizuka
- Scott Winecoff
- Gina Yi, Hawaiian  
Electric
- Colin Yost
- Yumi Kam
- Christopher Yunker
- Zachary Judd

## Welcome

- Introduced the topic of land management
- Discussed ground rules
- Shared that the next meeting will be on September 24

## Program Overview

- Vegetation management is one of the practices Hawaiian Electric uses to mitigate the risk of wildfires
- Challenges for land management include fuels, agriculture, invasive vegetation, funding, and policies
- Operational mitigation includes inspection and routine vegetation management in risk areas and mid-cycle inspection for hazard trees
- Vegetation management QA/QC is an additional program that Hawaiian Electric is implementing
- Question: Under QA/QC 90% of compliance of 25-30% of all work, what does the double percent mean?
  - The 25-30% is the representation of the percentage of the work that Hawaiian Electric wants to do QA/QC of the total amount of work.
- Vegetation distribution clearance requirements
  - There is a 10 ft clearance of branch overhang
- Question: what is the integrity of the pole if it's a wood pole? Do you want a fuel break area around the wood pole?
  - The clearance wouldn't be for all poles but potentially poles that have non-exempt equipment on them.
- Vegetation transmission clearance requirements have a wider zone – about a 25 ft clearance from the outside conductor.
- The substation facility clearance is a 10 ft minimum clearance
- Discussed the O'ahu customer and community engagement examples - Leihoku Elementary field break pilot project and goat grazing pilot
- Recapped the 2025 legislative session
  - Hawaiian Electric supported SB 11 – vegetation management near utility lines which required an annually updated wildfire hazard map
  - Supported House Resolution 69 – vegetation management working group to define safety standards. These policies didn't pass in 2025 legislative session,

but Hawaiian Electric is hopeful the conversation around vegetation management will continue

- Question: Cost per acre for goat grazing on Maui?
  - Please see, <https://surfinggoatdairy.com/pages/goat-grazing-services>

## What's ahead

- Between 2025 and 2027, Hawaiian Electric plans to:
  - Implement WSS vegetation management programs, create wider rights-of-way for vegetation clearing, increase partnerships with the state, counties, utilities, and landowners to complete work within easements and rights of way.
- Question: Regarding ROWs, Hawaiian Electric usually pays just a \$1 to allow for a ROW, will Hawaiian Electric pick up the cost for a wider clearance?
  - In the contract it says a dollar, however, Hawaiian Electric pays market value, and will pay those additional easement costs to widen the ROW.

## Yumi Kam Wai'anae Mountains Watershed Partnership (WMWP) Presentation

- Yumi is the program manager and is talking about partnerships as it comes to wildfire management and land management level
- Hawai'i Association of Watershed Partnerships (HAWP) is comprised of 10 island-based watershed partnerships. WMWP is a voluntary partnership between major landowners and stakeholders in the Wai'anae Mountains. The partnership was formed in 2010.
- Shared a quick snapshot of the Fire Management Areas, just captured areas that had high frequencies of fires. Most of them occurred in those fuel breaks.
- Homes in Wai'anae have, on average, greater risk than 100% of communities in the US. There is also a higher likelihood of a wildfire than 100% of the communities in the US. The last year and a half have been the driest. The layer of dead grass is thick and is part of the focus for the year.
- Example of Wai'anae Kai vegetative fuel break, part of a grant and first-time doing fuels management in this area. As of the most recent reporting, the area expanded from 5 acres to 30 acres and the length is over 1.5 miles. Even though continuously expanding it requires a lot of maintenance, and they rely on volunteers and partners.

- Shared examples of vegetative fire breaks. Without management, the grass can become dense and become good fuel for wildfires.
- Highlighted another partnership with the Board of Water Supply in Makaha.
- Shared they created a buffer on both sides of the service road and showed how much fuels have been suppressed. The goal is to keep expanding it and introducing native plants to reduce the temperature.
- Noted it takes lots of volunteers to make these projects happen.
- Discussed nurseries and propagation, developed with DOE schools on O’ahu. A great program to teach people about native plants, ecosystems, and why they are growing these plants in the threat of wildfires, and provides mentoring opportunities for students.

## LeeAnn Silva Queen Emma Land Company Presentation

- Presented a map showing wildfires from 2005-2020 in the South Kohala area. QEL’s ahupua’a is 10K acres, about 90% is reserved for grazing. It’s steep. It shows how often wildfires happen in South Kohala.
- 2015 wildfire aftermath burned 6k acres. Then a large storm pushed a lot of runoff into the surrounding environment, particularly nearshore waters of great cultural significance.
- HWMO released the greater Kawaihae region wildfire plan in 2022, this was their playbook for response.
- The source of the 2023 fire was not determined, it started near the HawaiianTel building.
- The Mauna Kea resort golf course acted as a bit of a green break, but multiple fires still resulted within the resort. No loss of life or residential damage.
- Post fire assessment included archaeologist, structural engineer, forestry/natural resources team, BAERS team, arborist, lineal descendants.
- Parker Ranch established hot work protocols which QEL utilized for all contractors working on site.
- Post-fire priority actions
  - Repair any damage from fire suppression activity
  - Minimize risk to natural and cultural resources from erosion
  - Recover ecosystem function and restore the landscape.
- Repair/rebuild physical improvements
  - Public access bridges
  - Fence lines

- Utility lines
- Long term objectives before the next fire
  - Create fire adapted communities – shared kuleana
  - Optimize safe and efficient emergency response
  - Make landscapes resilient to wildfire
  - Wildfire risk assessment and strategic plan
- Lots of education needs to be done. Many neighbors are still planting non-native ornamental grass that is fire adapted.
- Drafted a wildfire risk assessment for Queen Emma land. This gives them a game plan and where to prioritize efforts in the next 5-10 years.
- Fuel breaks
  - Ignition prevention on major corridors
  - Protection of communities – homes and native plant enclosures
  - Regular inspections and ongoing maintenance
  - One size cannot fit all
- Focus on managed vs un-managed grazing

## Sara Tekula Kula Community Watershed Alliance Presentation

- Working on invasive species removal and creation of native forests.
- Hawai'i is historically known for biodiversity and microclimates. All the islands are watersheds, and these watershed partnerships are protecting what's left.
- Focused on the Australian Black Wattle tree, this is what they are battling in Maui since they are fire prone. The deer eat the grass, but don't care about the wattle.
- This plant does not let anything else grow. And the seeds are very prolific and can last up to 60 years. Filling all the open space in Kula and in this part of Maui they are at 91% risk. Steep gulches all around Kula and hard to manage for landowners.
- Another challenge is real estate for sale in Kula. Lots of properties are advertised as living in a beautiful landscape and not teaching about the risk and hazard of living in a hard to manage area with wattle.
- Kula burn area was surrounded by wattle and it was all private land, so it was up to the landowners to manage. The 2023 fire happened in a non-watershed protected area.
- Soil burn severity correlated with thickest stands of wattle. Soil burns mean no organic matter to hold it together. The burned area response team came out on

private land to map the soil burn. Thinking about what kind of fire is going to occur in the vegetation and what will need to be dealt with after.

- After 2023 Kula fire, removal of the entire forest and community of the landowners came together for restoration and mitigation efforts. They don't want wattle to grow back and that's how the Kula Community Watershed Alliance formed.
- Started to fundraise to ensure that one property wasn't prioritized over another to work together.
- To restore the burn scar, they are using the felled wattle to make wood chips and are trying to use the materials that they have.
- Composting woodchips used as mulch exhibit the least hazardous fire behavior among organic mulches. Prevents regrowth when it decomposes, spread rate is slower, and kept away from a house.
- Not restoring houses but land.
- Post-wildfire, post winter "flush" regrowth in the burn scar. The wattle started to regrow quickly. If funding was unlockable sooner, they might have been able to mitigate this regrowth.
- Created community-led invasive species awareness leave behinds and resources
- Professional crews create 1.5-mile fuel break through intact wattle forest, using chips. Need the chips to stabilize the soil and prevent regrowth of more wattle.
- Coming up in the next 3-4 years. 120 acres of watershed restoration in the burn scar with wildfire resilient native plants, and 45 more acres of fuels reduction and creation of shaded green breaks in priority areas
- Big lessons:
  - Neighborhood-scale watershed restoration is possible, even with 71 different landowners.
  - More attention should be paid to locations below the large landowners where the watershed partnerships typically operate
  - Community-led & government supported is the way
  - The pace of the land is important. Don't rush. Listen, observe, do it right the first time.

## Clay Trauernicht, University of Hawai'i Manoa

- Across these presentations are fuels management and it is possible to convert flammable fuels to something that is less flammable. Can also implement other forms of land use such as grazing. What's important about fuel breaks is to create

networks of them and to create options and opportunities for firefighters to use them.

- Regarding fire response, the reality is it's not going to work 100% of the time. High wind events are going to challenge any of these strategies. A big thing is water availability -- without supplementing water to support plantings it's going to take a long time for plants to become established and the maintenance for those. What these communities are doing now is to prepare for the next fires.
- Most of the time dealing with grass and the Kula example shows that there are some exceptions to tree types.
- A lot of these tactics will be site specific. The terrain is a huge thing as well. Can also use animals for management, like goats.
- For Hawaiian Electric, talking about PSPS. Once there is adequate vegetation management and identification about where it's needed, may reduce the need and frequency for the power shutoffs.
- Question: When we look at risk, how can we improve the data sources on the types of fuels? That will help improve accuracy and how Hawaiian Electric prioritizes their efforts and for other organizations as well. What are the best ways to tackle that issue?
  - Using machine learning to look at the severity of soil burn would help prioritize management. Connective fuels concept, understanding if a fire hit here can models trace where it may go using fuels and pre-calculate what you are going up against. For example, the Lahaina fire was through fire contact to materials and embers from trees. Look at vulnerability in these communities.

## Panel Questions and Discussion

- Six communities have been receiving an award from the Division of Forest and Wildlife to do a combination of grazing and equipment along the highway. Trying to devise a solution but must be finished by May 2026.
- What is your most important challenge or need?
  - The greatest need is unrestricted funding. Gulches are privately owned so can't assume there is funding. These landowners don't have the resources to scale it down. They use reimbursable grants, and for an organization just starting out this slows down the ability of work to be done. Work is possible with funding and the right management plan.

- Building up the workforce, hard to find people who want to do this work. Challenge to build and maintain a workforce.
- When awarded big grants, they must build the project from scratch. This means creating and filling positions . In the field of natural resource management, pay is low, and it is hard to attract well qualified people. Fire is obviously related to public safety, but it is also an opportunity to understand there must be an increase in public investment to push this work forward. How much of this going to fall on private owners versus the state? In addition, federal grants are uncertain, need to rely on local and state grants.
- Creating competitive wages for conservation jobs.
- Long-term solutions are all very place specific.