



HAWAIIAN HOME LANDS

HAWAIIAN HOMES COMMISSION • DEPARTMENT OF HAWAIIAN HOME LANDS

G-5

Update on Climate Change Impacts Affecting Hawaiian Home Lands, Statewide

March 20-21, 2023



April 2023 Climate Change Update

- ❖ Update by DHHL staff on
 - Molokai climate change vulnerabilities
 - Current DHHL climate change-related projects
- ❖ Presentation by Amy Wirts, Coastal Lands Program Coordinator at University of Hawaii Sea Grant College Program
 - Climate Change & SLR update, anticipated impacts to Hawai'i and mitigation and adaptation measures



Molokai Climate Change Vulnerabilities

- Sea Level Rise-related impacts
 - Accelerated/Episodic Shoreline Erosion
 - Groundwater upwelling/re-emergent springs & wetlands
- Heavy rain events/more frequent and worse flooding of low-lying areas
- Prolonged Drought/Wildfire/Extreme Heat

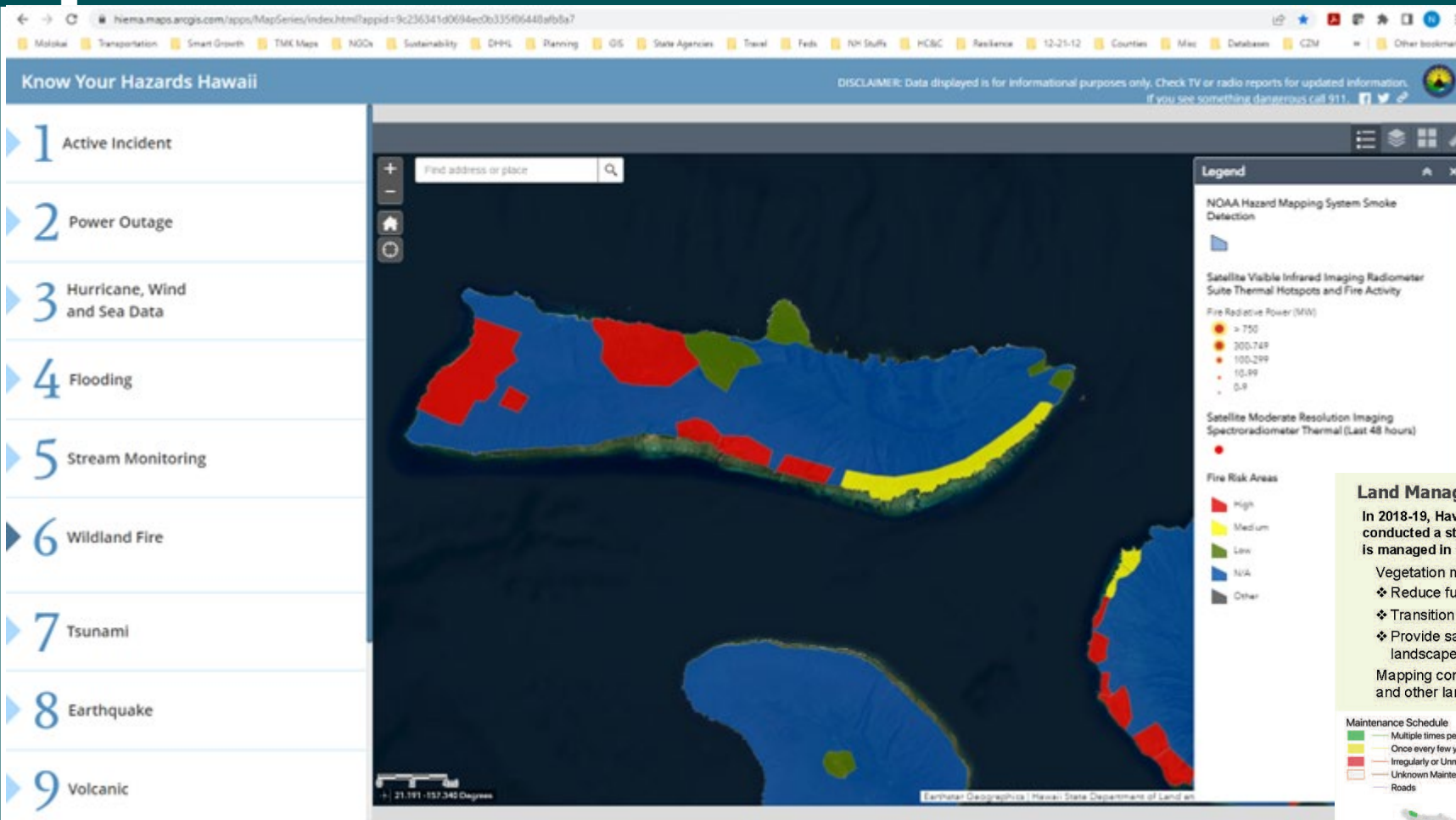
Ten Highest Priority Road Sections for Sea Level Rise

	Name	Island	Mileposts	CRESI Values	Remediation Alternatives
1	Hauula	Oahu	22, 22.45	29, 34	Harden
2	Mopua	Maui	14.3, 14.32, 14.43, 14.49	16, 22, 44, 22	Harden, Relocate
3	Kaawa South	Oahu	28.38, 28.82	29, 25	Harden
4	Waikoko	Kauai	4.11, 4.25, 4.39, 4.51	26, 30, 22, 24	Harden, Relocate
5	Waimanalo	Oahu	5.93, 6, 6.19	30, 28, 26	Relocation, Harden
6	Kaluaaha	Molokai	14.7	37	Relocate, Elevate
7	Pukoo	Molokai	16.27	37	Relocate, Elevate
8	Kaawa to Kahana	Oahu	27.25, 27.79	29, 21	Harden
9	Kualoa	Oahu	30.54	28	Harden, Relocate
10	Kualoa to Kaawa	Oahu	29.71	26	Harden, Relocate





Molokai Climate Change Vulnerabilities



WILDFIRE HAZARDS

Land Managers are Currently Reducing Wildfire Risk Through Vegetation Management

In 2018-19, Hawai'i Wildfire Management Organization (HWMO) conducted a statewide rapid assessment to identify where vegetation is managed in a way that reduces wildfire hazard.

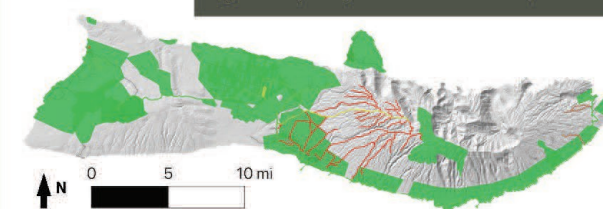
- Vegetation management efforts were categorized as strategies that:
- ❖ Reduce fuel load (**fuels reduction**)
 - ❖ Transition vegetation from higher to lower fire risk (**fuels conversion**)
 - ❖ Provide safer first response access and breakup fuel continuity across landscapes (**firebreaks or access roads**)

Mapping contributors included agency representatives, community groups, and other large landowners stewarding land across Moloka'i.

Maintenance Schedule

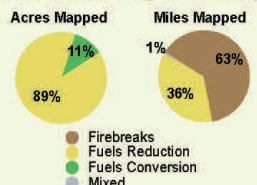
- Multiple times per year
- Once every few years
- Irregularly or Unmaintained
- Unknown Maintenance
- Roads

Land stewards on Moloka'i are managing roughly **150 miles** and **65,000 acres** of vegetation (nearly **40%** of the island).

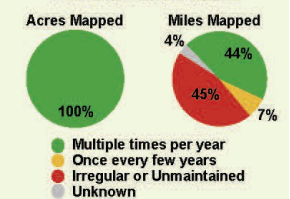


Map 3: Maintenance frequency of areas with vegetation management activities reported by mapping participants. Regular, ongoing maintenance of vegetation is critical to effectively reduce wildfire hazard.

Wildfire Hazard Mitigation Strategy



Maintenance Schedule



For more results visit:



hawaiiwildfire.org



DHHL Climate Change-Related Projects

What We Can Do -- Ho'omākaukau

- Begin Implementation of SM-SEMP (PLO & LDD)
- Begin Community Outreach for DHHL Community Resilience Plan (PLO)
- Coordinate with County of Maui on implementation of Molokai Climate Change and Sea Level Adaptation and Resiliency plan (CCSLAR)
- Molokai Drainage Study (LDD)
- Employ Land Management BMP's to reduce wildfire hazard (HSD, LMD, Co. of Maui)



Links to More Info on Climate Change

- NOAA State Climate Summary 2022 for Hawai'i: statesummaries.ncics.org/chapter/hi/
- Civil Beat's Hawai'i Climate Change 2040 Series: www.civilbeat.org/hawaii-2040
- Hawai'i Wildfire and Drought Info: www.hawaiiwildfire.org
- State of Hawai'i Climate Change Portal: climate.hawaii.gov
- County of Maui's Office of Climate Change, Resiliency and Sustainability (CCRS): www.mauicounty.gov/142/Office-of-Climate-Change-Resiliency-and-



Climate Change/SLR Update by Amy Wirts

Presentation by Amy Wirts, Coastal Lands Program Coordinator at University of Hawaii Sea Grant College Program

- Amy serves as the Coastal Lands Program Coordinator with Hawai'i Sea Grant and the Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL).
- Her role as a Sea Grant Extension Agent is to provide scientific and policy support and program coordination support to the OCCL on issues including improved understanding of coastal processes, mitigation of coastal erosion and other coastal hazards, beach conservation and restoration, appropriate coastal land use, environmental document and regulatory permit reviews, and coastal management policy compliance and development, including interagency and public engagement.



Mahalo!



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