

Managing Hazardous Vegetation on HAWAII ISLAND

Reduce Wildfire Spread and Damage ❖ Increase Firefighter Safety

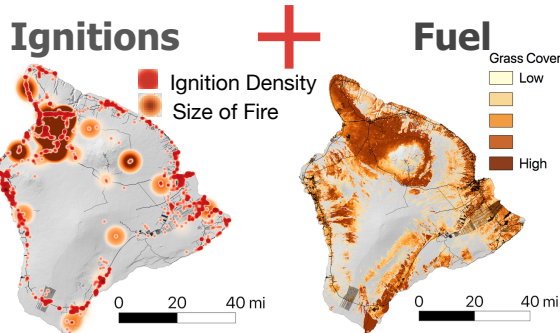
Why manage vegetation?

Dry plant matter ignites easily and provides **fuel** for a fire to follow.

In Hawaii, the **amount of flammable hazardous vegetation**, or **fuel load**, can develop quickly due to rapid growth of vegetation, multiple growing seasons, and regular dry and drought cycles.

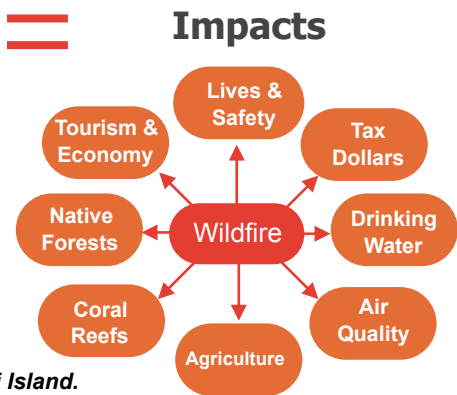
Frequent, active **vegetation management** is critical to reduce fire hazard across the landscape and to **protect our communities and valuable ecosystems from destructive fire impacts mauka to makai**.

Wildfires need **oxygen, ignitions (heat), and fuel** to start and spread. Hawaii Island has all of these ingredients year-round and wildfire impacts are devastating and far-reaching.



Map 1: Wildfire ignition history 2002-2012. In Hawaii 99% of fire starts are human caused (often along roadsides). Source: HWMO 2013

Map 2: Grass cover on Hawaii Island. Invasive, fire-promoting grasses ignite easily when dry. They spread along roadways and disturbed areas and are first to regrow after a burn, choking out native plant communities and increasing fire risk. Source: UH Manoa 2018



Land Managers Are Currently Reducing Wildfire Risk Through Vegetation Management

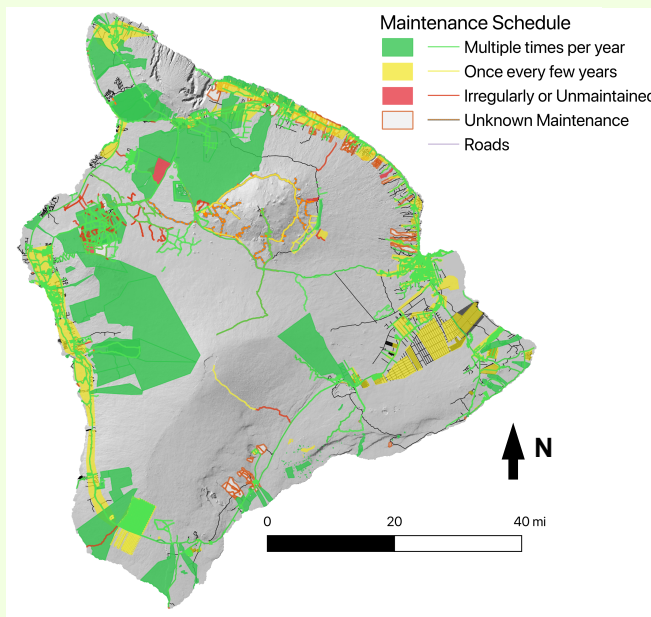
In 2018-19, Hawaii Wildfire Management Organization (HWMO) conducted a statewide rapid assessment to identify where vegetation is managed in a way that reduces wildfire hazard.

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**)

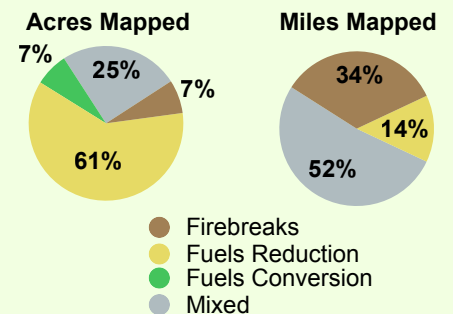
Mapping contributors included agency representatives, community groups, and other large landowners stewarding land across Hawaii Island.

Land stewards on Hawaii Island are managing roughly **2,900 miles** and **750,000 acres** of vegetation (nearly **35%** of the island).

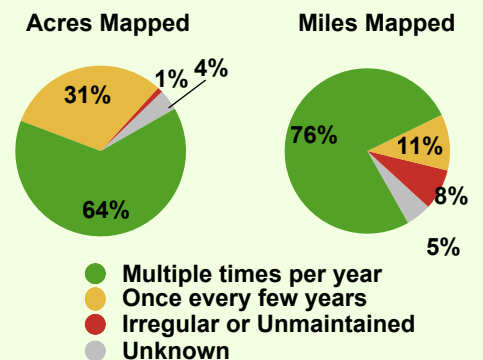


Map 3: Maintenance frequency of areas with vegetation management activities reported by mapping participants. Regular, ongoing maintenance of vegetation is critical to effectively reduce wildfire hazard.

Wildfire Hazard Mitigation Strategy



Maintenance Schedule



For more results visit:

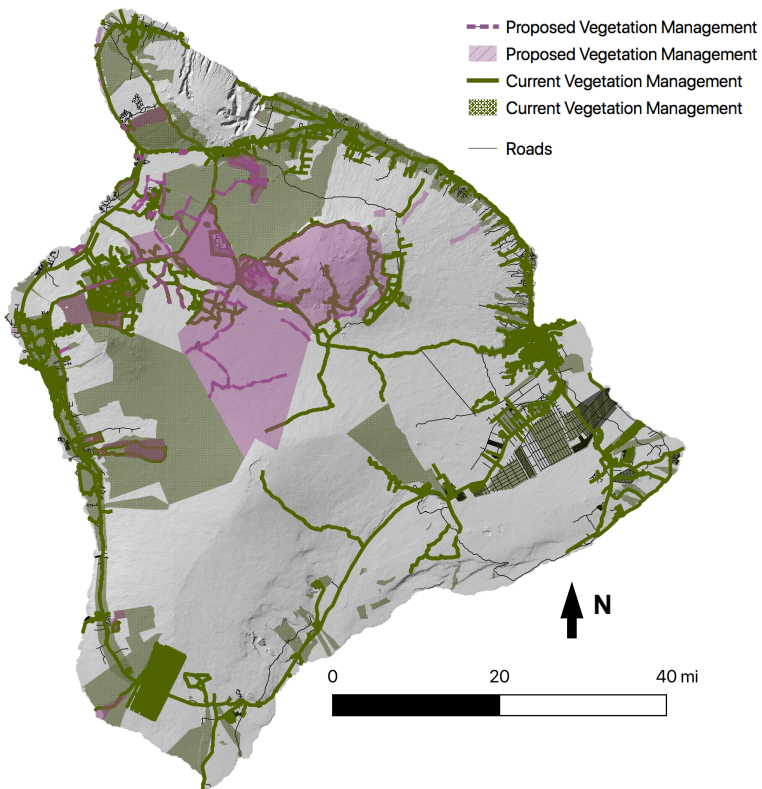
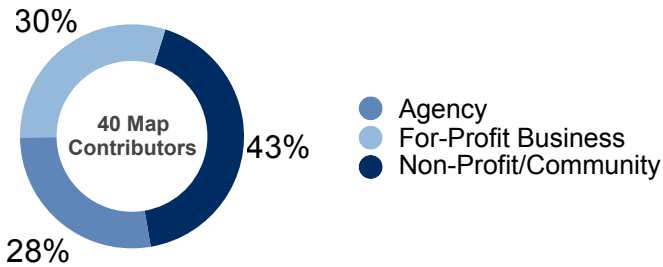


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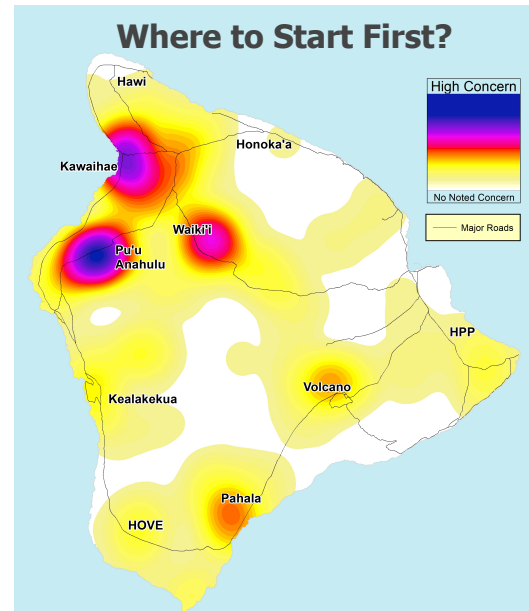
HAWAI'I ISLAND (cont.)

There is a great need for investment in and collaboration on vegetation management as expressed by the **40** map contributors and **68** action planning workshop participants on Hawai'i Island.

Mapping contributors identified roughly **310,000** acres and **120** miles of needed vegetation management. 264,000 acres of these are in addition to areas already managed.



Map 4: Rapid assessment results. Land stewards identified current and proposed areas in need of ongoing vegetation management.



Map 5: Collaborative priority areas. Participants at the action planning workshops identified areas of highest concern where fire hazard (hazardous vegetation, fire weather, and frequent ignitions) and values at risk of fire damage intersect.

Recommended Actions

(input from 68 action planning workshop participants)



Encourage funding for vegetation management that reflects maintenance needs:

- Preventing fire would cost a fraction of fire suppression costs and damage from fire.



Collaborative, coordinated effort to reduce wildfire hazards and encourage fire safe behavior:

- Relevant parties at the table. Regional and agency collaboration including road maintenance, utilities, and tourism
- Prevention and awareness
- Align policy and legislation



Plan for fire (particularly in areas with recurring fires):

- Include fire-thinking (firebreaks, fuel reduction/conversion buffers, and water) in planning and development
- Be ready to go with post-fire restoration!



Target roadside ignitions including fuel reduction/conversion



Action Planning Workshop, Kawaihae, February 26, 2019

The 2018-2019 statewide rapid assessment of vegetation management was conducted by HWMO to better understand existing vegetation management and prioritize needed vegetation management to **reduce future losses from wildfire**. This project was made possible by the numerous land steward and agency partners who participated in the project and funding support provided by the Hawai'i State Grant-in-Aid Program 2016 and the U.S. Forest Service, Pacific Southwest Region, under the terms of Grant No. 16-11052012-146 and No. 17-DG-11052012-143. USDA is an equal opportunity provider and employer.

More project details at: hawaiiwildfire.org

