Managing Hazardous Vegetation on MAUI

Reduce Wildfire Spread and Damage ❖ Increase Firefighter Safety

Why manage vegetation?

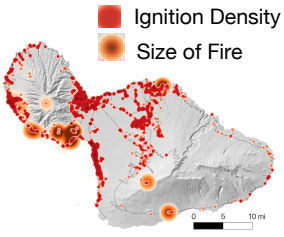
Dry plant matter ignites easily and provides **fuel** for a fire to follow.

In Hawai'i, 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.

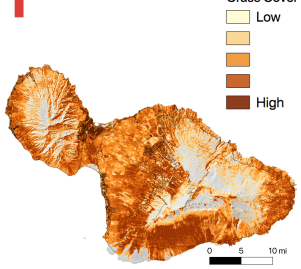
Frequent, active **vegetation management** is critical to reduce fire hazard across the landscape and to **protect our communities and valuable ecosystems from destructive fire impacts mauka to makai.**

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

Ignitions + **Fuel** = **Impacts**



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



Map 2: ***Grass cover on Maui.*** 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

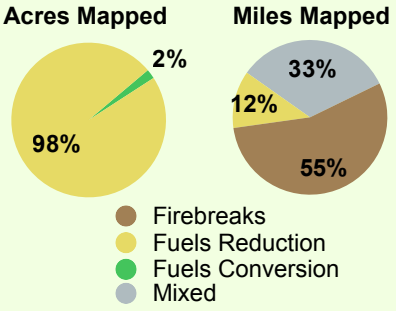
In 2018-19, Hawai'i Wildfire Management Organization (HWMO) conducted a statewide rapid assessment to identify where vegetation is managed in a way that reduces wildfire hazard.

Vegetation management efforts were categorized as strategies that:

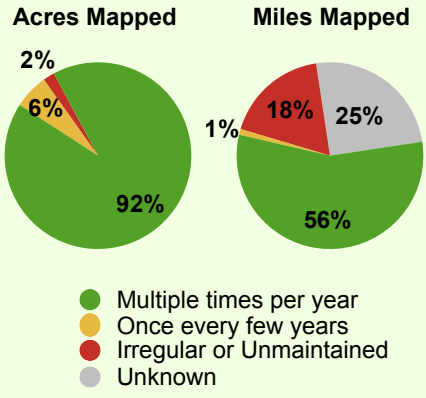
- ❖ Reduce fuel load **(fuels reduction)**
- ❖ Transition vegetation from higher to lower fire risk **(fuels conversion)**
- ❖ Provide safer first response access and breakup fuel continuity across landscapes **(firebreaks or access roads)**

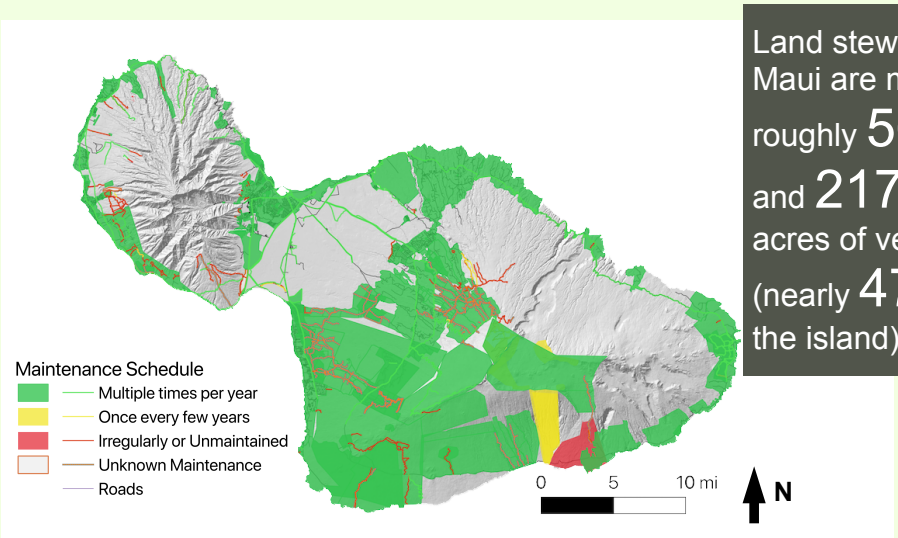
Mapping contributors included agency representatives, community groups, and other large landowners stewarding land across Maui.

Wildfire Hazard Mitigation Strategy



Maintenance Schedule





Land stewards on Maui are managing roughly **560** miles and **217,000** acres of vegetation (nearly **47%** 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.

For more results visit:

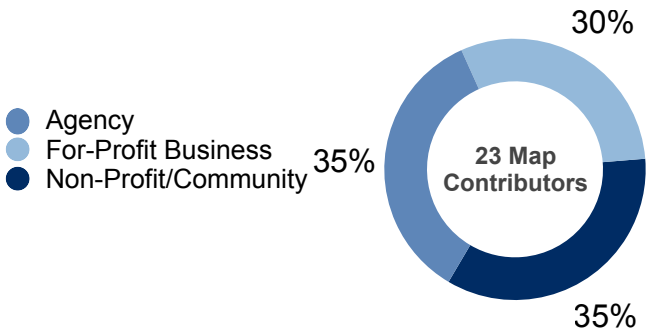
HWMO
Hawai'i Wildfire Management Organization

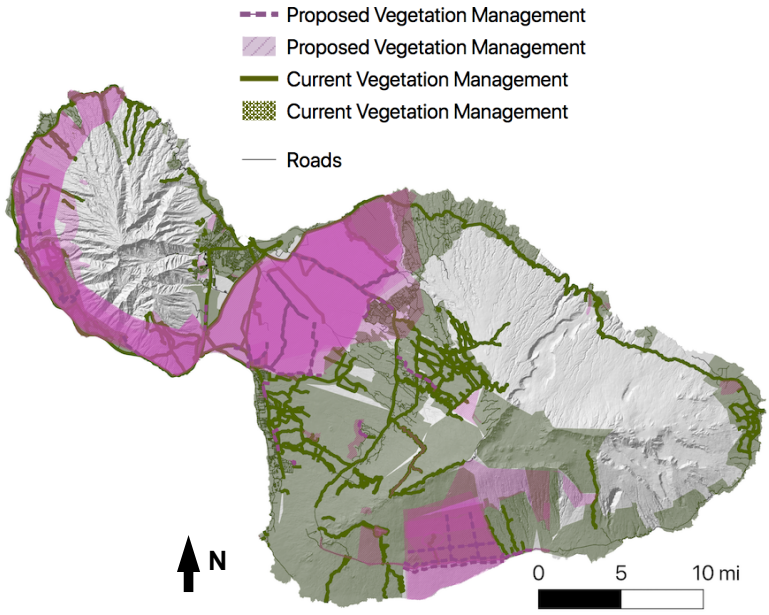
hawaiiwildfire.org

MAUI (cont.)

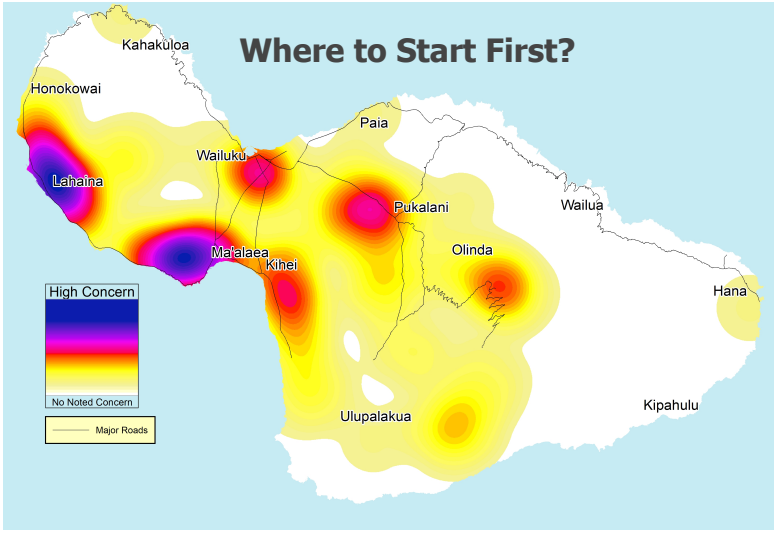
There is a great need for investment in and collaboration on vegetation management as expressed by the **23** map contributors and **41** action planning workshop participants on Maui.

Mapping contributors identified roughly 132,000 **acres** and 90 **miles** of **needed vegetation management.** 86,000 acres of these are in addition to areas already manage.





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 workshop 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

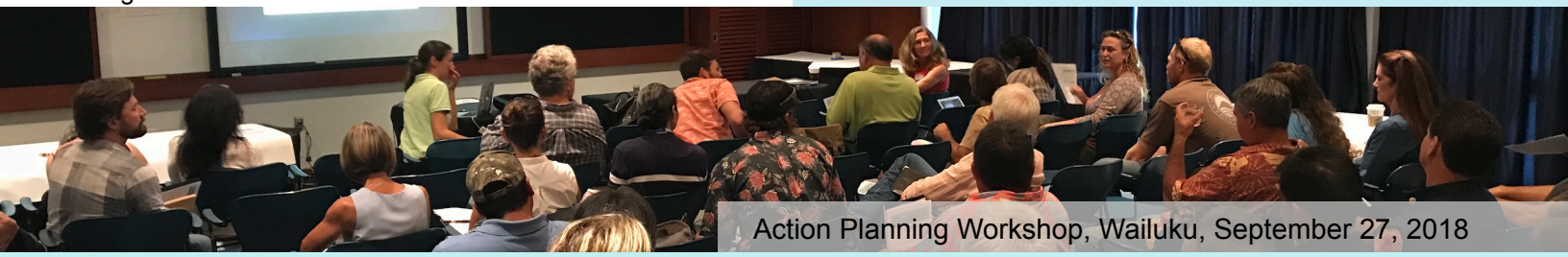
(input from 41 action planning workshop participants)

Develop planning and policies supportive of landscape-level vegetation management
- Island-wide vegetation management plan
- Develop funding sources for establishment and maintenance of fire infrastructure

Reduce hazardous fuel loads around communities
- Make green waste removal easy for communities
- Use strategic grazing and fuel reduction buffers around community boundaries

Encourage active management of agricultural lands including overgrown forestry operations

Prioritize 'hotspot' areas with recurring fires:
- Reduce hazards through strategic grazing and fuel reduction buffers
- Prevent ignitions by addressing the source of ignitions (e.g., power lines, encampments)



Action Planning Workshop, Wailuku, September 27, 2018

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**

HWMO
Hawaii Wildfire Management Organization