#### **ADEPT Committee**

From: Elizabeth Pickett <elizabeth@hawaiiwildfire.org>
Sent: Wednesday, September 13, 2023 3:13 PM

**To:** ADEPT Committee

Cc: Gabe Johnson; Axel I. Beers; Roxanne K. Morita; Kate Griffiths; Clay Trauernicht

**Subject:** Presentation for ADEPT mtg

**Attachments:** Maui County ADEPT committee mtg 9\_14\_23.pdf

Follow Up Flag: Follow up Flag Status: Flagged

[You don't often get email from elizabeth@hawaiiwildfire.org. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification]

Aloha James,

The presentation I will be sharing at tomorrow's meeting is attached.

Will I be able to share my screen during the meeting?

Thank you,

Elizabeth

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# HAWAII WILDFIRE MANAGEMENT ORGANIZATION

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501(c)3 nonprofit organization founded 2000

Vision: For the people and places of Hawaii and the Pacific to be wildfire-ready and wildfire-resilient

- Hub for wildfire research, prevention, mitigation, and planning activities
- Proactive, Collaborative, Multi-Partner, Forward-Thinking







# Wildfire-Resilient Landscapes & Sustained Fire Fuels Management

County of Maui Agriculture, Diversification, Environment, and Public Transportation Committee

- Educational Resources
- 2. Understanding Wildfire
- 3. Wildfire-Resilient Landscapes& Fuels Management

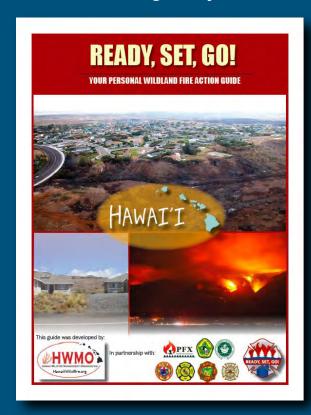


#### WHAT IS AVAILABLE:

Educational Resources
Technical Assistance
Programs and Opportunities

#### FOR YOU TO SHARE

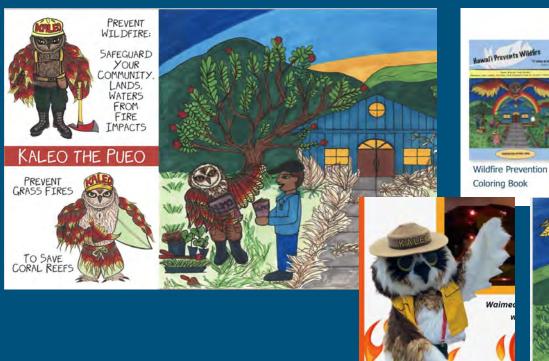
Unified, statewide, all-agency wildfire prevention information and programs





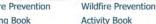
#### FOR YOU TO SHARE...

#### Keiki curriculum and outreach materials



#### **Youth Materials**







Activity Book (Dra-V-)nd avada)



Wildfire Prevention Activity Book



K-8 KNOW FIRE Classroom Wildfire

**Protect Your** Home from Wildfire 5 Easy Steps:

Keep grasses cut short Trim low-hanging tree bra

Get started today

HawailWildfire ore HWMO Brought to you by: Hawai'i Wildfire

#WildfireReadyH



#### FOR COMMUNITIES TO BECOME PREPARED...

Hawaii Firewise Communities Program & Hawaii Firewise Network





















#### **FOR FIRE & LAND MANAGEMENT PRACTITIONERS**



Procession of the Pacific Fire Exchange org @Pacific Fire Exchange org @Pacific Fire Exchange org



Forest and Natural Reseource Management Febrary 2016

Pre-Fire Planning Guide for Resource Managers and Landowners in Hawai'i and PacificI4 ands.

Clay Trauernicht1 and Elizabeth Pickett2 <sup>1</sup>University of Hawai'i Cooperative Extension Service, <sup>2</sup>HawaiieWildfir Management @ ganization



College of Tropical Agriculture and Human Resources University of Hawai'i at Manoa

Forestry and Natural Resources Management December 2019 RM-22

Fuel Breaks and Fuels-Management Strategies for Pacific Island Grasslands and Savannas

> Clay Transmicht and Meliasa Kunz: Department of Natural Resources and Environmental Management: "Hawa"i Wildlire Manaeement Oreanization, Kamuela, HI

#### Grazing to Reduce Blazing

#### Wildfire in the Western Pacific



PFX Fact Sheet | February 2017



2018 Wildfires in Hawai'i | PFX Annual Summary

In Hawal'i, the land area in active agriculture has declined by 60% since the 1960s causing

Every wildfire incident is not of a larger nation, and is an one

Abandoned Agriculture in 2019 is Hawaiii's Fire Problem



communicating fire knowledge across the Pacific

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Pacific Fire Exchange

vegetation buildup. Every wildfire incident is part of a larger pattern and is an opportunity to gain experience and insight for wildfire management. Three main factors contribute to wildfire risk

PFX FACT SHEET

Climate Change Series





#### Changing Climate and Wildfire: a Crisis In the pas Brewing in the Pacific ranked in record, Ov

As the climate crisis rages on, wildfires will become ever more frequent, more intense, and more widespreading in Hawai'i and across the Pacific. The most affected areas will be grasslands and savannas which surround residential areas and the edges of watershed forests.

#### Did You Know?

Becoming wildfire ready and wildfireresilient are key climate adaptation strategies.

On our current trajectory.

increasing temperatures



· Wildfire risk in Hawai'i and around the Pacific is due to vast areas of highly flammable grasslands and shrublands (10-25% of island land area) and human-caused ignitions (up to 99% of all fires).



· Warming air and changing rainfall patterns from climate change will increase our wildfire risk.



. Heavier rainfall increases grass growth and makes more fuels, which, followed by more intense droughts increases the likelihood and intensity of fires.

#### **FOR FIRE & LAND MANAGEMENT PRACTITIONERS**

Education and technical support for those who manage large lands:

- Training and working groups
- Fire planning
- Best practices for mitigation
- Grant application assistance





# FRAMING THE WILDFIRE SITUATION

Hawai'i and Pacific Islands
Areas are burning



Hawai'i and Pacific Islands
Areas are burning



because people are starting fires (mostly accidentally, some arson).





Hawai'i and Pacific Islands
Areas are burning



because people are starting fires (mostly accidentally, some arson).



Those fires spread across unmanaged fire-prone vegetation,



Hawai'i and Pacific Islands
Areas are burning



because people are starting fires (mostly accidentally, some arson).



Those fires spread across unmanaged fire-prone vegetation,



& ignite the built environment, becoming an urban conflagration.



### The Wildfire Equation



causes



impacts

### The Wildfire Equation

reduce the causes



prepare & protect protect natural resources



optimize firefighting resources & keep everyone safe

#### FOR YOU TO USE TO THINK THROUGH CREATIVE, MULTI-PURPOSE SOLUTIONS...

National Cohesive Wildland Fire Management Strategy



# SO HOW DO WE ADDRESS WILDFIRE EFFECTIVELY & SUSTAINABLY ON THE LANDSCAPE?

Wildfire-Resilient Landscapes & Sustained Fire Fuels Management

#### Forest Policy and Economics 128 (2021) 102458



Many practitioners and policymakers are increasingly recognizing the need to develop novel, integrated fire management approaches that shift emphasis towards the root causes of extreme fires.

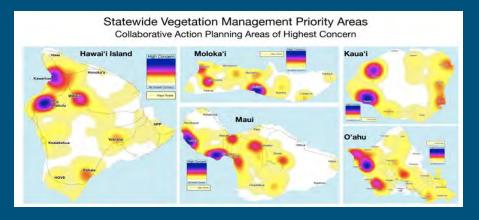
Landscapes and people can become more fire-resilient through integrated fire prevention strategies.

We need interdisciplinary approaches, multiple stakeholder perspectives, and systems thinking, so as to break down a wicked problem with complex linkages into manageable nodes of information.

#### **USE THE WORK ALREADY DONE AS A STARTING POINT**

Statewide understanding of vegetation management priorities, including Maui, Lanaʻi, Molokaʻi















# USE THE WORK ALREADY DONE AS A STARTING POINT





### **FOCUS ON: WILDLAND URBAN INTERFACE**

#### **Recommended Actions**



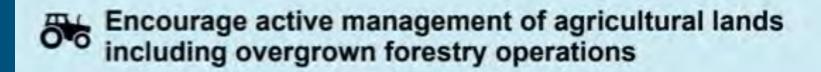
#### Reduce hazardous fuel loads around communities

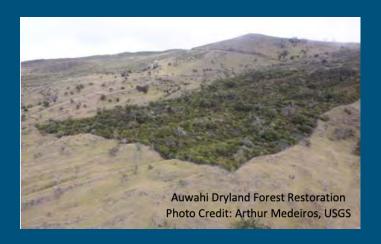
- Make green waste removal easy for communities
- Use strategic grazing and fuel reduction buffers around community boundaries

Multi-purpose buffers along WUI boundaries and roads that serve as defensible space



#### FOCUS ON: SUPPORTING ACTIVE LAND USE AGRICULTURE & CONSERVATION







#### FOCUS ON: BUILDING FUNDING & CAPACITY







 Water infrastructure and rights to use- for nurseries, planting, farming, grazing, and firefighting



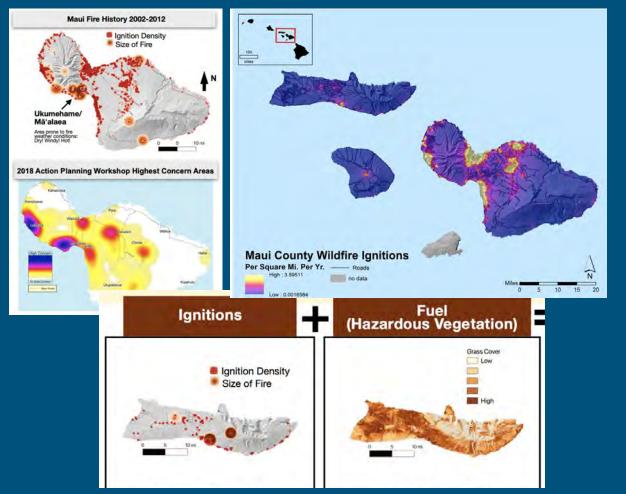
 Workforce development to support agriculture and conservation

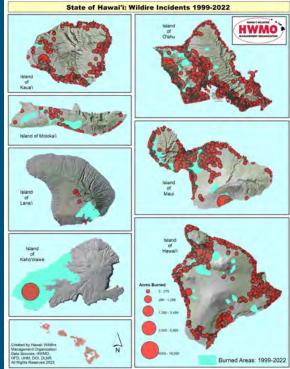
### FOCUS ON: WHERE IGNITIONS ARE MOST OCCURING



#### 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)





#### **FOCUS ON: PLANNING**



#### 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

## AIM FOR: INTEGRATED MASTER PLAN



Master plan for thriving landscapes that protect from wildfire and provide for food, economy, and public health and safety



Opportunities and funds to assist land managers to develop site plans for wildfire mitigation & funds to implement

#### **FOCUS ON: ACCOUNTABILITY**

Proactive inspection of hazard fuel management

Adequate funds to inspect, enforce, and remove fuels when noncompliant





# Firefighting is the last line of defense when it comes to wildfire.





#### What is the first line of defense?

#### WILDFIRE-SAFE LAND USE

...and a regulatory and funding environment that ensures wildfire safety and wildfire-resilient landscapes









