**YOUR PERSONAL WILDLAND FIRE ACTION GUIDE** 

Rev. 2021





This guide was developed by Hawaii Wildfire Management Organization, in partnership with:















## **Wildland Fire Action Guide**

Saving Lives and Property Through Advanced Planning



he fire season is now a year-round reality in many areas across the Hawaiian Islands, requiring firefighters and residents to be on heightened alert for the threat of wildland fire.

Each year, wildland fires consume hundreds of homes across the nation in the Wildland-Urban Interface (WUI), and Hawaii is at a similar risk. Studies show that as many as 80 percent of the homes lost to wildland fires could have been saved if their owners had only followed a few simple fire-safe practices. In addition, wildland fire related deaths occur because people wait too long to leave their home.

In the event of a wildland fire, our first responders take every precaution to help protect you and your property. However, the reality is that in a major wildland fire event, there will simply not be enough fire resources or firefighters to defend every home.

Successfully preparing for a wildland fire enables you to proactively take personal responsibility for protecting yourself, your family and your property. In this Action Guide, we hope to provide the tips and tools you need to prepare for a wildland fire threat (Ready), have situational awareness when a fire starts (Set), and to act early (Go!).

The Ready, Set, Go! Program works in complimentary and collaborative fashion with the Firewise USA® program and other existing wildland fire public education efforts. Utilizing firefighters and local wildland fire prevention expertise, it amplifies their messages to individuals to better achieve the common goal of wildland fire preparedness.

Many residents have built homes and landscaped without fully understanding the impact a fire can have on them and few have adequately prepared their families for a quick evacuation.

It's not a question of if but when the next major wildland fire will occur. Through advanced planning, understanding and preparation, we can all be partners in the wildland fire solution. We hope you find the tips in the following pages helpful in creating heightened awareness and a more fire-safe environment for you, your family and firefighters.

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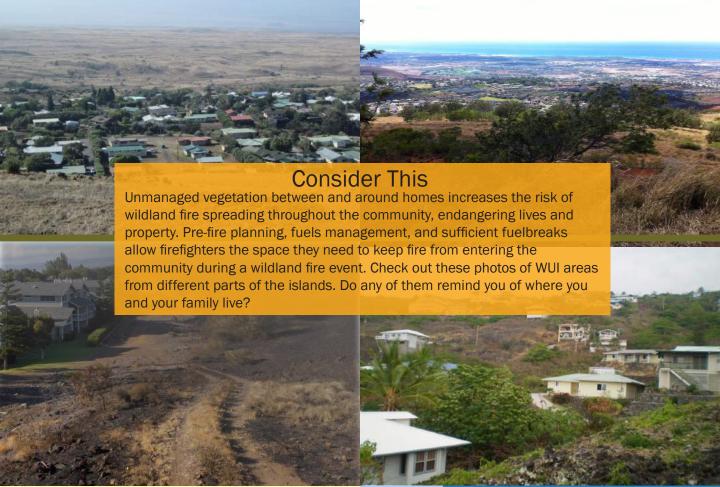
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# Living in the Wildland Urban Interface and the Ember Zone

Ready, Set, Go! Begins with a House That Firefighters Can Defend

### **Defensible Space Works!**

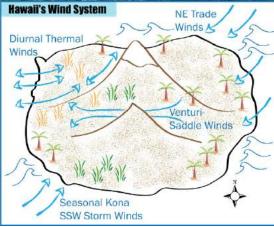
If you live next to a natural area, the Wildland Urban Interface, you should provide firefighters with the defensible space they need to protect your home. The buffer zone you create by removing weeds, brush and other vegetation helps keep the fire away from your home and reduces the risk from flying embers. Firewise Communities and other wildland fire preparedness education programs provide valuable guidance on property enhancements.



## Not Only the Homes on the Wildland Boundary are at Risk

A home within one mile of a natural area is in the Ember Zone. Wind-driven embers can attack your home. You and your home must be prepared well before a fire occurs. Ember fires can destroy homes or neighborhoods far from the actual flame front of the wildland fire. These threats are amplified in Hawaii due to the culmination of thermal, saddle, storm, and trade winds that create a complex system of strong, erratic winds (see diagram on right).

Fire is wind-driven. Know your wind-related risks



# Hawaii's Growing Wildland Fire Problem

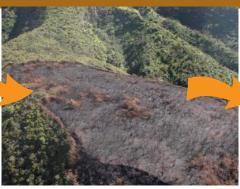
And Why We Should Be Concerned

Traditionally, Hawaii ecosystems existed with a very limited presence of wildland fire. However, as climate conditions and land uses have changed over recent time, non-native, fire-adapted vegetation have rapidly spread through our wildland landscapes and toward community boundaries. In addition, communities are expanding further into fire-prone areas, increasing the risk of wildland fires that threaten natural resources, including native habitats, and people's lives and homes.

## **Impacts on Natural Resources**



Invasive vegetation such as guinea and fountain grass spread easily and rapidly.



These plants also ignite easily. After the fire, they re-sprout and out-compete native plants, spreading over a larger area than before.



All it takes is another spark and the same area will burn hotter, more intensely, and over a larger area than before. This creates a vicious fire cycle.

Wildland fire, fueled by the build-up of dry vegetation and driven by a complex system of hot dry winds, are extremely difficult, expensive, and dangerous to control. Hawaii's wide diversity of challenging terrains add to the challenge for firefighters.



#### **Did You Know?**

26% of the state land cover is nonnative grassland.
These grasses are fireprone and spread more and more with each fire.

#### Mauka Fires Affect Makai Health and Safety



Large fires destroy vegetation that help hold down soil. Heavy winds can lift the soil and create dust storms that impact air quality and human health.



In addition, Hawaii's high-intensity rain events can sweep away soil through erosion, runoff and land-slides.



Rivers and streams carry the debris and sediment into the ocean polluting coral reefs and negatively affecting sea life. This adversely affects commerce such as fishing and marine/coastal-based tourism.

## **Impacts on People & Communities**

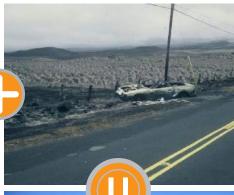
Towns and cities expanding outwardly into formerly undeveloped areas...

and large areas of fallow, invasive, or un-managed vegetation...

and a steady increase in human ignition sources via human error and intention...







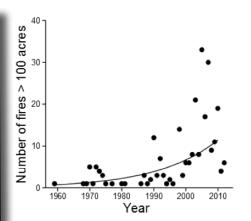
#### Did You Know?

Hawaii experiences more than 1,000 wildfires per year, burning an average of 20,000-40,000 acres each year.

On average, every island has at least one 1,000 acre fire every year.

Wildfires in Hawaii are increasing in size, frequency, and impacts.

Every island and every area (windward, leeward, mauka, makai) can be at risk under the right conditions, mainly during periods of dry weather and high winds.



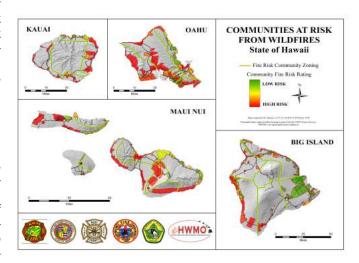


...are increasing the size, frequency, and intensity of fires across all of the islands on both wet and dry sides.

## **Future Outlook**

Climate change is increasing the length and frequency of drought periods, creating drier conditions. Scientists predict these trends will continue and even worsen, which will result in larger fires that are more severe and intense. As more areas become drier, they will become more prone to wildfire. If your area is currently low risk in the map below, it likely is still at risk during very dry periods. Under certain conditions, such as dry periods and heavy winds, anywhere can burn, and we are seeing that occur. As a result, it's best if you take action now, rather than later, when it may be too late.

The Communities at Risk from Wildfires Map (on right) was the result of an effort that looked at 36 hazard characteristics that contribute to wildfire risk for neighborhoods and communities (gray areas were NOT assessed). Many of Hawaii's communities are at moderate to high risk of wildfire for reasons ranging from climate to lack of water to lack of community awareness and action. Many of the challenges are ones we can address with collaborative action.



#### How You Can Make a Difference

We need to create **resilient landscapes and communities** across Hawaii. You can play a significant role by increasing resilience in and around your own home and preparing your family for a potential wildland fire event. Use the following pages as a guideline.

## What is Defensible Space?



Defensible space is the required space between structures and the wildland area that, under normal conditions, creates a sufficient buffer to slow or halt the spread of wildfire to a structure. It protects the home from igniting due to direct flame or radiant heat. Defensible space is essential for structure survivability during wildland fire conditions. For more information about defensible space zones and preparedness techniques within each, visit the Firewise USA® website, www.firewise.org.

### **ZONE ONE**

Zone One extends 30 feet out from buildings, structures, decks, etc.

- Remove all dead or dying vegetation.
- Remove "ladder fuels" (low-level vegetation that allows the fire to spread from
  the ground to the tree canopy). Create at least 6 feet of separation between
  low-level vegetation and tree branches. This can be done by reducing the
  height of low-level vegetation and/or trimming low tree branches.
- Create "fire-free" area within 5 feet of home, using non-flammable landscaping materials and/or high-moisture content, drought-resistant vegetation.
- Trim tree canopies regularly to keep their branches a minimum of 10 feet from structures and other trees.
- Remove leaf litter (dry leaves/pine needles) from yard, roof and rain gutters.
- Relocate woodpiles or other combustible materials into Zone Two.
- Remove combustible material and vegetation from around and under decks, lanai, or the entire house if foundation is post-and-pier.
- Remove or prune vegetation near windows.

## **ZONE TWO** \*

Zone Two extends 30 to 100 feet out from buildings, structures and decks. You can minimize the chance of fire jumping from plant to plant by removing dead material and removing and/or thinning vegetation. The minimum spacing between vegetation is three times the dimension of the plant.

- · Remove "ladder fuels."
- Cut or mow annual grass down to a maximum height of 4 inches.
- Trim tree canopies regularly to keep their branches a minimum of 10 feet from other trees/cluster of trees.
- \* For larger properties, consider areas outside of Zone Two as a third zone to address. Continue reducing ladder fuels, managing fuels, hardening structures, and properly storing combustible materials.



## **Actions You Can Take Today!**



Weed around the property regularly, especially areas that a lawn mower is not appropriate for (tall dry grasses, rocky terrain, etc.)



Remove leaf litter and other debris that accumulate around the building, under vegetation, and other collection areas.



Remove leaf litter, straw and other debris from under and around propane tanks to create 10 feet of clearance around it.



Eliminate ladder fuels by pruning tree branches on trees around the property to within at least 6 feet of the ground, using a bypass lopper (seen above), pruner saw, or long reach/hand pruner.



Remove flammable materials from underneath the house, decks, porches, and lanai. Common flammables include scrap-wood, firewood, and combustible furniture.



Mow the lawn regularly to keep grasses shorter than 4 inches tall around the home. Do not mow in the heat of the day or when the wind is blowing. Never mow in dry vegetation.

### **Watch Out for Exotic Vegetation**

Non-native trees, such as ironwood (seen below) constantly drop needles, leaves, branches, and other debris, so it's best to stay on top of removing them from the ground before the pile becomes a major project. Consider reforesting these areas with native trees that don't drop large amounts of debris.



Invasive grasses such as guinea and fountain grass grow rapidly when un-managed and can dry out very quickly, creating a major fire hazard. Weed them often and consider replanting with low-lying, drought-tolerant, native ground cover.



## **Defensible Space - Hawaiian Style**

Consider selecting native plants from this list that are most relevant to your area: Maia Pilo 'Ilima Papa 'Ākia Bonamia 'A'ali'i 'Akoko ʻlhi Ma'o Hau Hele Koki'o 'Ūlei Wiliwili Uhiuhi Hala Pepe Koai'a Ohi'a Lehua Koʻokoʻolau 'Ohe Makai 'Iliahi Nehe Alahe'e Ala'ala Wai Nui Kolomona Koai'a

Creating defensible space does not necessarily mean eliminating the presence of greenery on your property. You can still landscape around your home to make it fire-safe without compromising beauty and aesthetics. By planting native, drought-tolerant plants (**xeriscaping**) around your home, you can:

- Protect your home from wildland fire ignition and spread
- · Beautify your property
- Perpetuate an important natural and cultural resource
- Decrease the maintenance needs of your landscaping

For the drier areas of Hawaii, consider that native dryland plants are specially adapted to local conditions and require less upkeep, water, and fire maintenance, saving yourself a great deal of time, money, and resources. Non-native, lush plants often drop hazardous debris and can become fire prone in drought conditions.

#### **Homes with Great Xeriscaping**







#### Did You Know?

The same winds that blow hazardous debris toward a collection area (underneath shrubs, under the lanai, next to outer edges of home, etc.) will likely carry embers during a wildland fire to that same spot, and ignite that pile. That's why it's incredibly important to consistently remove debris from these areas long before a wildland fire occurs.

## What is a Hardened Home?

Construction materials and the quality of the defensible space surrounding it are what give a home the best chance to survive a wildland fire. Embers from a wildland fire will find the weak link in your home's fire protection scheme and gain the upper hand because of a small, overlooked or seemingly inconsequential factor. However, there are measures you can take to safeguard your home from wildland fire. While you may not be able to accomplish all the measures listed below, each will increase your home's, and possibly your family's, safety and survival during a wildland fire.

#### **Home Improvements**











#### **ROOFS**

Roofs are the most vulnerable surface where embers land because they can lodge and start a fire. Roof valleys, open ends of barrel tiles and rain **gutters** are all points of entry.

#### **EAVES**

Embers can gather under open **eaves** and ignite exposed wood or other combustible material.

#### **VENTS**

Embers can enter the attic or other concealed spaces and ignite combustible materials. Vents in eaves and cornices are particularly vulnerable, as are any unscreened **vents**.

#### **WALLS and FENCING**

Combustible siding or other combustible or overlapping materials provide surfaces or crevices for embers to nestle and ignite. Combustible **fencing** can become engulfed and if attached to the home's sidings can carry the fire right to the home.

#### **WINDOWS and DOORS**

Embers can enter gaps in doors, including garage doors. Plants or combustible storage near **windows** can be ignited from embers and generate heat that can break windows and/ or melt combustible frames.

#### **BALCONIES and DECKS**

Embers can collect in or on combustible surfaces or the undersides of decks, lanai, and balconies, ignite the material and enter the home through walls or windows. Post-and-pier homes, common throughout Hawaii, are especially vulnerable since most, if not all, of the underside of the house is exposed.

To harden your home even further, consider protecting your home with a residential fire sprinkler system. In addition to extinguishing a fire started by an ember that enters your home, it also protects you and your family year-round from any fire that may start inside your home.

## **Creating a Safe Ho**

**Roof:** Your roof is the most vulnerable part of your home because it can easily catch fire from windblown embers. Homes with wood-shake or shingle roofs are at high risk of being destroyed during a wildland fire.

Build your roof or re-roof with fire-resistant materials such as composition, **metal** (as seen in picture) or tile. Block any spaces between roof decking and covering to prevent ember intrusion.

Clear pine needles, leaves and other debris from your roof and gutters.

Cut any tree branches within ten feet of your roof.

**Deck/Patio Cover**: Use heavy timber or non-flammable construction material for decks.

Enclose the underside of balconies and decks with fire-resistant materials to prevent embers from blowing underneath.

Keep your deck clear of combustible items, such as baskets, dried flower arrangements and other debris.

The decking surface must be ignition resistant if it's within 10 feet of the home.

Inside: Keep working fire extinguishers on hand.

Install smoke alarms on each level of your home and near bedrooms. Test them monthly and change the batteries twice a year.

**Non-Combustible Fencing:** Make sure to use non-combustible fencing to protect your home during a wildland fire.

Home Site and Yard: Ensure you have at least a 100-foot radius of defensible space (cleared vegetation) around your home. Note that even more clearance may be needed for homes in severe hazard areas. This means looking past what you own to determine the impact a common slope or neighbors' yard will have on your property during a wildland fire.

Cut dry weeds and grass before noon when temperatures are cooler to reduce the chance of sparking a fire.

Landscape with fire-resistant plants that have a high moisture content and are low-growing.

Keep woodpiles, propane tanks and combustible materials away from your home and other structures such as garages, barns and sheds.

Ensure that trees are far away from power lines.

**Driveways and Access Roads**: Driveways should be designed to allow fire and emergency vehicles and equipment to reach your house.

Access roads should have a minimum 10-foot clearance on either side of the traveled section of the roadway and should allow for two-way traffic.

Ensure that all gates open inward and are wide enough to accommodate emergency equipment.

Trim trees and shrubs overhanging the road to a minimum of 13 1/2 feet to allow emergency vehicles to pass.

## ome in the WUI

**Chimney:** Cover your chimney and stovepipe outlets with a non-flammable screen of 1/4-inch wire mesh or smaller to prevent embers from escaping and igniting a fire.

Make sure that your chimney is at least 10 feet away from any tree branches.

**Vents:** Vents on homes are particularly vulnerable to flying embers.

All vent openings should be covered with 1/8-inch or smaller metal mesh. Do not use fiberglass or plastic mesh because they can melt and burn.

Attic vents in eaves or cornices should be baffled or otherwise protected to prevent ember intrusion (mesh is not enough).

**Address:** Make sure your address is clearly visible from the road.

**Walls**: Wood products, such as boards, panels or shingles, are common siding materials. However, they are combustible and not good choices for fire-prone areas.

Build or remodel with fire-resistant building materials, such as plaster, cement, masonry or stucco.

Be sure to extend materials from foundation to roof.

Raingutters: Screen or enclose rain gutters to prevent accumulation of plant debris.

**Water Supply:** Have multiple garden hoses that are long enough to reach any area of your home and other structures on your property.

If you have a pool or well, consider a pump.

**Garage**: Have a fire extinguisher and tools such as a shovel, rake, bucket and hoe available for fire emergencies.

Install a solid door with self-closing hinges between living areas and the garage. Install weather stripping around and under door to prevent ember intrusion.

Store all combustibles and flammable liquids away from ignition sources.

**Windows:** Heat from a wildland fire can cause windows to break even before the home ignites. This allows burning embers to enter and start internal fires. Single-paned and large windows are particularly vulnerable.

Install dual-paned windows with the exterior pane of tempered glass to reduce the chance of breakage in a fire.

Limit the size and number of windows in your home that face large areas of vegetation.

# Create Your Own Action Guide

Now that you've done everything you can to protect your house, its time to prepare your family. Your **Wildland Fire Action Guide** must be prepared with all members of your household well in advance of a fire. Use these checklists to help you gain a situational awareness of the threat and to prepare your Wildland Fire Action Guide. For more information on property and home preparedness before a fire threat, review the preparedness checklist on the Firewise Communities website, www.firewise.org.

## **Ready – Preparing for the Fire Threat**





### **Take Action for Your Community**

- □ Talk to your community members and community association about creating a Community Wildfire Protection Plan (CWPP).
   □ Hawaii Wildfire Management Organization can assist with this process.
- Coordinate with local county CERT teams.
- Get to know your neighbors. If there are any elderly or handicapped residents, or others with limited mobility, plan with them on how you can best assist them in the event of a wildland fire.

- Create a Family Disaster Plan that includes meeting locations and communication plans and rehearse it regularly. Include in your plan the evacuation of pets and large animals such as horses.
- Have fire extinguishers on hand and train your family how to use them.
- Ensure that your family knows where your gas, electric and water main shut-off controls are and how to use them.
- Plan several different evacuation routes.
- Designate an emergency meeting location outside the fire hazard area.
- Assemble an emergency supply kit as recommended by the American Red Cross (www.redcross.org).
- Appoint an out-of-area friend or relative as a point of contact so you can communicate with family members who have relocated.
- Maintain a list of emergency contact numbers posted near your phone and in your emergency supply kit.
- Keep an extra emergency supply kit in your car in case you can't get to your home because of fire.
- Have a portable radio or scanner so you can stay updated on the fire.
- Have a clear list and easy access location for necessary medications, glasses and other health aids.

## **Set – Situational Awareness When a Fire Starts**

	Evacuate as soon as you are set! Do not wait		Outside Checklist		
	for evacuation orders. Get out early - you can always return home if it is safe. This protects you, decreases traffic, and allows firefighters to focus on fire suppression. See more under the "Go" section.		Gather up flammable items from the exterior of the house and bring them inside (e.g., patio furniture, children's toys, door mats, etc.) or place them in your pool.		
	Alert family and neighbors.		Turn off propane tanks.		
	Dress in appropriate clothing (i.e., clothing made from natural fibers, such as cotton, and work		Don't leave sprinklers on or water running - they can waste critical water pressure.		
	boots). Have goggles and a dry bandana or particle mask handy.		Leave exterior lights on.		
	Ensure that you have your emergency supply kit on hand that includes all necessary items, such		Back your car into the driveway. Shut doors and roll up windows.		
	as a battery powered radio, spare batteries, emergency contact numbers, and ample drinking water.		Have a ladder available.		
			Patrol your property and extinguish all small fires until you leave.		
	Stay tuned to your TV or local radio stations for updates, or check the fire department Web site.		Seal attic and ground vents with pre-cut plywood or commercial seals if time permits.		
	Remain close to your house, drink plenty of water and keep an eye on your family and pets until you		Inside Checklist		
	are ready to leave.		Shut all windows and doors, leaving them unlocked.		
lf □	You are Trapped: Survival Tips  Shelter away from outside walls.		Remove flammable window shades and curtains and close metal shutters.		
$\Box$	Bring garden hoses inside house so embers don't	Ιп	Remove lightweight curtains.		
П	destroy them.  Patrol inside your home for spot fires and		Move flammable furniture to the center of the room, away from windows and doors.		
	extinguish them.		Shut off gas at the meter. Turn off pilot lights.		
	Wear long sleeves and long pants made of natural fibers such as cotton.	-	Leave your lights on so firefighters can see your house under smoky conditions.		
	Stay hydrated.		Shut off the air conditioning.		
	Ensure you can exit the home if it catches fire (remember if it's hot inside the house, it is four to five times hotter outside).				
П	Fill sinks and tubs for an emergency water supply.				
	Place wet towels under doors to keep smoke and embers out.		. 1		
	After the fire has passed, check your entire property and extinguish any fires or embers.				
	If there are fires that you can not extinguish with a		The second secon		

small amount of water or in a short period of time,

call 9-1-1.

## **Go – Leave Early**

By leaving early, you give your family the best chance of surviving a wildland fire. You also help firefighters by keeping roads clear of congestion, enabling them to move more freely and do their job in a safer environment.

#### WHEN TO LEAVE

Leave early enough to avoid being caught in fire, smoke or road congestion. Don't wait to be told by authorities to leave. In an intense wildland fire, they may not have time to knock on every door. If you are advised to leave, don't hesitate!

#### **WHERE TO GO**

Leave to a predetermined location (it should be a low-risk area, such as a well-prepared neighbor or relative's house, a Red Cross shelter or evacuation center, motel, etc.). Your local Community Wildfire Protection Plan will also have locations listed.

#### **HOW TO GET THERE**

Have several travel routes in case one route is blocked by the fire or by emergency vehicles and equipment. Choose an escape route away from the fire.

#### **WHAT TO TAKE**

Take your emergency supply kit containing your family and pet's necessary items.



#### **EMERGENCY SUPPLIES**

The American Red Cross recommends every family have an emergency supply kit assembled long before a wildland fire or other emergency occurs. Use the checklist below to help assemble yours. For more information on emergency supplies, visit the American Red Cross Web site at www.redcross.org.

	Three-day supply of water (one gallon per person per day).
	Non-perishable food for all family members and pets (three-day supply).
	First aid kit.
	Flashlight, battery-powered radio, and extra batteries.
	An extra set of car keys, credit cards, cash or traveler's checks.
	Sanitation supplies.
	Extra eyeglasses or contact lenses.
	Important family documents and contact numbers.
	Map marked with evacuation routes.
	Prescriptions or special medications.
	Family photos and other irreplaceable items.
	Easily carried valuables.
	Personal computers (information on hard drives and disks).
	Chargers for cell phones, laptops, etc.
Not	te: Keep a pair of old shoes and a flashlight

handy in case of a sudden evacuation at night.

# For Large Landowners & Land Managers

## Ready

**Prenare Your Family Employees and Visitors** 



	paro rour rummy, Emproyoco, and Protecto		
	Go through the previous guidelines (pgs. 12-14) with your family in addition to this section.		Create and maintain firebreaks (vegetation removed down to bare, mineral soil) each year prior to fire season around pastures and structures. This
	Have at least two exits for your headquarters and primary residence for your evacuation plan.		will allow access for suppression. The width of the firebreaks should be at least 3x the fuel height.
	If you have a GPS device, pre-program it with multiple escape routes.		Reduce vegetation and remove combustible material around all structures.
	Keep an emergency supply kit in all ranch and personal vehicles.		When selecting for understory vegetation (below trees), choose those that are less fire-prone and don't dry out quickly, and those that don't create ladder fuels.
Pre	epare Your Animals		Drianitize expects by expecting the viels and value of
	Create a livestock evacuation plan.	-Ш	Prioritize assets by assessing the risk and value of each and the effort it would take to protect them.
	Ensure proper registering and branding of livestock.		Maintain your equipment (power tools, mowers, catalytic converters, etc.) Make sure working
Establish a back-up plan for feeding livestock if grazing land is destroyed by fire.			spark arrestors are installed and maintained on equipment.
			Reinforce fences with metal posts, if applicable.
	Know Your Area's Conditions	١.,	On the state of th
	Track the weather daily. Take note of changing conditions.	ľ	Create a safe zone clear of all vegetation for equipment.
	If the weather is too dry: close the area, avoid	-	Clear vegetation around fuel tanks and other highly combustible equipment.
	risky equipment operations, or driving over dry vegetation. Fires can start by simply idling your car over grass. Make sure all vehicles' catalytic converters are in working order.		Create a fire pre-plan for your property that includes insights from your fire department and wildland fire experts. Discuss your plan and property specifics with local firefighters ahead of time. (See pre-plan

insert on next page).

## For Large Landowners & Land Managers

## Set

## Go

Your Family, Employees, and Visitors			Follow guidelines from page 14.
	Follow guidelines from page 13.		Ensure all people have safely evacuated.
	Alert family, ranch hands, field workers, or anyone else who is on your property.		Stay in communication with fire operations. Ask questions, offer assistance, and give permission. Your invaluable knowledge of the area will prove
	Make sure you have a contact list or meeting location coordinated ahead of time to ensure everyone's safety.		useful for firefighters who are there to help protect your land and resources. Fire crews can then run ar operation that meets your needs as well as theirs.
Your Animals		Pı	re-Plan: Ensure Firefighters Have Access
	Hook up your stock trailer and load your animals.		Make sure address posts are clearly visible and marked in contrasting colors.
	Unlock and open gates so livestock can escape flames and firefighters can gain access.		Keep copies of gate keys and a written list of combinations in a known location.
	Close all barn doors so horses and livestock will not go into a burning building.		Make sure your property is properly mapped out and that your county fire department has a copy of the map.
Your Property			
	Follow guidelines from page 13.		Maintain roads far in advance of fire season.  Make sure there is enough room for fire trucks
	Move equipment into a safe zone that is clear of combustible fuels.		to drive through and that large turn-outs for emergency vehicles are available. Hazards to look out for include: overhanging trees, low
	Close all doors, windows, and turn on exterior/interior lights in barns and other structures.		power lines, bridges with weight restrictions, boggy areas, and rural residence internal fencing.
	Shut off gas supply and propane tanks.		Establish "safety zones" (large areas free of vegetation and other hazardous conditions for firefighters to retreat to).
	Catch the Fire Before it Burns Out of Control		Maximize water source access and availability
Н	ave suppression tools & methods available on site:	_	(hydrants, ditches, reservoirs, water tanks, etc.).
	] Fire extinguisher		Ensure pumps and hoses are available and that the size and type of outlets are standard fittings.
	] Water		If you would like to offer your equipment (water, tank, tractor) for firefighting, make
	] Fire tools		arrangements and contacts prior to use for proper tracking and reimbursement.

Post in a location where every member of your family can see it, such as on the fridge or front door.

## **Our Family's Wildland Fire Action Guide**

Well before fire danger is HIGH, prepare your family and residence for potential wildfires. Monitor your local media for the latest information on any incident, and make certain your mobile phones have "In Case of Emergency" (ICE) information loaded.

Our family members w	rill call this out-of-area/state contact to 1	report that we are safe:
	Phone number(s):	
Pre-program this into ce	II phones. Keep it current. Make sure the	person agrees to be available/responsive.
_		our family will meet at this safe location:
Secondary:		
	chool during an emergency, they will be	evacuated to this/these locations:
School 1:		
		Info:
School's Evacuation Pro	tocol:	
School 2:		
Child(ren):	School Contact	Info:
School's Evacuation Pro	rtocol:	
Our emergency go-bag	is located:	
Essential items to grab	before leaving (medication, glasses, etc	. <mark>):</mark>
Tara will de abie wish and		
Our pet emergency go-ki	<mark>r pets:</mark> it (food, water, bowl, leash, crate, etc.) is lo	ocated:
, , , , , ,		
		on during an emergency or evacuation:
		Phone:
	assist and/ or make sure they are ok.	
Name:	Addrace	Phone:
How we have agreed to	assist and/or make sure they are ok:	Filone.
How we have agreed to	assist and/ of make sure they are ok.	
	Local Fire Department Infor	
	(Circle the appropriat	e contact)

Hawaii (County) Fire Dept. (808) 932-2912



Honolulu Fire Dept. (808) 723-3473



Maui Fire Dept. (808) 876-4690



Kauai Fire Dept. (808) 241-4985



#### **Safety Tip**

Remember to PRACTICE your evacuation plan each year with your family, and keep it up to date!

## **Emergency Plan Notes**

Use the space below to add any additional information to your family's evacuation plan.

### Off-island plans during fire season? Plan ahead!

If you are a seasonal resident or property owner, or if you know you will be away, it is critical that you take personal responsibility for your property and the safety of those who may occupy it during your absence. Unmitigated hazards on your property can significantly affect an entire neighborhood, especially adjacent homes and yards. Remember, if an ember lands and ignites a fire on your property, that fire can easily spread and threaten additional lives and homes within the community, whether you are physically present or not. It is up to you to ensure your home, yard, and property are READY at all times.

#### Essential preparedness actions for part-time and traveling residents:

1. Ensure your vegetation and structures will be managed and maintained to withstand embers and mitgate wildfire ignition and spread while you are away.

Keeping your yard lean (via strategic, Firewise planting methods and trimmed grasses and trees), green (meaning watered and alive, not dry or dead), and clean (regularly maintained, no debris or leaf piles) applies all year long. What is your property and vegetation maintenance plan? How will you know if your plan is successfully occurring?

2. Create a wildfire information packet for any seasonal or temporary guests who will be staying at your property, familiarizing yourself with all potential evacuation routes and how they may have changed over the year.

Introduce your guests to neighbors that may need their help evacuating. Who are those neighbors, in which houses do they live, and what are their contact numbers? Where can guests find your emergency supplies box or evacuation go-bag?

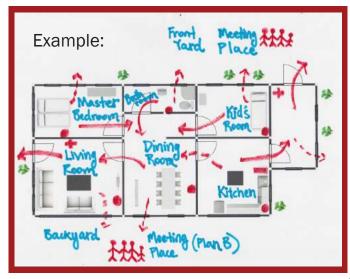
3. Be a good neighbor. Be active in your community, even if you only consider yourself a parttime or seasonal resident.

Get to know your neighbors and provide your contact information to them, so that you can work together to find solutions to unexpected risks or hazards within the community, particularly any stemming from your property or that may endanger your property while you are away.

## **Our Family's Home Evacuation Plan**

Draw a floor plan or map of your home with the space provided below:

- · Show all doors and windows.
- Mark two ways out of each room with arrows (1st choice: solid and 2nd choice: dotted).
- Mark all smoke alarms in the house with a
   Mark all fire extinguishers with a
- Pick and mark a main meeting place (and a backup alternative) outside the house where everyone can meet, away from any hazards.
- Remember to practice your plan at least twice a year.







## Residential Safety Checklist Tips To Improve Family and Property Survival During A Wildland Fire

	Home	Yes	No	
1.	Does your home have a metal, composition, or tile (or other non-combustible) roof with capped ends and covered fascia?			
2.	Are the rain gutters and roof free of leaves, needles and branches?			
3.	Are all vent openings screened with 1/8 inch (or smaller) mesh metal screen?			
4.	Are approved spark arrestors on chimneys?			
5.	Does the house have non-combustible siding material?			
6.	Are the eaves "boxed in" and the decks, lanai, and/or pier-and-posts enclosed?			
7.	Are the windows made of at least double-paned or tempered glass?			
8.	Are the decks, porches, lanai, and other similar areas made of non-combustible material and free of easily combustible material (e.g. plastic furniture)?			
9.	Is all firewood at least 30 feet from the house?			
	Defensible Space	Yes	No	
1.	Is dead vegetation cleared 100 feet from the house? (Consider adding distance due to slope of property.)			
2.	Is there separation between shrubs?			
3.	Are ladder fuels removed?			
4.	Is there a clean and green area extending at least 30 feet from the house?			
5.	Is there a non-combustible area within five feet of the house?			
6.	Is there separation between trees/tree clusters?			
	Emergency Access	Yes	No	
1.	Is the home address visible from the street?			
2.	Is the home address made of fire-resistant materials?			
3.	Are street signs present at every intersection leading to the house?			
4.	Are street signs made of fire-resistant materials?			
5.	Is flammable vegetation within 10 feet of the driveway cleared and are overhanging obstructions removed?			
6.	If a long driveway is present, does it have a suitable turnaround area?			

--This is a high value resource-Please pass this on to others
instead of throwing in the trash.
It could save a life or home.

Ready, Set, Go! www.wildlandfireRSG.org

Hawaii Wildfire
Management Organization
www.hawaiiwildfire.org















