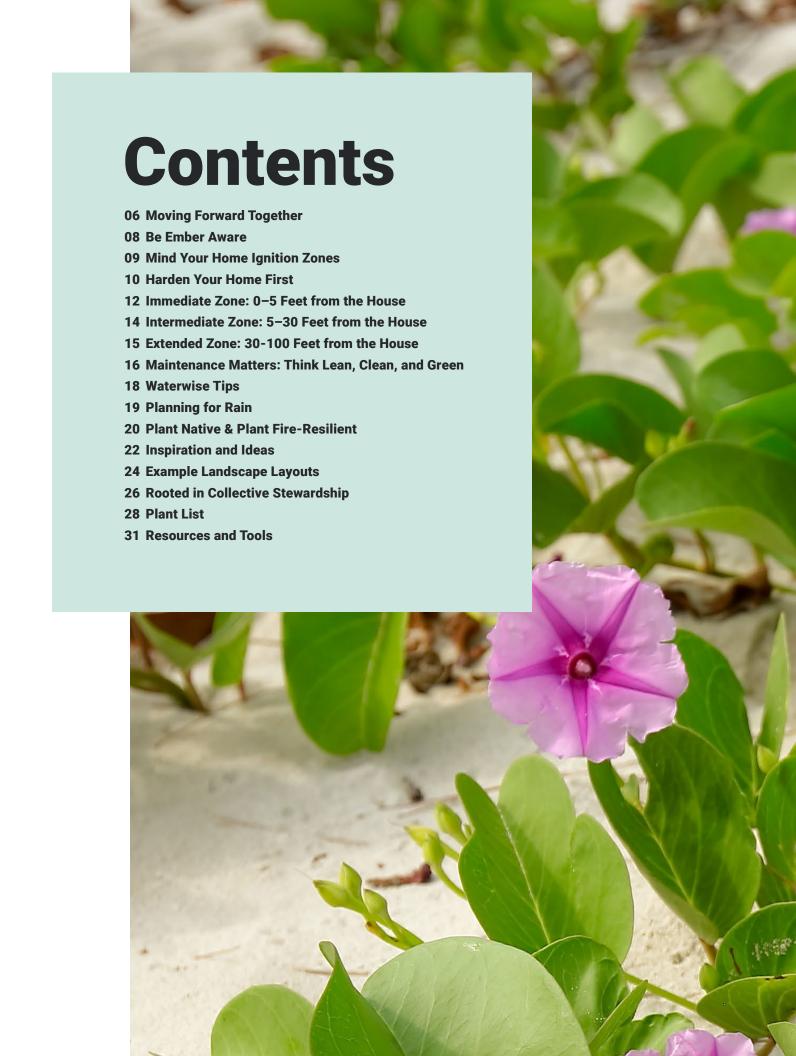
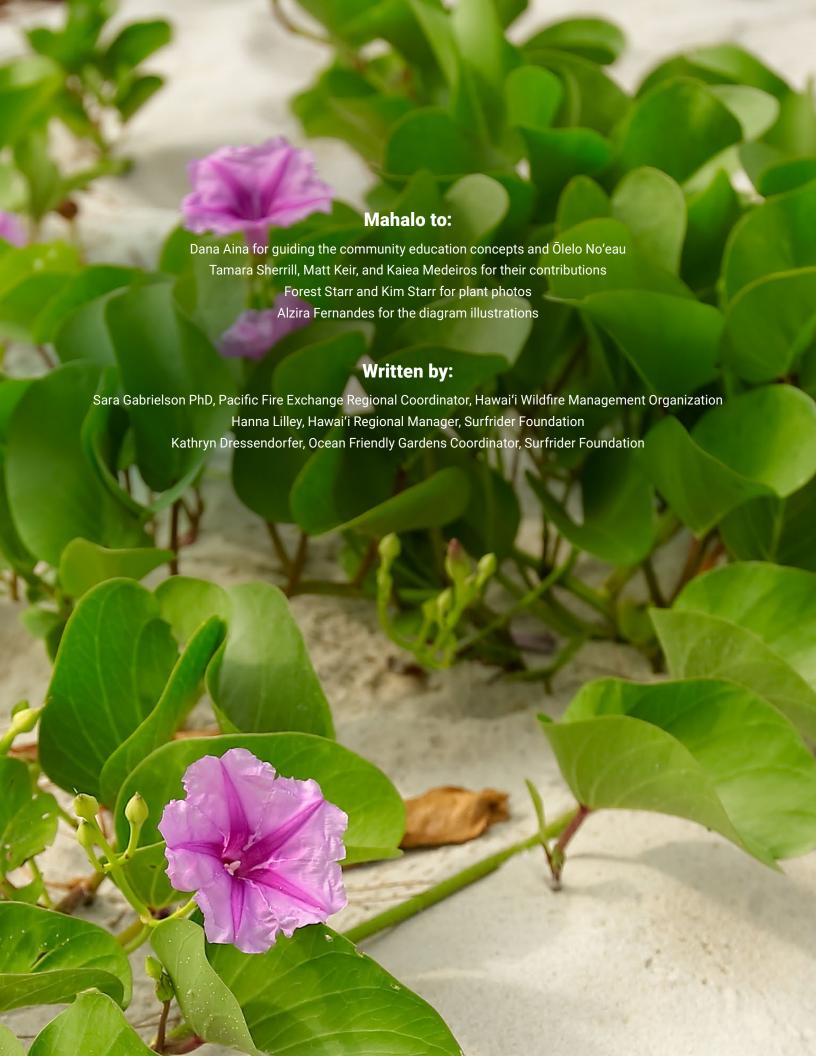
Re-Planting After Fire:

A Fire-Resilient Landscape Guide for Lahaina & West Maui







Maui Komohana

Foreword contributed to by Kaiea Medeiros

Maui Komohana (West Maui) is an incredibly storied and significant place, rich with history and a source of immeasurable mana (spiritual power). West Maui mountains are known by many names: Mauna o 'E'eka, Mauna Kahālāwai, or Hale Mahina. Mauna o 'E'eka is recognized as a kupuna, an ancestor and relative, a living, breathing source of life that we all have a kuleana (responsibility) to love and mālama (care for).

Maui Komohana is home to some of the rarest endemic and indigenous plant and animal species in the world. Over millions of years, the evolution of species and the rich diversity of ecosystems across Maui Komohana's varied elevations have shaped an interconnected watershed that sustains vital resources, including our aquifers and waterways, that we rely on today.

Lahaina, traditionally referred to as Malu 'Ulu o Lele, the shaded breadfruit grove of Lele, was historically

known as a seat of power for Maui's ali'i (ruling chiefs) for many years and was the capital of the Hawaiian kingdom during the early- to mid-1800s. The Lahaina of old was marked by prosperous and lush green landscapes. Intricate 'ōiwi (indigenous) agroforestry systems, specifically groves of 'ulu (breadfruit) alongside niu (coconut), and lo'i kalo (wetland taro) provided an abundance of crops that supported a much larger human population than it does today. Remarkably, these agroforestry systems also enhanced water cycles, pulling moisture from the air and creating a cooler and wetter climate.

For the perpetuation and sustainability of 'aina, water, and people, stewardship of Maui Komohana must be rooted in a collective understanding of place, reciprocity, and action. We have the kuleana to heal our 'āina through re-planting the Lahaina landscape with mindful and intentional landscaping, honoring the biological and cultural history of this storied place.





Moving Forward Together

The 2023 Maui wildfires forever shifted our community's experience with fire. Many lost loved ones, homes, businesses, and their sense of safety and security, especially in Lahaina. This wildfire was part of an alarming pattern; fires are becoming more frequent, more intense, and traveling further into urban areas.

Maui's native landscape evolved largely in the absence of wildfire. In a little over a century, Lahaina, once known for a lush, green, and productive landscape, was transformed to a hot, dry, and fire-prone region. This dramatic shift was driven by water diversions, development, large-scale industrial agriculture, and unmanaged lands left behind after agricultural abandonment. Native species were cleared and displaced by invasive, fire-prone grasses and plants.

Climate change is aggravating these conditions with more extreme weather patterns, and human activities and infrastructure are creating more frequent ignitions (sparks). Along with all of these environmental factors, most building materials and homes are not fireresistant, creating a perfect storm for more frequent and destructive fires.

But we are not powerless in slowing the spread of fire. Residents can play a vital role in reducing urban fire losses, and the small actions you take can make a big difference in protecting your home and your community.

Your yard can act as a first line of defense, preventing fire from reaching your home and from spreading between homes in your neighborhood. You can play an important role in protecting your 'ohana, the landscape, and communities you love.

Many community members are now tackling the process of rebuilding their homes or looking to make existing homes and buildings more fire-resistant. If you're rebuilding now or are interested in reducing your risk, please know — you are not alone.

This guide is here to help you create a safer space around your home with fire-resilient landscaping. With the right plants, smart planning, and simple maintenance, we can work together to reduce the chances that our homes and neighborhoods burn when wildfires occur. Let's move forward together toward a fire-resilient future.





Be Ember Aware

Fires can spread to homes and buildings through direct flames, extreme heat from a nearby wildfire (radiant heat), or most commonly, through wind-blown embers.

Up to 90% of homes that burn in wildfires ignite from embers - not from direct flames. During a wildfire, embers (tiny bits of burning material) fly through the air and can land on your home or yard. Embers can be carried by wind miles away from where a wildfire is burning.

If embers land in dry leaves in your gutters, on wood decks, or other flammable materials near your home, they can start a fire that spreads to your home and other buildings nearby. By being ember aware, you can stop a fire before it starts.

Throughout this guide we use the terms fire-resilient landscaping and fire-resilient plants. We define these terms here:

Fire-resilient landscaping is the practice of designing and maintaining your yard to reduce the chance that embers ignite your home and to slow the spread of flames during a wildfire event.

Fire-resilient plants are plants that are compatible with fire-resilient landscaping. They are more resistant to catching on fire when embers land on them, and can help to slow the spread of fire when properly maintained. Fire-resilient plants and trees can help block embers from reaching your home and shade out fire-prone invasive grasses, keeping you safer while providing habitat, shade, and cooling.

Up to 90% of homes that burn in wildfires ignite from embers — not from direct flames.



Mind Your Home Ignition Zones

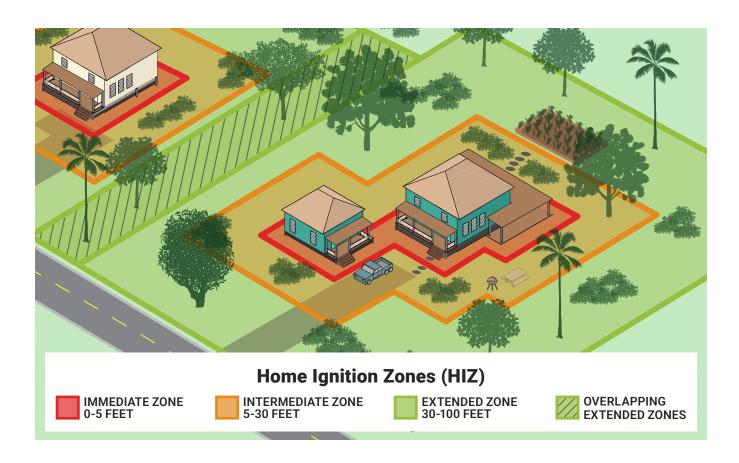
When talking about fire risk, we call the home and the area around it the Home Ignition Zone (HIZ). The HIZ includes the building materials and design of the home, as well as the surrounding landscape. The HIZ plays a key role in whether a home survives a wildfire.

The largest fuel source on your property is not large trees or plants, but your home itself. To make your home safer from embers, start with the area closest to the house and then work your way into the yard. First, we'll talk about hardening your home, then tending to the Immediate Zone right next to your house, and then finally tackling the Intermediate and Extended Zones.

In denser suburban and urban neighborhoods, your Intermediate and Extended Zones might overlap with your neighbor's zones. It is important to start with your own home, and to communicate with and help your neighbors as you work together to protect your neighborhood from wildfire.

The Home Ignition Zone concept breaks up your landscape into actionable sections. By using fire-resistant building materials, reducing flammable materials near the house, and creating fire-resilient landscaping, residents can greatly reduce the chance that their home ignites during a wildfire. While no building can be 100% fireproof, taking steps to reduce your fire risk will help protect your home and give firefighters a chance to safely defend it.

The largest fuel source on your property is not large trees or plants, but your home itself.



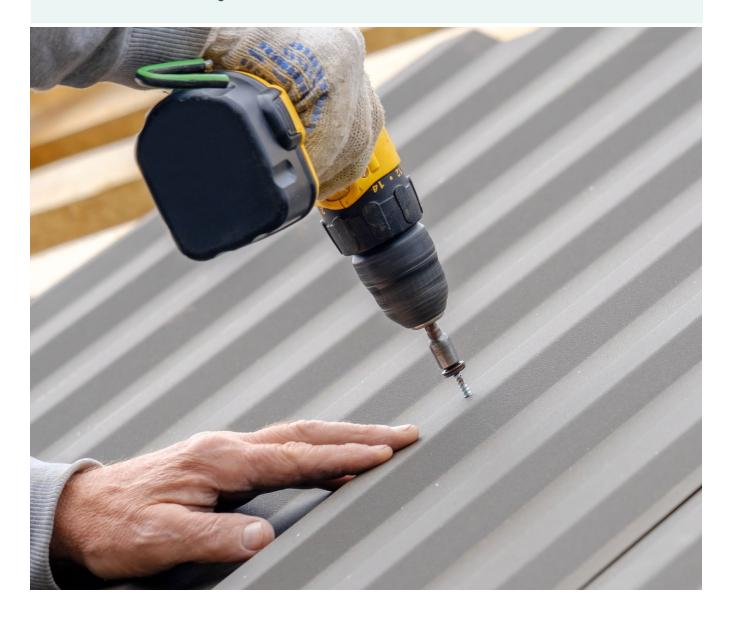
Harden Your Home First

"Home hardening" is like giving your home a shield against wildfires! Whether you are rebuilding from the ground up or retrofitting your house, you can apply fire-resistant materials in a strategic way to help keep flames and embers from burning your house. To learn more about home hardening and building for wildfire resilience in Hawai'i, see this guide for builders and homeowners: hwmo.org/build-wildfire-safe.

Tips to harden your home

- Use a Class A Roof, which has the highest level of Clean gutters and install gutter guards or fire resistance.
- · Use double-pane, tempered glass windows with metal casing.
- Use non-combustible siding.

- screens to prevent debris accumulation.
- · Screen vent openings on rooftops, soffits, gables, and exterior walls with 1/8" metal mesh to prevent embers from entering your home.





IMMEDIATE ZONE OR ZONE 0

0-5 feet from the House

Keep it Clean and Clear

This is the most important zone! Many homes burn because small embers land here and find fuel. By keeping the first 5 feet clean of debris and clear of anything that can burn, you can reduce the chance of your home igniting during a wildfire.

There should be no flammable materials in this zone, so anything in this zone should be metal, stone, brick, or other fire-resistant materials.

Traditional landscaping often puts plants right up against the house, but we want to avoid planting in this first 5 foot zone to be better prepared for fire. Embers often get trapped between plants and the house, and the heat from a burning plant can cause windows to shatter, spreading fire into the home. One safe alternative is to add a fire-resistant pathway directly next to your home, creating a built-in buffer zone.

There should be no flammable materials in this zone, so anything in this zone should be metal, stone, brick, or other fire-resistant materials.





Do This

- · Clear this space of all flammable materials like firewood, outdoor furniture, and clutter.
- Use fire-resistant materials for walkways and patios such as gravel or cinder rock, stone pavers or urbanite (recycled concrete), interlocking or permeable pavers, decomposed granite (DG), bricks, or concrete
- · Use metal gates and fences, instead of wood or vinyl, where they connect to your home.
- Trim back tree branches 10 feet away from the edge of the roof, so they don't touch or hang over the house.
- Remove leaves and debris from your roof and rain gutters.
- Remove weeds regularly.



Avoid This

- Don't plant large bushes or climbing vines against the house or under windows.
- Avoid using combustible groundcovers such as bark mulch, rubber mulch, or artificial turf / fake grass.
- · Don't let leaves or debris pile up next to the house.

INTERMEDIATE ZONE OR ZONE 1

5-30 feet from the House

Spread Things Out

Moving a bit further away from the home, we have more flexibility in the kinds of plants and landscape features we can add. It's important to create gaps and spaces between plants to slow the spread of any potential fires, and to add fire-resistant buffer zones where embers can safely fizzle out.

Shade is your friend — tree canopies maintain soil moisture, and reduce fire-prone invasive grass.



Do This

- · Use native (or non-invasive) fireresilient plants (see page 20-21).
- · Break up plants with fireresistant buffer zones:
 - Gravel paths, stone pavers, or dirt pathways
 - Dry rock creeks or swales (shallow creek-shaped ditches in the soil)
 - · Stone, brick, or urbanite (recycled concrete) retaining walls
- · Remove ladder fuels (lowhanging branches, shrubs, vines, and climbing plants) beneath trees that can carry fire up into the tree canopy.

- · Trim or "limb up" the lower branches of tall trees 6-10 feet off the ground. Trim the lower branches of smaller or younger trees up to 1/3 of the total height.
- Prioritize keeping larger, wellestablished trees and shrubs that provide shade to increase soil moisture and limit grass growth.
- · Keep grass lawns mowed to 4 inches and well-hydrated (See our "Waterwise Tips" for more info).
- · Remove weeds, dry grasses, invasive trees (like haole koa), and dead or dying plants.

Avoid This

- Don't leave piles of dry leaves. dead branches, or palm fronds in your yard.
- Don't let tall grass or weeds grow in buffer zones.
- Don't use power tools like mowers or trimmers in dry, hot, windy weather (sparks can start fires!)

EXTENDED ZONE OR ZONE 2

30-100+ feet from the House

Manage the Wild Space

If you have a big yard or open space near your home, you can make your home safer from wildfire without having to clear out all living plants and trees. The goal is to manage the landscape so less fuel builds up and fire does not move quickly through it.

"Limb up" trees by removing branches 6-10 feet above the ground, but keep the shade at the top!

Do This

- · Use native (or non-invasive) fireresilient plants and trees.
- · Create spaces and pathways between groundcovers and shrubs.
- Trim or "limb up" the lower branches of tall trees 6-10 feet off the ground. Trim the lower branches of smaller or younger trees up to 1/3 of the total height
- · Remove dead branches and fronds from trees and shrubs.
- · Remove weeds, dry grasses, invasive trees (like haole koa), and dead or dying plants.

Avoid This

- Don't remove your healthy trees. Tree canopy can help shade out weeds and slow flying embers.
- Don't plant fire-prone eucalyptus or pine trees.
- · Don't use power tools like mowers or trimmers in dry, hot, windy weather (sparks can start fires!)



MAINTENANCE MATTERS

Think Lean, Clean, and Green

Maintenance matters for fire-resistance! Even yards with the best plant choices and layouts need routine care and maintenance to prevent fire. To maintain a healthy, fireresilient landscape, keep it Lean, Clean, and Green. This

easy-to-remember rhyme isn't just catchy, it's a practical way to keep your yard and home prepared! The do's and don'ts for the different zones covered in the previous section align with and are guided by these principles.

Lean

By keeping living trees and plants appropriately spaced and uncluttered ("lean") we can reduce the chance of fire spreading while preserving their benefits for shade, biodiversity, and beauty. By regularly trimming and pruning plants and trees, we can remove potential fuel and maintain healthy plants.

- Remove ladder fuels (low-hanging branches, shrubs, vines and climbing plants) beneath trees that can carry fire up into the tree canopy.
- Prune dead branches, leaves, and palm fronds off of shrubs and trees. Remove any dry plant material that builds up at the base of the plant.
- Hedge or trim plants to maintain open pathways and gaps.
- Keep grass mowed to 4 inches. Don't let it get tall and brown! Avoid mowing or trimming in hot, windy conditions (sparks can ignite fires!)
- Trim tree canopies 10 feet away from the house to keep flames from jumping to the roof. Further from the house, properly maintained trees can help keep your landscape cool, hydrated, and shade out weeds.





Clean

Keeping your yard clean and tidy goes a long way towards preventing common fuel sources from building up in the landscape. Power tools can spark fires during hot, dry weather, so use them only during milder weather.

- Regularly remove weeds, dry leaves, pine needles, palm fronds, and other debris.
- · Avoid storing flammable building materials, firewood, toys, or tools under decks or in the yard. Use metal or fire-resistant sheds or store smaller items indoors.
- Use metal patio furniture instead of flammable materials like plastic, wood, or wicker. In high-fire risk weather, move furniture and cushions inside.
- · Clear vegetation and clutter around sheds and outbuildings.

Green

Green, hydrated plants are a crucial part of a fire-resilient landscape. Water stored in leaves and stems makes it harder for a plant to ignite — you wouldn't try to start a bonfire with wet firewood or a damp matchstick! Remember, even the best plant choices can become hazardous when they are neglected and dehydrated.

- Choose plants that naturally stay green and hydrated throughout the dry season.
- Plant drought-tolerant native and non-invasive plants.
- · Keep plants well-irrigated and hydrated during warm or dry weather.

Waterwise Landscapes

Keeping the plants and trees in your yard green and hydrated is important for fire resistance, but we need water to do that! Water is a precious resource in Hawai'i, especially on dry leeward sides like West Maui.

Use the tips below to water efficiently, balancing water conservation and fire preparedness. Check out the resources at the end for in-depth resources about irrigation, plant selection, and local composting!



Waterwise Gardening Tips

- · Choose native and drought-tolerant plants that don't need much water once established.
- Downsize your grass lawn where possible, and use drought-tolerant grass varieties.
- · Group plants that have high water needs (like fruit trees) together and close to water sources like hoses or sprinklers.
- Water early in the morning to reduce evaporation.
- · Adjust irrigation timers to water less during cooler seasons, and shut off during rain.

- · Use drip irrigation, high-efficiency sprinkler systems, or water by hand to ensure that you are only watering the plants that need it.
- · Water deeply and less often. Quick, frequent watering encourages shallow roots that are less drought-tolerant.
- Use compost* or biochar** to improve soil porosity and hydration.
- · Add rain gardens, bioswales, or dry creeks to guide rainwater from your roof to flow to your plants.

*Compost transforms yard waste and food scraps into organic fertilizer and supports healthy, living soil.

^{**}Biochar transforms farm waste into carbon-rich fertilizer and supports soil health and hydration.

Planning For Rain

Keeping your landscape green also means making the most of the rain that falls on your yard and roof. You can help keep your plants hydrated by strategically shaping the soil or directly collecting rainwater.

Not only is planning for rain important for water conservation in dry areas, but it also makes our homes and communities better prepared for erosion and runoff after fire events. After a fire, rain can wash

away bare soil and flush ash and debris downstream. This can cause landslides, flooding, and flush polluted runoff into waterways and out to the ocean. Sediment and pollution flowing into the ocean can suffocate coral, harm marine life, and impact human health.

By thinking of our yards' impact from mauka to makai, we can be better prepared for runoff after wildfires while protecting the ocean year-round.

Rain Planning Tips

- Make your yard less flat by digging shallow swales (creek-shaped grooves) or creating berms (hills) to slow, spread, and sink rainwater into the soil.
- If you have gutters, direct your roof downspout into a rain garden or swale to let rain soak into the ground.
- Install metal rain barrels or cisterns to collect rainwater for irrigation.
- · Plant deeply rooted native plants and trees.
- · Use compost or biochar to support healthy soil and naturally filter water.



Plant Native & Plant Fire-Resilient

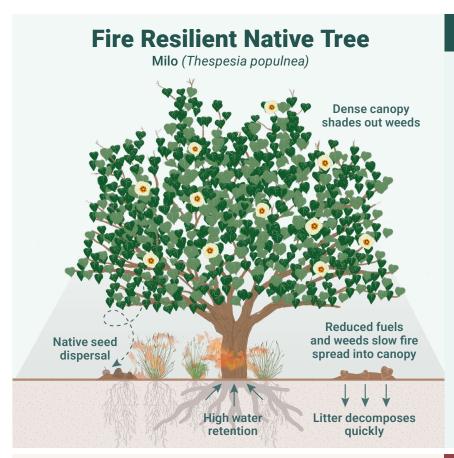
Choosing the right types of plants can help make your home safer while making it easier to keep up with yard maintenance. Remember, maintaining your plants and keeping them hydrated is key to fire-resilient landscaping! Even the best plant choices can become hazardous if they are left to dry out or are not properly cared for. Lahaina and West Maui are dry and coastal, making native plants a great choice for fire-resilient yards. These native plants are adapted to our unique local environment, can survive with little water, and are less likely to catch fire.

Many tropical trees, like banana trees, don't burn easily - especially if you keep them watered and trimmed. Trees and large shrubs can also help shade out invasive grasses, which are some of the most fire-prone plants in Hawai'i. If you remove shady tree canopy, you might unintentionally create new open spaces for weedy plants and invasive grasses to grow.

Farther from your home, you can plant fire-resilient trees and larger shrubs as "green breaks" to help slow down the spread of fire. Green breaks can block flying embers from reaching your home, and give them a safe place to fizzle out. Remember, when planting new trees, consider how big the tree will be when fully grown, and make sure the branches will be at least 10 feet away from the roof!

Remember, maintaining your plants and keeping them hydrated is key to fire-resilient landscaping! Even the best plant choices can become hazardous if they are left to dry out or are not properly cared for.





Choose plants that:

- · Stay green, even in the dry season
- · Have thick, leathery, succulent, or moist leaves
- Don't drop lots of dry or papery
- Are native or non-invasive

Examples:

- Native dryland plants like pōhuehue, 'ilima, and milo
- Drought-tolerant, non-invasive plants like aloe succulents
- See the plant list at the end of this guide for more options



Avoid plants that:

- Dry out quickly and do not stay green in the dry season
- Have thin, papery bark or leaves
- · Drop a lot of dead leaves or needles
- Are invasive and spread quickly
- · Are oily or resinous (like pine trees, junipers, or eucalyptus)
- · Build up dry material and branches at the base of the plant

Examples of fire-prone plants to avoid:

- Haole Koa (Leucaena leucocephala)
- Kiawe (Neltuma pallida, formerly Prosopis pallida)
- Guinea Grass (Megathyrsus maximus)
- Fountain Grass (Pennisetum alopecuroides)
- Buffelgrass (Cenchrus ciliaris)

Inspiration and Ideas

Choosing the right plants is key to creating a safer, lower-maintenance, fire-resilient yard! For inspiration, this section includes some plant recommendations and example plant layouts for different water needs. The plant list at the end of this guide includes more options of native and non-invasive plants that are fireresilient and suited to our local environment. There is a wide variety of plants to choose from, whether you are looking for beautiful flowers, tasty fruit, or plants that are deeply connected to Hawaiian culture.

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Special Plant Considerations Salt Tolerance

Many Lahaina properties are oceanfront, with sandy soils and salty conditions. Native coastal and dune species are ideal for these sites to reduce fire risk, stabilize the soil, and prevent erosion. If a plant is salt tolerant, it's indicated in the plant list at the end of the guide.

Phytoremediation

Wildfires in urban areas can leave behind toxins like heavy metals in the soil. If you are concerned about soil contamination, seek expert advice to understand contamination and remediation options. One possible approach is phytoremediation. Phytoremediation uses plants to take up some of these pollutants from the soil, trapping the pollutants in plant material or converting them into different, safer forms.

Phytoremediation differs depending on the plant species, the type of contaminant, and the way the plant processes the contamination. For example, a plant that is used to phytoremediate lead might store the lead in its stems and leaves, which then need to be safely harvested and disposed of off-site.

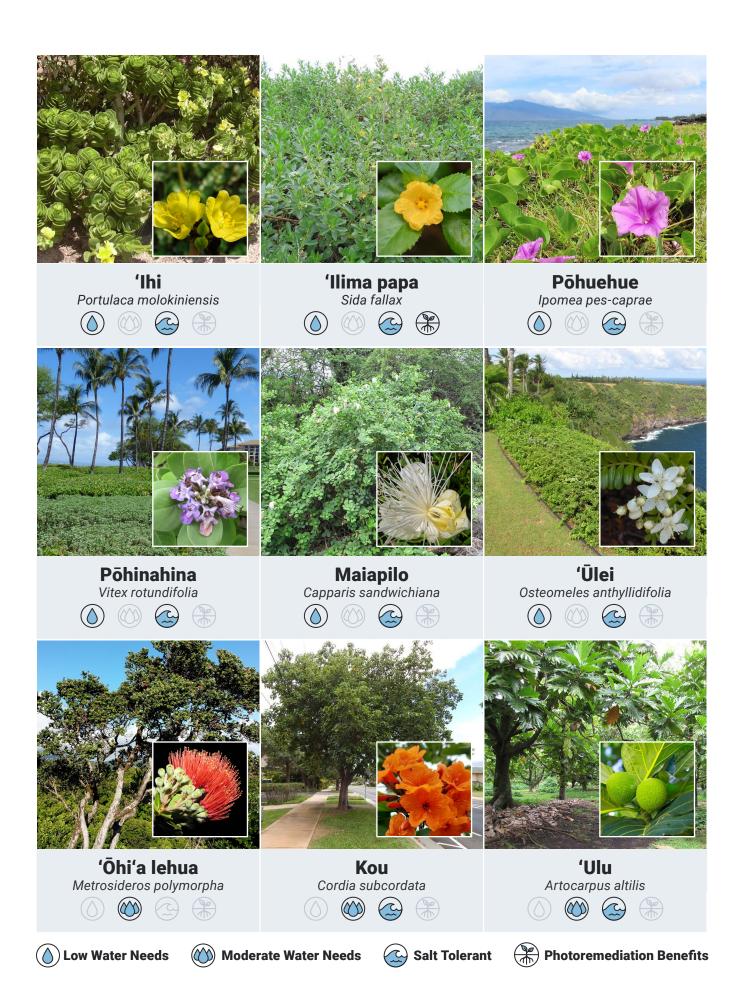
Current research is underway to investigate how well phytoremediating plants can remove soil contaminants, and there are still unanswered questions. In the extended plant list at the end of this guide, we noted

plants that have shown phytoremediation properties and what contaminants they might help target if you are interested in exploring this topic. For more information about soil contamination and how phytoremediation works, please refer to the resources at the end of this guide

Edible Plants

It's easy to grow māla'ai (an edible garden) while keeping your landscape fire-resilient. Just keep these principles in mind:

- Position your garden beds outside the Immediate Home Ignition Zone (>5 feet from your house).
- Use non-combustible materials for raised beds. such as metal, stone, or concrete blocks.
- · Avoid wood chip mulch, both for fire risk and to reduce habitat for coconut rhinoceros beetle (an invasive pest).
- Irrigate edible plants regularly. Many edible plants have high water needs, so plan ahead for irrigation and water consistently using our waterwise tips.
- · Use walkways, gravel paths, or stone borders to break up garden sections and providefire-resistant gaps between vegetation and garden beds.
- Regularly remove dead plant material and weeds.



Example Landscape Layouts

These landscape layouts show examples of plants grouped by their water needs, with fire-resistant pathways and spaces between plantings.

Remember, every new plant will require water to get established, even if it has low water needs or is drought-tolerant. A good rule of thumb for new plants is to water every or every-other day for the first week. Then try watering once or twice a week, and see how the new plants respond. If plants are wilting or drying

out and turning brown, they probably need more water. If the soil is still damp when you go to water it, the leaves are turning yellow, or you see lots of weeds, try watering less!

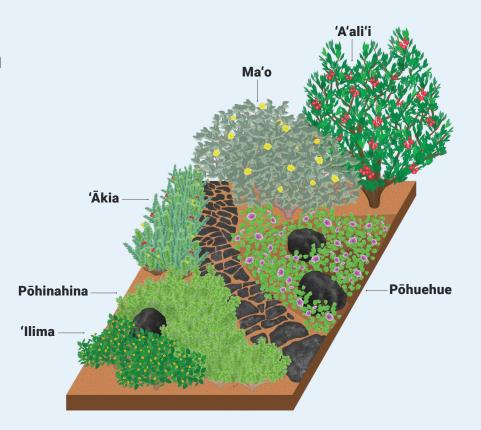
How much water a new plant needs will depend on the weather, the soil, the amount of sun or shade it receives, and whether it is in its growing season. The best thing you can do is get to know your plants, and when in doubt, water less.

Plant in water-efficient zones! Grouping plants by their water needs conserves water in Lahaina and West Maui's dry climate.



Low Water Needs Garden

This planting plan features drought-tolerant plants that need very little water once established. It's meant to inspire ideas for creating a beautiful, low-maintenance yard that supports wildfire resilience while conserving water.





High Water Needs Garden

This planting plan features plants that need more frequent watering to stay healthy and lush. It also includes edible plants and trees, many of which require more water. These high water needs plants are best placed in areas where you can easily water them or areas that water naturally collects - like gutter downspouts or low points in your yard.





Rooted in Collective Stewardship

In the face of increasing wildfire threats, we have the kuleana to landscape with fire resilience and sustainability in mind. By replanting with native species and designing with care, we restore what was lost and create stronger, safer communities.

One yard may seem small, but when many homes and neighbors work together and use fire-resilient landscaping principles, the whole community is safer.

Work together with 'ohana, friends, and neighbors to make your home and community lean, clean, and green. Host a clean-up party, lend a hand to a neighbor, or share tools and knowledge. When neighbors work together, it strengthens protection for the entire community. If you're interested in organizing a Firewise USA® community in your neighborhood, we're here to help. Learn more at firewise.org or hwmo.org/firewise-program. Start with the first 5 feet. That's all it takes to begin.





Plant List

Whether you are swapping out invasive plants or starting with a blank slate, you are probably wondering, "What plants are a good choice for a fire-resilient landscape?"

This plant list has easy-to-source, fire-resilient options for your yard. This is not an exhaustive list of every possible plant, just a few curated choices to help you get started!

Plant flammability and fire resistance have not been comprehensively researched for many plants in Hawai'i, especially for non-invasive and native plant species. However, we can use plant characteristics to avoid fire-prone plants and choose fire-resilient ones instead.

To create this list, we considered whether a plant is climate-adapted or native to West Maui, and if it has fire-resilient characteristics, such as succulent or waxy evergreen leaves, no oily or resinous leaves, is drought and/or wind tolerant, and helps shade out fire-prone weeds. These criteria can also help you navigate other plant choices if you are considering plants not found on this list.

As you learned in this guide, plant choice is just one part of holistically managing your fire risk. Hardening your home, spacing plants wisely throughout the home ignition zones, watering, and actively maintaining your landscape are crucial to reducing overall fire risk for your home — and your neighborhood!

This list is ordered alphabetically by common name. For more detailed plant info, check out the extended plant list here: go.surfrider.org/mauiplantlist. Additional resources at the end of this guide can help you explore more native plant options and how to care for them.

Common Name Scientific Name	Growth Form	Plant Origin	Salt Tolerant	Phyto- remediation	Water Needs
' Ae'ae Bacopa monnieri	Groundcover	Native	\bigcirc	\bigcirc	
'A'ali'i Dodonaea viscosa	Shrub	Native	\bigcirc	\bigcirc	
'Aki 'aki Sporobolus virginicus	Groundcover	Native	\bigcirc	\bigcirc	
'Ākia Wikstroemia uva-ursi	Shrub	Native	\bigcirc	\bigcirc	
'Akoko Euphorbia degeneri Euphorbia celastroides	Shrub	Native	\bigcirc	\bigcirc	
'Ākulikuli Sesuvium portulacastrum	Groundcover	Native	\bigcirc	\bigcirc	
Alahe'e Psydrax odorata	Tree	Native	\bigcirc	\bigcirc	

Common Name Scientific Name	Growth Form	Plant Origin	Salt Tolerant	Phyto- remediation	Water Needs
Aloe hemmingii Aloe delphinensis	Groundcover	Introduced	\bigcirc		
Avocado Persea americana	Tree	Introduced	\bigcirc	\bigcirc	$\Diamond \Diamond \Diamond$
Citrus spp.	Tree	Introduced	\bigcirc	\bigcirc	$\Diamond \Diamond \Diamond$
Dragon tree yucca Dracaena draco	Tree	Introduced	\bigcirc	\bigcirc	
Firecracker cactus Cleistocactus baumannii	Shrub	Introduced	\bigcirc	\bigcirc	$\Diamond \Diamond \Diamond$
Ghost succulent <i>Graptopetalum spp.</i>	Groundcover	Introduced	\bigcirc	\bigcirc	\Diamond \Diamond \Diamond
ʻlhi Portulaca molokiniensis Portulaca lutea	Groundcover	Native	\bigcirc	\bigcirc	
'Ilie'e Plumbago zeylanica	Groundcover	Native	\bigcirc	\bigcirc	\Diamond \Diamond \Diamond
'Ilima papa Sida fallax	Shrub	Native	\bigcirc	\bigcirc	
Kamani Calophyllum inophyllum	Tree	Canoe Plant	\bigcirc	\bigcirc	
Ki Cordyline fruticosa	Shrub	Canoe Plant	\bigcirc	\bigcirc	$\Diamond \Diamond \Diamond$
Koʻoloaʻula Abutilon menziesii	Shrub	Native	\bigcirc	\bigcirc	$\Diamond \Diamond \Diamond$
Kou Cordia subcordata	Tree	Native	\bigcirc		$\Diamond \Diamond \Diamond$
Kupukupu Nephrolepis cordifolia	Groundcover	Native	\bigcirc		$\Diamond \Diamond \Diamond$
Loulu Pritchardia glabrata Pritchardia hillebrandii Pritchardia forbesiana	Tree	Native	\bigcirc	\bigcirc	
Ma'o Gossypium tomentosum	Shrub	Native	\bigcirc	\bigcirc	
Ma'o hau hele Hibiscus brackenridgei	Shrub	Native	\bigcirc	\bigcirc	$\triangle \triangle \triangle$
Maiapilo Capparis sandwichiana	Shrub	Native	\bigcirc	\bigcirc	$\Diamond \Diamond \Diamond$

Common Name Scientific Name	Growth Form	Plant Origin	Salt Tolerant	Phyto- remediation	Water Needs
Mai'a Musa acuminata	Tree	Canoe Plant	\bigcirc	\bigcirc	$\Diamond \Diamond \Diamond$
Mango Mangifera indica	Tree	Introduced	\bigcirc	\bigcirc	$\triangle \triangle \triangle$
Mauʻu ʻakiʻaki Fimbristylis cymosa	Groundcover	Native	\bigcirc	\bigcirc	$\Diamond \Diamond \Diamond$
Milo Thespesia populnea	Tree	Canoe Plant	\bigcirc	\bigcirc	$\triangle \triangle \triangle$
Nanea Vigna marina	Groundcover	Native	\bigcirc	\bigcirc	\Diamond \Diamond \Diamond
Nehe Lipochaeta integrifolia	Groundcover	Native	\bigcirc	\bigcirc	\Diamond \Diamond \Diamond
Niu Cocos nucifera	Tree	Canoe Plant	\bigcirc	\bigcirc	$\triangle \triangle \triangle$
Noni Morinda citrifolia	Tree	Canoe Plant	\bigcirc	\bigcirc	$\triangle \triangle \triangle$
'Ōhai Sesbania tomentosa	Shrub	Native	\bigcirc	\bigcirc	
'Ōhi'a lehua Metrosideros polymorpha	Tree	Native	\bigcirc	\bigcirc	
Oʻahu sedge Carex wahuensis	Groundcover	Native	\bigcirc		
Ox tongue succulent Gasteria spp.	Groundcover	Introduced	\bigcirc	\bigcirc	
Pāʻū o hiʻiaka Jacquemontia ovalifolia	Groundcover	Native	\bigcirc	\bigcirc	
Pōhinahina Vitex rotundifolia	Shrub	Native	\bigcirc	\bigcirc	
Pōhuehue Ipomea pes-caprae	Groundcover	Native	\bigcirc	\bigcirc	
Sedums Sedum spp.	Groundcover	Introduced	\bigcirc		
'Uki 'uki Dianella sandwicensis	Groundcover	Native	\bigcirc	\bigcirc	$\Diamond \Diamond \Diamond$
'Ūlei Osteomeles anthyllidifolia	Shrub	Native	\bigcirc	\bigcirc	
'Ulu Artocarpus altilis	Tree	Canoe Plant	\bigcirc	\bigcirc	
Zebra succulent Haworthia spp.	Groundcover	Introduced	\bigcirc	\bigcirc	$\Diamond \Diamond \Diamond$

Resources and Tools

Visit **go.surfrider.org/frlg** or scan the code to view the below resources.



Wildfire & Fire Management	
Wildfire Resources and Firewise® Community Information: Hawai'i Wildfire Management Organization (HWMO)	VIEW RESOURCE
Learn About Wildfire Basics: Fuels and Wildfire Behavior Training Module, Pacific Fire Exchange	VIEW RESOURCE
Rebuilding & Home Hardening	
Home Hardening & Building Materials Guide: HWMO and Community Planning Assistance for Wildfire, Headwaters Economics	VIEW RESOURCE
Sustainable Landscaping Practices	
Neighborhood and School Compost Collection: West Maui Green Cycle	VIEW RESOURCE
Irrigation Tips: Board of Water Supply Irrigation Guide	VIEW RESOURCE
Ocean Friendly Garden Guidance: Surfrider's Ocean Friendly Gardens Program	VIEW RESOURCE
Reef Friendly Landscaping Guidance: Maui Nui Marine Resource Council	VIEW RESOURCE
Gardening Workshops and Information for Maui Nui: Maui Nui Botanic Garden	VIEW RESOURCE
Plants & Soils	
Find Native and Canoe Plants For Your Yard: Go Native! Plant Search Tool	VIEW RESOURCE
Get Free Native Plants: Grow Aloha	VIEW RESOURCE
Hawaii Weed Risk Assessment: Plant Pono (only use low risk plants)	VIEW RESOURCE
Fire-Specific Weed Risk Database: Pacific Fire Exchange Database	VIEW RESOURCE
Coastal Plants for Creating Green Breaks: Pacific Fire Exchange	VIEW RESOURCE
Pruning Trees and Shrubs: Hawai'i Department of Transportation	VIEW RESOURCE
Limbing up trees: Tending the Land	VIEW RESOURCE
A Citizen's Guide to Phytoremediation: Environmental Protection Agency	VIEW RESOURCE
Managing Contaminated Soils: University of California	VIEW RESOURCE

