



PROTECTING TIBURON COMMUNITIES FROM FIRE



THE STATE LISTS ACACIA AS A NOXIOUS WEED, CONSIDERED HARMFUL TO ANIMALS OR THE ENVIRONMENT. THE MARIN COUNTY OPEN SPACE DISTRICT HAS TARGETED 24 NOXIOUS WEEDS FOR CONTROL IN PRIORITY AREAS.

Protecting Tiburon Communities and Rare Plants

Beginning in August 2018, in partnership with Marin County Fire Department, a fire fuel reduction project will help protect neighborhoods bordering Old Saint Hilary's open space preserve from wildland fire risk while also protecting rare plants habitat inside the preserve.

Acacia trees can form dense monospecific stands which are also highly flammable. This non-native tree has begun to spread in Old Saint Hilary's preserve. The largest, most dense population of Acacia is situated on a steep slope, making it an imminent fire hazard to the neighborhood above.

Patches of non-native Acacia across Old Saint Hilary's are also invading the range of the rare Tiburon Jewelflower (*Streptanthus glandulosa* ssp. *niger*)—found only in the Tiburon peninsula—as well as other special status plants.

Questions

See Frequently Asked Questions, continued on back. Contact Rachel Hendrickson at (415) 473-5082 or RHendrickson@marincounty.org. To learn more about how to protect your home from fire, visit firesafemarin.org



How will the Acacia be reduced?

Small populations of young Acacia sprouts will be hand-pulled with a weed wrench by staff crews and volunteers.

In September 2018, Marin County Fire will cut mature stands of Acacia and construct burn piles on-site.

Within the same 2- week window as cutting, the stumps will be carefully painted with an aquatic approved triclopyr-based herbicide.

Marin County Fire will conduct pile burning in December of 2018. In the following seasons (e.g., 2019, 2020, and 2021) the Acacia sprouts will be spot treated with triclopyr-based herbicides.

In the years following, any remnant populations could be managed by hand pulling individual plants.

PROJECT: REDUCING ACACIA IN OLD SAINT HILARY'S

FREQUENTLY ASKED QUESTIONS

What are the goals of this project? Why are you doing this project here?

1) Protect communities from fire. Acacia forms dense monospecific stands which are also highly flammable. This site falls within the Wildland-Urban Interface, which is where wildland and the urban zones meet. That interface has an increased risk of fire to adjacent homes and businesses. The largest, most dense population of Acacia is situated on a steep slope, making it an imminent fire hazard to the neighborhood above.

2) Protect rare plants. Acacia plants grow much more aggressively than the serpentine grassland communities that are native to the project area. Patches of Acacia across the preserve are invading the range of *Streptanthus glandulosa* ssp. niger (Tiburon Jewelflower) and other special status plants. This project will enhance native habitat that supports federally endangered and rare plant species at Old Saint Hilary's.

Why is it important to control invasive plants like Acacia?

Invasive species are plants whose introduction can cause economic harm, environmental harm, or harm to human health. When non-native, invasive species begin to spread, they crowd out native species and change habitat for plants and animals that have evolved there. Marin County open space preserves are home to many rare and endangered plant species. When native plants are displaced by invasive weeds, some of them will be lost forever. The Marin County Open Space District controls these harmful invasive species to protect native plants and animals for future generations.

How will fire fuels be reduced at this site?

The Open Space District's Vegetation and Biodiversity Management Plan provides the framework for making decisions about how to reduce fire fuels and invasive species on a case-by-case basis.

Experts agree that an effective control strategy requires integration of several types of treatment at a given location over time. This method is called Integrated Pest Management (IPM).

An IPM approach will be used to control the Acacia populations that dominate this site. This includes hand-pulling with a weed wrench, mechanical cutting, pile burning, and careful herbicide application at different stages and for different population types (see front for project details). In the years following, any remnant populations could be managed by hand pulling individual plants.

Why was this approach chosen? Why not use goats or pull by hand?

All possible IPM alternatives for each individual site are analyzed, including a no-herbicide and no-treatment alternative. Most projects do not use herbicides. Herbicides are a tool of last resort, and only considered for "critical uses" such as fire, agriculture and rare species protection.

The Open Space District has attempted to control the spread of Acacia on its preserves by mechanically cutting the plants for the past several decades. This approach has actually encouraged the growth and colonization of the Acacia throughout the region, and is no longer seen by local land management agencies as an economically or environmentally sustainable method.

Other methods, such as hand-pulling and goat grazing, have been considered but are either not practical for the scale of the site or are not an effective tool for this project. The use of mechanical cutting in tandem with targeted herbicide application is being implemented here so that the Acacia population will be reduced to a level at which it can be eventually maintained through hand-pulling.

How will people know if herbicides are being used?

The Open Space District is committed to transparency. Prior to the application of herbicide we will post a notice identifying treatment information at the project site as well as at all entrances to the preserve 4 days prior and 4 days following application. We will also provide notice on the Open Space District website.

Why cut the Acacia in September? Will that risk starting a fire?

The Acacia is being cut in September to increase the likelihood that the population will ultimately be removed from the site. Cutting and creating piles in September will provide enough time for the piles to cure and be burned during the 2018-19 rainy season.

While using power tools in a dry environment can pose a fire risk, a crew of 10 trained Marin County fire fighters will be performing the chainsaw work and mitigating that risk.