

## Land Stewardship and Vegetation Management

**Land stewardship includes thinking about how today’s vegetation management actions can help protect, enhance, sustain, or improve conditions over time.** Improving landscape wildfire resiliency is a common stewardship objective for many landowners. When working outside the 100-foot defensible space, wildfire risk mitigation might be one of many goals you have on your property. Stewardship Plans (i.e., Forest Management Plan, Rangeland Management Plan, Oak Woodland Management Plan, etc.) are a good way to define the goals and objectives for the property and then start to prioritize different projects to meet those individual goals. For more information about land stewardship and plans, visit the UCCE Forest Stewardship page (<https://ucanr.edu/sites/forestry/Stewardship/>).

It is important to remember that not every acre can or needs to be treated to achieve every goal or objective you may have for your property. If fuels reduction and fire mitigation is one of the management objectives for your land, strategically placing fuels treatments can go a long way in mitigating the risk of high severity fire on your property. Fuels reduction strategies to consider include thinning, herbicide, and prescribed fire. Here are some ways those tools can be incorporated at the landscape level:

1. **Implement forest thinning treatments followed by prescribed fire.** Thinning reduces competition and forest stand density while prescribed fire reduces surface fuel loads. A variation on this method would be thinning followed by a pile burn.
2. **Use targeted grazing (cow, goat, or sheep) to reduce live vegetation** (Figure 1). Grazing can be an effective tool for reducing and maintaining your defensible space in grasslands and oak woodlands.
3. **Herbicide is a cost-effective tool for controlling vegetation.** It can be particularly effective when trying to control sprouting species or invasive weeds.
4. **Create and maintain strategic fuel breaks.** Fuel breaks are areas where vegetation and downed woody material are removed to reduce fuel loads and can involve the removal of all vegetation or retention of some tree canopy (i.e. shaded fuel breaks; Figure 3). Shaded fuel breaks are created by thinning and pruning trees and shrubs next to: 1) access roads (ingress and egress), 2) ridgelines and other critical control points identified by local fire departments, and 3) critical infrastructure on the property (e.g., water tanks, propane/fuel tanks, solar panels). Fuel breaks can be maintained through time using grazing, herbicides, prescribed fire, or pile burning.
  - **Work with neighbors, your local Fire Department, or Fire Safe Council to extend fuels reduction efforts across property lines.** Sometimes the best place for a fuel break might be on your neighbor’s property.



**Figure 1:** Targeted grazing (cow, goat, or sheep) can be used to reduce live fuel loads.

Stewardship work is not a ‘one and done’ thing, but rather an investment in the health, resiliency and conservation of California’s natural lands. Funding, technical expertise, or support may be available from a variety of different organizations to tackle these larger stewardship projects.

1. **UC Cooperative Extension Advisors** (Fire, Forestry, and Livestock and Natural Resources) can help you determine your management goals and objectives, provide technical assistance, and offer many regional science-based workshops and trainings. Advisors can also connect you to many of the different organizations that provide technical and financial assistance to landowners. Check out your local UCCE county website to connect with your local Advisors.



**Figure 2:** Prescribed fire in oak woodlands.

2. **Natural Resource Conservation Service (NRCS)** is a federal agency that helps ranchers, forest landowners and farmers conserve their natural resources while promoting working lands. They offer a variety of cost-sharing programs and technical expertise. For more information about NRCS, visit (<https://www.nrcs.usda.gov/>).
3. **Resource Conservation Districts (RCDs)** are a state-based conservation agency that partners with landowners to manage California’s natural resources. They have technical expertise and can assist in writing Stewardship plans. To find your local RCD, check out <https://carcd.org/rcds/find/>.
4. **Prescribed Burn Associations (PBAs)** are collaborative communities open to all that share knowledge, expertise, tools, and work in order to implement prescribed fire. They are great community-based organizations that allow landowners to take charge of managing their own properties. Visit <https://calpba.org/> to learn more or to connect with your local PBA.



**Figure 3:** Strategic shaded fuel break located in rangeland A) pre-prescribed fire, B) 1-month post-prescribed fire, and C) 6-months post-prescribed fire. Prescribed fire reduced woody fuel loads while increasing growth of native plants.