CAFWA
CALIFORNIA FOREST WATERSHED ALLIANCE

BENEFITS OF SHADED FUEL BREAKS

THE SITUATION

The 2018 Camp Fire was the deadliest and most destructive wildfire in California's history. Some advocates have cited the Camp Fire to argue that forest management is ineffective or even counter-productive in protecting our forests and communities from high-severity wildfire. But a closer look reveals just the opposite. The facts show that strategically placed fuel breaks were likely instrumental in saving the Pine Ridge School in Magalia and the community of Stirling City from the worst ravages of the Camp Fire.

Thus, notwithstanding the tragedy, the Camp Fire adds to the growing evidence demonstrating that reducing excessive fuels from our forests through targeted thinning of brush and small trees is a critically important strategy in protecting our communities and forests from megafires.

WHY FUEL BREAKS ARE IMPORTANT

Fuel breaks, in combination with ecologically based thinning and controlled burns, can be a critical tool for managing forest health and protecting communities from wildfire risk.

- They provide firefighters with more accessible safe zones to take a stand against a wildfire, or retreat from fire if the need arises.
- They provide potential areas for safe implementation of back burns, a tool that fire fighters use to fight fire.
- They can be used as effective containment lines and points of access for preemptive controlled burns meant to remove excess fuels ahead of the next wildfire.
- They also allow for the effective application of aerial retardant.

WHAT ARE FUEL BREAKS

A **fuel break** is a strip of land where the density of trees and vegetation has been reduced to slow or stop the progress of a crown fire. **Shaded fuel breaks** remove surface and ladder fuels while maintaining the forest overstory to provide habitat and reduce the in-growth of flammable shrubs.

IMPORTANT CONSIDERATIONS IN PLANNING FUEL BREAKS

Fuel breaks are most likely to be effective where:

- They are strategically placed in relation to high fuel loads and predicted fire behavior.
- They are designed to protect the forest canopy from flammable surface and ladder fuels; the application of controlled burning after thinning makes fuel breaks more effective.
- "Backcountry" fuels reduction efforts (e.g., ecologically based thinning and controlled burns) are coordinated with fuel break construction to strategically reduce fuels at a landscape scale.
- They are placed along predominant ridgelines, incorporating roads and powerline rights of way, and linked natural features, such as rivers, lakes or rocky areas.

Gov. Gavin Newsom held a news conference at Pine Ridge School in Magalia during a February 2019 tour of communities devastated by the Camp Fire. He was joined on the tour by several elected officials, including legislators and members of the Paradise Town Council.

THE CAMP FIRE: TWO EXAMPLES OF FUEL BREAKS THAT WORKED

MAGALIA PINE RIDGE SCHOOL

The Project/Background: The area surrounding Pine Ridge School in Magalia was identified on CAL FIRE's fire hazard severity map as being at great risk from wildfire. Through the coordination of local, state, and federal resources – with funding from the Sierra Nevada Conservancy and CAL FIRE – excess trees and brush were thinned in an 11-acre area surrounding the school in August 2018.

> *"Prior to the project, the area around the school was a solid wall of trees and branches. Thanks to the tree thinning work ahead of the Camp Fire, the school and forest survived the flames." – Calli-Jane DeAnda, Executive Director, Butte County Fire Safe Council*

MOSQUITO FUEL BREAK

The Project/Background: A fuel break on Sierra Pacific Industries-managed land was completed in May 2018 to protect both high-value timber on the property and residential areas in the community of Stirling City. As a result, CAL FIRE was able to stop the north west movement of the flanking edge of the Camp Fire, which saved additional acres and homes from burning and likely saved the community of Stirling City.

> *"Shaded fuel breaks create an area on the landscape that moderates fire behavior and makes it possible for firefighters to complete backfire operations safely. Shaded fuel breaks effectively protected both communities and nearby forested areas during the Camp Fire by giving fire crews a safe place to slow or stop fire progression." – Fire Chief David Hawks, CalFire Butte Unit*

The California Forest Watershed Alliance (CAFWA) is an urban-rural coalition representing water interests, local governments, the conservation community, agriculture, and the forestry sector, created to promote the restoration and improvement of California's forested watersheds. For more information, visit www.caforestsandwatersheds.org.