Reducing the Destructiveness of Wildfires:

Promoting Defensible Space in California

The Executive Summary

Defensible Space Is Valuable Tool to Reduce Destructive Wildfires

Reducing Home Ignitions Helps Prevent Destructiveness of Wildfires. Many of the largest and most damaging wildfires have occured in recent years. One approach to mitigating future wildfire disasters is to reduce the chance that homes ignite when wildfires occur nearby, such as through the maintenance of defensible space—areas free of excess or dead vegetation—around homes. Importantly, maintaining defensible space not only helps to protect that home, it also reduces the risk that the wildfire will spread to neighboring homes, thereby helping to protect communities.

Existing Defensible Space Requirements. Under existing state and local laws, homeowners in certain areas at high risk of wildfires are required to create and maintain defensible space. As shown in the nearby figure, state law requires implementation of certain defensible space practices within three separate zones around structures.

State and Local Agencies Administer Various Defensible Space Programs. The California Department of Forestry and Fire Protection (CalFire) and local agencies administer a range of programs aimed at improving compliance with defensible space requirements. The most common defensible space activity is inspections of properties to assess compliance. Other programs include homeowner education activities, financial or other assistance, and enforcement.



Achieving Compliance Complicated by Various Factors

Many communities report relatively high compliance rates with defensible space regulations, but there is significant variation by location. Moreover, given the large number of homes in fire-prone areas in California, even a moderately high compliance rate means that there are probably hundreds of thousands of homes out of compliance throughout the state. We find that efforts to improve compliance rates are complicated by factors including:

- Fragmented and Overlapping Responsibilities. There are hundreds of state and local agencies involved in defensible space programs. Without consistent coordination, this can lead to gaps in the delivery of programs in some places and potential duplication in others.
- Lack of Consistent Statewide Data. A lack of consistent statewide data on defensible space inspections and compliance makes it difficult to (1) identify where gaps in or overlapping inspection programs are occurring, (2) fully understand the extent to which homeowners are out of compliance with defensible space regulations in different communities, and (3) assess the effectiveness of programs at improving compliance.
- Lack of Resources, Authority, and Motivation. Other key barriers to state and local agency efforts to improve compliance include insufficient funding and staffing, authority to fine non-compliant homeowners, and motivation to implement strong defensible space programs.
- Cost-Effectiveness of Defensible Space Not Well Understood. The research literature has not yet provided clear information on the cost-effectiveness of maintaining defensible space compared to other risk-reduction activities, or on the cost-effectiveness of different programs designed to improve defensible space compliance. This lack of information makes it difficult to determine which specific steps, if any, state or local agencies should undertake.

Recommend Legislature Take Steps to Improve Compliance

Improve Data Collection, Sharing, and Quality. We recommend the Legislature take steps to improve the availability of consistent information on defensible space programs, which would benefit policymakers and program administrators. This includes increased state support for a shared data collector application and ensuring that state and local agencies feed inspections data into a centralized system.

Take Steps to Address Other Barriers to State and Local Efforts. To begin addressing the barriers of lack of resources, authority, and motivation, we recommend: (1) increased ongoing resources for CalFire inspections, (2) providing CalFire with administrative fee authority, and (3) using oversight of reported compliance rates to improve transparency and help motivate agency actions.

Support Additional Research Efforts to Identify Effective Strategies. We recommend that data collection and evaluation be integrated in defensible space grant programs as a condition of future state funding. We further recommend that the state fund demonstration projects to provide better information on the most cost-effective strategies for improving compliance, including the use of newer strategies involving insurance and emerging technology.

Conduct Oversight to Inform Future Decisions. We recommend that the Legislature conduct ongoing oversight focused on (1) assessing the size and location of gaps and overlaps in programs, (2) the implementation of CalFire's new training program, (3) the cost-effectiveness of defensible space activities, and (4) the outcomes of current and future demonstration projects. This oversight could inform future policy decisions and help the state target limited funding in ways that increase compliance and reduce wildfire risk to homeowners and communities.

