



Preparing a Community Wildfire Protection Plan

A Handbook for Wildland–Urban Interface Communities

Sponsored By:

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Photo: CA Dept. of Forestry and Fire Protection

Introduction

The idea for community-based forest planning and prioritization is neither novel nor new. However, the incentive for communities to engage in comprehensive forest planning and prioritization was given new and unprecedented impetus with the enactment of the Healthy Forests Restoration Act (HFRA) in 2003.

This landmark legislation includes the first meaningful statutory incentives for the US Forest Service (USFS) and the Bureau of Land Management (BLM) to give consideration to the priorities of local communities as they develop and implement forest management and hazardous fuel reduction projects.

In order for a community to take full advantage of this new opportunity, it must first prepare a Community Wildfire Protection Plan (CWPP). Local wildfire protection plans can take a variety of forms, based on the needs of the people involved in their development. Community Wildfire Protection Plans may address issues such as wildfire response, hazard mitigation, community preparedness, or structure protection—or all of the above.

The process of developing a CWPP can help a community clarify and refine its priorities for the protection of life, property, and critical infrastructure in the wildland–urban interface. It also can lead community members through valuable discussions regarding management options and implications for the surrounding watershed.

The language in the HFRA provides maximum flexibility for communities to determine the substance and detail of their plans and the procedures they use to develop them. Because the legislation is general in nature, some communities may benefit from assistance on how to prepare such a plan.

This *Handbook* is intended to provide communities with a concise, step-by-step guide to use in developing a CWPP. It addresses, in a straightforward manner, issues such as who to involve in developing a plan, how to convene other interested parties, what elements to consider in assessing community risks and priorities, and how to develop a mitigation or protection plan to address those risks.

This guide is not a legal document, although the recommendations contained here carefully conform to both the spirit and the letter of the HFRA. The outline provided offers one of several possible approaches to planning. We hope it will prove useful in helping at-risk communities establish recommendations and priorities that protect their citizens, homes, and essential infrastructure and resources from the destruction of catastrophic wildfire.

Cover images



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Discussion

Communities and the Wildland–Urban Interface

The wildland–urban interface (WUI) is commonly described as the zone where structures and other human development meet and intermingle with undeveloped wildland or vegetative fuels. This WUI zone poses tremendous risks to life, property, and infrastructure in associated communities and is one of the most dangerous and complicated situations firefighters face.

Both the National Fire Plan and the Ten-Year Comprehensive Strategy for Reducing Wildland Fire Risks to Communities and the Environment place a priority on working collaboratively within communities in the WUI to reduce their risk from large-scale wildfire.

The HFRA builds on existing efforts to restore healthy forest conditions near communities and essential community infrastructure by authorizing expedited environmental assessment, administrative appeals, and legal review for hazardous fuels projects on federal land.

The Act emphasizes the need for federal agencies to work collaboratively with communities in developing hazardous fuel reduction projects, and it places priority on treatment areas identified by communities themselves in a CWPP.

Role of Community Wildfire Protection Plans

The HFRA provides communities with a tremendous opportunity to influence where and how federal agencies implement fuel reduction projects on federal lands and how additional federal funds may be distributed for projects on nonfederal lands. A CWPP is the most effective way to take advantage of this opportunity.

Local wildfire protection plans can take a variety of forms, based on the needs of those involved in their development. They can be as simple or complex as a community desires.

The *minimum requirements* for a CWPP as described in the HFRA are:

- (1) **Collaboration:** A CWPP must be collaboratively developed by local and state government representatives, in consultation with federal agencies and other interested parties.
- (2) **Prioritized Fuel Reduction:** A CWPP must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure.
- (3) **Treatment of Structural Ignitability:** A CWPP must recommend measures that homeowners and communities can take to reduce the ignitability of structures throughout the area addressed by the plan.

The HFRA requires that three entities must mutually agree to the final contents of a CWPP:

- The applicable local government (i.e., counties or cities);
- The local fire department(s); and
- The state entity responsible for forest management.

In addition, these entities are directed to consult with and involve local representatives of the USFS and BLM and other interested parties or persons in the development of the plan. The process is intended to be open and collaborative, as



Photo: State and Private Forestry, Cooperative Programs Pacific Northwest Region

described in the Ten-Year Strategy, involving local and state officials, federal land managers, and the broad range of interested stakeholders.

If a community already has a plan that meets these requirements, the community need not develop an additional plan for the purposes of the HFRA.

Benefits to Communities

In the context of the HFRA, a CWPP offers a variety of benefits to communities at risk from wildland fire. Among those benefits is the opportunity to establish a localized definition and boundary for the wildland–urban interface.

In the absence of a CWPP, the HFRA limits the WUI to within $\frac{1}{2}$ mile of a community’s boundary or within $1\frac{1}{2}$ miles when mitigating circumstances exist, such as sustained steep slopes or geographic features aiding in creating a fire break. Fuels treatments can occur along evacuation routes regardless of their distance from the community. At least 50 percent of all funds appropriated for projects under the HFRA must be used within the WUI as defined by either a CWPP or by the limited definition provided in the HFRA when no CWPP exists.¹

In addition to giving communities the flexibility to define their own WUI, the HFRA also gives priority to projects and treatment areas identified in a CWPP by directing federal agencies to give specific consideration to fuel reduction projects that implement those plans. If a federal agency proposes a fuel treatment project in an area addressed by a community plan but identifies a different treatment method, the agency must also evaluate the community’s recommendation as part of the project’s environmental assessment process.

Preparing a Community Wildfire Protection Plan

- These step-by-step recommendations are intended to help communities develop a wildfire protection plan that addresses the core elements of community protection. Items required under the HFRA are addressed, as are some additional issues that often are incorporated into wildfire protection planning. Actions beyond those listed in the legislation are not required for the purposes of the HFRA.
- Community fire planning need not be a complex process. A community can use this outline to develop a fire plan that is as extensive or as basic as is appropriate and desired by the community.
- A key element in community fire planning should be the meaningful discussion it promotes among community members regarding their priorities for local fire protection and forest management. This handbook should help to facilitate these local discussions.

¹ In the absence of a CWPP, Section 101 (16) of the HFRA defines the wildland–urban interface as “(i) an area extending $\frac{1}{2}$ mile from the boundary of an at-risk community; (ii) an area within $1\frac{1}{2}$ miles of the boundary of an at-risk community, including any land that (I) has a sustained steep slope that creates the potential for wildfire behavior endangering the at-risk community; (II) has a geographic feature that aids in creating an effective fire break, such as a road or ridge top; or (III) is in condition class 3, as documented by the Secretary in the project-specific environmental analysis; (iii) an area that is adjacent to an evacuation route for an at-risk community that the Secretary determines, in cooperation with the at-risk community, requires hazardous fuels reduction to provide safer evacuation form the at-risk community.”

✓ **STEP ONE: Convene Decisionmakers**

The initial step in developing a CWPP should be formation of an operating group with representation from local government, local fire authorities, and the state agency responsible for forest management.

Together, these three entities form the core decision-making team responsible for the development of a CWPP as described in the HFRA. The core team members must mutually agree on the plan's final contents.

In communities where several local governments and fire departments are within the planning area, each level of government/authority may need to convene ahead of time and identify a single representative to participate, on its behalf, as a core team member.

✓ **STEP TWO: Involve Federal Agencies²**

Once convened, members of the core team should engage local representatives of the USFS and BLM to begin sharing perspectives, priorities, and other information relevant to the planning process.³

Because of their on-the-ground experience, mapping capabilities, and knowledge of natural resource planning, these local land management professionals will be key partners for the core team. In some landscapes, they will also be largely responsible for implementing the priorities established in the resulting CWPP.

✓ **STEP THREE: Engage Interested Parties**

The success of a CWPP also hinges on the ability of the core team to effectively involve a broad range of local stakeholders, particularly when the landscape includes active and organized neighborhood associations, community forestry organizations that work in forest management, and other stakeholder groups that display a commitment to fire protection and fuels management.

Substantive input from a diversity of interests will ensure that the final document reflects the highest priorities of the community. It will also help to facilitate timely implementation of recommended projects. In some circumstances, the core team may wish to invite local community leaders or stakeholder representatives to work along with them in final decisionmaking.

As early as possible, core team members should contact and seek active involvement from key stakeholders and constituencies such as:

- Existing collaborative forest management groups
- City Council members
- Resource Advisory Committees
- Homeowners Associations—particularly those representing subdivisions in the WUI
- Division of Wildlife/Fish and Game—to identify locally significant habitats
- Department of Transportation—to identify key escape corridors
- Local and/or state emergency management agencies
- Water districts—to identify key water infrastructure
- Utilities
- Recreation organizations
- Environmental organizations
- Forest products interests
- Local Chambers of Commerce
- Watershed councils

This list provides a starting point and is by no means exhaustive.



² Sec. 103 (b)(2) of the Act states that “the Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the planning process and recommendations concerning community wildfire protection plans.”

³ A CWPP is legally applicable to federal lands only if they are managed by the USFS or the BLM. Nothing in the Act requires a community to exclude other federal agencies—such as the Fish and Wildlife Service or the National Park Service—from planning efforts, but those agencies are not bound by the provisions of the HFRA.



Photo: New Mexico State Forestry

In addition to directly contacting key individuals and organizations, core team members may want to consider using a public notice or public meeting process to acquire additional, more generalized input as the plan is developed.

✓ **STEP FOUR:** Establish a Community Base Map

Using available technology and local expertise, the core team and key partners should develop a base map of the community and adjacent landscapes of interest. This map will provide a visual information baseline from which community members can assess and make recommendations regarding protection and risk-reduction priorities.

To the extent practicable, the map should identify:

- Inhabited areas at potential risk to wildland fire;
- Areas containing critical human infrastructure—such as escape routes, municipal water supply structures, and major power or communication lines—that are at risk from fire disturbance events; and
- A preliminary designation of the community's WUI zone.

✓ **STEP FIVE:** Develop a Community Risk Assessment

The development of a community risk assessment will help the core team and community members more effectively prioritize areas for treatment and identify the highest priority uses for available financial and human resources.

A meaningful community assessment can be developed by considering the risk factors identified below. Choose an appropriate adjective rating (such as high, medium, and low) that best represents the risk to the community posed by each factor. Display the results on the base map to develop a useful tool for the final decision-making process.

State and federal land managers will be a valuable resource in helping communities locate the best available data and in producing quality maps that display and aid assessment of that data. Engaging key stakeholders in the rating process will be essential to a successful outcome.

A. Fuel Hazards

To the extent practicable, evaluate the vegetative fuels on federal and nonfederal land within or near the community. Identify specific areas where the condition of vegetative fuels is such that, if ignited, they would pose a significant threat to the community or essential community infrastructure. Consider how the local topography (such as slope, aspect, and elevation) may affect potential fire behavior.

Identify areas affected by windthrow, ice storms, or insect and disease epidemics where fuels treatment would reduce wildfire risks to communities and/or their essential infrastructure.

State and federal resource planning documents can be a valuable source of information on local forest and rangeland conditions.

Rate each area of identified hazardous fuels and show each on the base map as a high, medium, or low threat to the community.

B. Risk of Wildfire Occurrence

Using historical data and local knowledge, determine the common causes and relative frequency of wildfires in the vicinity of the community. Consider the range of factors, including critical weather patterns, that may contribute to the probability of fire ignitions and/or extreme fire behavior.

Use relative ratings such as high, medium, and low to show areas of concern for fire starts on the base map.

C. Homes, Businesses, and Essential Infrastructure at Risk

Assess the vulnerability of structures within the community to ignition from firebrands, radiation, and convection. Document areas of concern.

Identify specific human improvements within or adjacent to the community, such as homes, businesses, and essential infrastructure (e.g., escape routes, municipal water supply structures, and major power and communication lines) that would be adversely impacted by wildfire.

Categorize all identified areas needing protection using ratings of high, medium, or low, and show them on the base map.

D. Other Community Values at Risk

At the community's option, the risk assessment may also consider other areas of community importance, such as critical wildlife habitat; significant recreation and scenic areas; and landscapes of historical, economic, or cultural value that would benefit from treatment to reduce wildfire risks. Additional recommendations from local stakeholders should be incorporated as appropriate.

Categorize all identified areas that warrant protection using the ratings of high, medium, or low, and show them on the base map.

E. Local Preparedness and Firefighting Capability

Assess the level of the community's emergency preparedness, including evacuation planning, safety zones, and fire assistance agreements, as well as the response capability of community and cooperator fire protection forces. Consider the insurance industry ISO rating, if available and applicable. Use the knowledge and experience of local officials to identify areas in need of improvement.

Incorporate local preparedness information into the base map as appropriate.



✓ **STEP SIX: Establish Community Hazard Reduction Priorities and Recommendations to Reduce Structural Ignitability**

Once the community assessment and base map are completed, the core team should convene all interested parties to discuss the results and their implications for local protection and hazard mitigation needs. A key objective of these discussions is to develop the community's prioritized recommendations for fuel treatment projects on federal and nonfederal lands in the WUI, along with the preferred treatment methods for those projects.

Recommendations should also be developed regarding actions that individuals and the community can take to reduce the ignitability of homes and other structures in the community's WUI zone.

While local interests are gathered, communities may also want to take this opportunity to identify and develop strategies to improve their emergency preparedness and fire response capability.

The discussion and identification of community priorities should be as open and collaborative as possible. Diverse community involvement at this stage is critical to the ultimate success of the CWPP.

Recommendations included in the final CWPP should clearly indicate whether priority projects primarily serve to protect the community and its essential infrastructure or are geared toward reducing risks to the other community values. Under the provisions of the HFRA, only projects that primarily serve to protect communities and essential infrastructure are eligible for the minimum 50 percent WUI funding specified in the legislation.

✓ **STEP SEVEN: Develop an Action Plan and Assessment Strategy**

Before finalizing the CWPP, core team members and key community partners should consider developing an action plan that identifies roles and responsibilities, funding needs, and timetables for carrying out the highest priority projects.

Additional consideration should be given to establishing an assessment strategy for the CWPP to ensure that the document maintains its relevance and effectiveness over the long term.⁴

✓ **STEP EIGHT: Finalize the Community Wildfire Protection Plan⁵**

The final step in developing a CWPP is for the core team to reconvene and mutually agree on the fuels treatment priorities, preferred methods for fuels treatment projects, the location of the wildland-urban interface, structural ignitability recommendations, and other information and actions to be contained in the final document.

If an associated action plan has not been developed, the core team should identify a strategy for communicating the results of the planning process to community members and key land management partners in a timely manner.

⁴ Community planning participants may also want to participate in multiparty monitoring of USFS and BLM projects developed under the HFRA as provided for in Sec.102 (g)(5) of the legislation: “In an area where significant interest is expressed in multiparty monitoring, the Secretary shall establish a multiparty monitoring, evaluation, and accountability process in order to assess the positive or negative ecological and social effects of authorized hazardous fuels reductions projects.”

⁵ Some states have statutes that may require an environmental analysis for plans adopted by local or state agencies. In such states, core team members should determine whether formal environmental analysis is required before finalizing their plans.

Summary and Checklist

✓ **Step One:** Convene Decisionmakers

- Form a core team made up of representatives from the appropriate local governments, local fire authority, and state agency responsible for forest management.

✓ **Step Two:** Involve Federal Agencies

- Identify and engage local representatives of the USFS and BLM.
- Contact and involve other land management agencies as appropriate.

✓ **Step Three:** Engage Interested Parties

- Contact and encourage active involvement in plan development from a broad range of interested organizations and stakeholders.

✓ **Step Four:** Establish a Community Base Map

- Work with partners to establish a baseline map of the community that defines the community's WUI and displays inhabited areas at risk, forested areas that contain critical human infrastructure, and forest areas at risk for large-scale fire disturbance.

✓ **Step Five:** Develop a Community Risk Assessment

- Work with partners to develop a community risk assessment that considers fuel hazards; risk of wildfire occurrence; homes, businesses, and essential infrastructure at risk; other community values at risk; and local preparedness capability.
- Rate the level of risk for each factor and incorporate into the base map as appropriate.

✓ **Step Six:** Establish Community Priorities and Recommendations

- Use the base map and community risk assessment to facilitate a collaborative community discussion that leads to the identification of local priorities for fuel treatment, reducing structural ignitability, and other issues of interest, such as improving fire response capability.
- Clearly indicate whether priority projects are directly related to protection of communities and essential infrastructure or to reducing wildfire risks to other community values.

✓ **Step Seven:** Develop an Action Plan and Assessment Strategy

- Consider developing a detailed implementation strategy to accompany the CWPP, as well as a monitoring plan that will ensure its long-term success.

✓ **Step Eight:** Finalize Community Wildfire Protection Plan

- Finalize the CWPP and communicate the results to community and key partners.

Sponsor Organizations

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For an electronic version of this Handbook and the latest information visit:
www.safnet.org/policyandpress/cwpp.cfm

Additional Resources on the Web:

- Federal Agency Implementation Guidance for the Healthy Forest Initiative and the Healthy Forest Restoration Act: www.fs.fed.us/projects/hfi/field-guide/
- Field Guidance for Identifying and Prioritizing Communities at Risk: www.stateforesters.org/reports/COMMUNITIESATRISKFG.pdf
- The National Fire Plan: www.fireplan.gov
- Fire Safe Councils: www.firesafecouncil.org
- Western Governors Association: www.westgov.org
- Collaboration:
www.redlodgeclearinghouse.org
www.snre.umich.edu/emi/lessons/index.htm

Examples of Community Fire Plans

(Note: these plans may not meet the requirements of HFRA, because they were created prior to its enactment)

Josephine County, Oregon: www.co.josephine.or.us/wildfire/index.htm

Applegate Fire Plan: www.grayback.com/applegate-valley/fireplan/index.asp

Colorado Springs, CO: csfd.springsgov.com/wildfiremitigation.pdf

Jefferson County, Colorado: www.co.jefferson.co.us/ext/dpt/admin_svcs/emergmgmt/index.htm

Lower Mattole Fire Plan: www.mattole.org/html/publications_publication_2.html

Trinity County Fire Management Plan: users.snowcrest.net/tcrd/

Want to help protect your community from wildfire risk?

Check out this *NEW* Handbook
for preparing community wildfire protection plans!

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