



U.S. Fire Administration  
Working for a fire-safe America

# Creating a Community Wildfire Protection Plan

May 2020



FEMA

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## **Mission Statement**

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We support and strengthen fire and emergency medical services and stakeholders to prepare for, prevent, mitigate and respond to all hazards.

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## Overview

This is not an all-inclusive document but a guide to assist you in creating a [Community Wildfire Protection Plan \(CWPP\)](#). Remember, the more agency representatives and resident leaders you include in helping you create the document, the better the plan you will have. Please note that items included as suggestions in the template are by no means inclusive of all components your community needs to work on. You will need to identify your own unique risks and create your own solutions.

Do not forget to connect with state and local entities who may also be able to provide you with additional guidance about local risks and code requirements. The [state of Texas](#), for example, provides some excellent guidance on developing a CWPP. Please refer to the reference materials added to the end of this document for additional guidance.

This PDF file contains attachments that you might not be able to see if you view the file in your web browser. Save it to your device and open it in a PDF application like Adobe Acrobat.



Click when you see this icon to download a template to complete, print and include with your plan.

## Key Stakeholders

In this area, all individuals who live/work in the community, tribe(s), entities that manage infrastructure (cell towers, utilities, schools and other public facilities), those who provide emergency response (fire/police, etc.), land managers (federal, such as U.S. Forest Service (USFS) and U.S. Department of the Interior (DOI), and state and local representatives, etc.), granges, 4-H groups, faith-based groups, resource conservation districts and everyone who is interested in participating in creating the CWPP.

Some communities also indicate whether a representative was contacted and declined to participate. This is not an all-inclusive list. You can add or subtract contacts as needed. The individuals participating should reflect the demographics of your community. The more participants that you include, the better the plan you will have by getting a real understanding about the needs and strengths in your jurisdiction, creating a whole community planning approach that includes all members of your community.

For example, you should include individuals who have disabilities, pet and livestock owners, families, and seniors, and as much as possible, get an accurate representation of the people who live and work in the area to ensure that all their needs and strengths are included in your assessment.

## Identified Risk/Fire History Maps

This is where you document research completed before your community meeting that you have made available to everyone participating. This information helps everyone better understand the strengths and needs of the community and provides facts to speak to during your meeting. Be sure to include maps with your plan.

Check out the USFS's brand-new [risk-mapping tool](#) for assistance with mapping and identifying community risk.

1. Fire history: The [USGS](#) provides some information. You can also work with your state forester or USFS, U.S. Park Service or DOI representatives to give you guidance if they are available.

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You can also draw your own design on a local map. It is important to understand fire history because sometimes wildfires will burn periodically in the same area. It is also important to understand what areas have burned in the past because wildfire may burn more intensely in an area that has not burned for many years.

Additional fire history information can also be found on the U.S. Department of Agriculture Forest Service's "[All Lands Wildfire Risk Portal](#)." This webpage also has information that can help you in the process of crafting creative wildfire safety project solutions.

2. Use a topographic map with assets at risk identified. Use [USGS maps](#). These maps can be downloaded free of charge.
3. Use vegetation fuels class maps. Check with [Landfire](#) and/or a local forester.
4. Use research about the demographics of the local population to identify capabilities and better understand how to work with and for the community. For example, is there a large number of residents who would need assistance in the event of an evacuation due to an aging population or residents without cars? Will educational/outreach materials need to be produced in more than one language or use infographics? Check out [City-Data](#).
5. Additional research tools that can help with data to assist communities located in much more rural areas are provided by [Headwater's Economics](#).
6. You may want to include a map identifying where fire and other emergency services buildings and resources are located, including fire stations and hydrant/water source locations.

## Assets at Risk

It is here where you define the conditions of the infrastructure/homes at a broad scale. It is highly encouraged that you consult a local, federal or state entity and/or a wildfire mitigation specialist to assist you.

You want to take a comprehensive look at conditions that are common to homes in the area; remember, you are not individually assessing each home but rather are looking at the community as a whole. If the community you are assessing is large, you may want to create sections for the various neighborhoods and homeowners associations (HOAs), identifying home components that lend themselves to home ignition from embers in each neighborhood depending on the type of home construction found there.

Research has shown that most homes/structures ignite and burn during a wildfire because of construction components that lend themselves to easily ignite and because of poor landscape maintenance around the home. As you identify common characteristics of homes typically found in the area and define areas of home/infrastructure construction that could contribute to structure ignition, you can identify actions that can reduce your risk of loss. Some of these design features could include things such as wood shake shingle roofs; stucco roofs without bird stops; gutters that are full of material because of overhanging trees; open eaves; decks with material stored underneath; dry, dead vegetation and trash (human treasures) immediately next to homes and outbuildings; and others, focusing on the first 5 feet.

For assistance, refer to the [U.S. Fire Administration flyer](#), the [Institute for Business and Home Safety](#), the [Fire Adapted Communities Learning Network Self-Assessment Tool](#) and the [National Fire Protection Association](#).

Below is an example table to help you. This is not all inclusive; please add your own identified potential ignition sources.

<b>Example</b>		
<b>Home structure component</b>	<b>Potential ignition source</b>	<b>Home maintenance suggestion</b>
Decks	Material stored underneath.	Remove and place in closed shed, replace, or treat with ignition-resistant materials.
Gutters	Leaves and pine needles in gutters.	Clean frequently, especially before fire season.
Eaves	Large gaps around.	Caulk or fill and paint over.
Vents	Open unscreened.	Screen with metal screen of about 1/8 inch or replace with baffled or other fire-resistive vents.
Roofs	Poorly maintained, made of wood shakes or other combustible material.	Replace roofs with ignition-resistant designs (e.g., Class A, metal).
Home siding	Poorly maintained, made of wood shakes or other combustible material.	Replace home siding with ignition-resistant designs (e.g., stucco).
Windows and doors	Single-pane windows, gaps around doors.	Replace windows with double-pane, tempered glass. Replace doors with fire-code rated ones. Seal gaps around windows and doors to keep embers out.
Landscape around homes	Overgrown with weeds; dry, dead vegetative matter; large flammable bushes under windows.	Pay special attention to make sure the area within the first 5 feet of the home is lean and green; remove open trash receptacles, building materials and trash from next to the home.
Stucco roof	No bird stops at the ends.	Clean debris such as nests from openings and cement ends or add bird stops.
Fencing	Flammable construction attached to the home.	Replace at least 5 feet of the flammable fence that attaches to the home.

Do not forget to pay attention to outbuildings (sheds, chicken coops, etc.) that are within 100 feet of the home that, when they burn, could cause the main structure to ignite. This is just a sample. Please add additional items that you identify.

<b>Example</b>		
<b>Outbuildings/ infrastructure</b>	<b>Potential ignition source</b>	<b>Maintenance suggestion</b>
Sheds	Gas cans outside.	Store inside locked shed, preferably inside a locker.
Chicken coops	No door; hay and flammable material inside.	Install door.
Pump house	Dead vegetation around outside.	Remove all flammable material from around the building focusing on the first 5 feet and improving landscaping within 100 feet.

Address the condition of community buildings such as schools and churches. Also examine the condition of the vegetation along the roads to improve evacuation needs. Are there at least two separate ways out of the community?

Identify updates needed to critical infrastructure such as public utilities. For example, if power to the area went out due to wildfire, would the local water facility still be able to supply water? Perhaps there is a need for an alternatively powered generator. Is there an area cleared around power poles? (This is something community members could work on in conjunction with the local utility company.)

<b>Example</b>		
<b>Critical infrastructure</b>	<b>Potential hazard</b>	<b>Maintenance suggestion</b>
Roads	Roads are not properly marked with signs.	Install metal reflective signs that will make it easier for emergency responders in smoky conditions.
Fire station	Vents are not screened on the bottom of the building and doors are not properly sealed.	Install 1/8-inch screen, and seal around doors to prevent embers from entering the building.
Power poles	Dead vegetation growing around and tree limbs hanging over.	Work with the local utility company to remove all flammable material from around the power pole, especially within the first 5 feet, removing tree limbs hanging over power lines.



It is important to include road departments and public works departments to address other infrastructure conditions. Another consideration is if bridges are load tested to ensure that fire trucks can use them safely. Are roads adequately identified with metal reflective signage that would not burn during a wildfire?

## Forest Health/Fire Fuels Class

Using [Landfire](#) or other data and experienced foresters and/or wildfire mitigation specialists, examine the conditions of vegetation within and surrounding the community starting with landscaping surrounding the homes. Identify the general health of the natural area. Are there problems with invasive pests? Were there large storms in the area, and is there a lot of deadfall? Is there a need for prescribed fire, mechanical or chemical treatments to reduce fuel load?

Be sure that you refer to experienced, credentialed specialists. A certified arborist can help with landscaping questions surrounding homes, and a certified forester (agency representative or paid professional) may be someone to whom you refer to help you better understand what projects you can work on surrounding the community that can improve forest health.

Below is a sample. Your list will identify local forest health issues within and surrounding the community.

### Forest/landscape health issues identified

This list is just a sample. You will have your own unique insect and disease issues that you will need to identify with the help of credentialed specialists for guidance. The guidance to restore a resilient landscape may require mechanical work, prescribed fire or other methods implemented by qualified professionals. Again, if you are completing a CWPP for a large area, you may want to break up these forest/landscape health issues identified by neighborhood or HOA.

Health issue identified	Professional guidance	Action to improve forest/landscape health
Insect issue example: oak mortality due to goldspotted oak borer	If located around homes, arborist/forester for landscape along roads and surrounding community.	
Invasive plant issue example: <a href="#">cheatgrass</a>	If located around homes, arborist/forester range specialist for landscape along roads and surrounding community.	
Flammable vegetation issue example: deadfall due to windstorms	Depending on location: if surrounding homes, community effort; if located in natural area, consult forester or land manager.	

Health issue identified	Professional guidance	Action to improve forest/ landscape health
Invasive plant issue example: <a href="#">overgrowth of invasive bamboo</a>	If located around homes, arborist/forester range specialist for landscape along roads and surrounding community.	
Invasive plant issue example: <a href="#">invasive broom</a>	Depending on location: if surrounding homes, community effort; if located in natural area, consult forester or land manager.	Example: Two important ways to manage brooms are mechanical removal and treatment with herbicides. Broom spreads through seed dispersal, so maintaining a healthy natural vegetation and reducing soil disturbance will minimize the spread of broom.
Unhealthy landscape issue example: <a href="#">overgrown woodlots between homes</a>	Depending on location: if surrounding homes, community effort; if located in natural area, consult forester or land manager.	

## Action Plan

It is here where you identify and prioritize project work that needs to be completed in your community. This project work should be prioritized based upon what is identified as the greatest risk or where you can make the greatest impact. Identify the capability of your community to complete projects. Oftentimes it is preferable to start with simple low-cost projects that can be effective, and gain buy-in by community members. Sometimes you need to consolidate small wins into larger ones.

Include activities that engage volunteer action. Youth groups can also provide assistance. Some colleges and high schools encourage youth to complete community service projects as part of their curriculum.

Another source of volunteer manpower to complete project work may come from local businesses. These entities, such as various big box stores, may also donate materials or resources to help you with project work.

As you become more confident in completing identified projects, you may want to explore federal grant funding, but keep in mind that there will be a lot of financial and other project management activities that will need to be followed. Make sure that you have someone or a reputable group that can manage such project work. Below are just a few samples of project work that can help your community become safer in the event of a wildfire.

Make sure that you tie in your goals to the [National Cohesive Wildland Fire Management Strategy](#).

## Action plan

### Goal 1: Create fire-adapted communities.

Goal	Crucial activities	Success metric	Project lead and partners	Importance
Pursue Firewise USA® site recognition.	Complete risk assessment with USFS, plan Firewise Day, write community action plan.	National recognition as a Firewise USA site by 2021.	Project lead: local fire prevention officer, Happy Town Fire Department.  Partners: USFS.	High
Provide information to recreational users about fire safety.	Posters about “One Less Spark – One Less Wildfire” at park kiosks.	Reduced number of recreational user wildfire ignitions.	Project lead: park ranger.  Partners: Boy/Girl Scouts, other youth volunteers.	Medium
Reducing risks for home ignition.	Completing risk assessment of individual homes.	More homes compliant to local ordinances.	Project lead: community mitigation specialist/ building or code enforcement.  Partners: office of emergency service/ local resource conservation district.	High

### Goal 2: Create fire-resilient landscapes through collaboration on public and private lands.

Goal	Crucial activities	Success metric	Project lead and partners	Importance
Remove flammable material around homes in neighborhood	Organize community clean-up day. Secure a donated dumpster. Plan and host event.	Amount of material removed.	Project lead: local fire prevention officer, Happy Town Fire Department.  Partners: youth and other neighborhood grass-roots volunteer efforts.	High

Goal	Crucial activities	Success metric	Project lead and partners	Importance
<p>Assist vulnerable populations with fuel reduction assistance.</p> <p>Focus: helping to improve the wildfire safety of the whole neighborhood by helping those who need assistance.</p>	<p>Organize event to help homeowners who cannot do landscaping maintenance on their own.</p>	<p>Number of residents assisted.</p>	<p>Project lead: senior or community center coordinator.</p> <p>Partners: local volunteers, donations from private corporations.</p>	<p>High</p>
<p>Remove deadfall left by windstorms.</p> <p>Focus: remove flammable materials located within the first 100 feet around homes.</p>	<p>Secure the donation of a chipper, green dumpster or waste facility that allows green dumping. Advertise via local newsletter, banner at fire station or web page the time/date when chipper or dump will be available to give homeowners adequate time to collect materials that have accumulated around their homes.</p>	<p>Amount of material removed.</p>	<p>Project lead: community mitigation specialist/building or code enforcement.</p> <p>Partners: office of emergency service/local resource conservation district.</p>	<p>Medium</p>

**Goal 3: Improve fire response capabilities.**

Goal	Crucial activities	Success metric	Project lead and partners	Importance
Provide weather information to local emergency responders specially to assist with wildfire response.	Installing weather monitoring equipment and computer applications.	Provide daily updates and, during a wildfire weather event, hourly updates.	Project lead: local fire department.  Partners: local emergency managers, USFS, perhaps private industry grant, National Oceanic and Atmospheric Administration.	High
Develop a communications plan for sending information and notices to the public.	Integrate with public alerts and warnings plan for status updates and instructions for evacuation; coordinate with community leaders.	Public is informed of current event status, what to do, where to go, and when and how to leave in an evacuation.	Local emergency manager, fire department, communications team, emergency alert staff, and local news and weather affiliates, and coordinate with community leaders.	High
Identify water sources.	Add reflective blue marker in center of road where hydrant is located.	Number of hydrants marked throughout the community.	Project lead: water district/public works department in collaboration with local fire district.  Partners: grant from federal program or private industry.	Medium

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## Additional Information

Additional information can include firefighting capabilities, needed memorandums of agreement between other entities, and future development plans for the community.

Note that this document is a living document, which means that it needs to be revisited and updated as project work is completed, maintenance items are identified, or the community expands and includes new partners. Make sure that you make the document available for everyone to look at and approve before implementing.

## Signature Page

The Healthy Forests Restoration Act requires three signatures from applicable city or county, (tribal) government, local fire department(s), and the state entity responsible for forestry. Additional signatories can be added but are not required.

It is not required, but if you wish, you could include representatives from all groups that participated.

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## Reference Materials

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