

# Community Wildfire Protection Plan Guidebook

A ROADMAP TO AN UPDATED, MODERNIZED CWPP  
MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

## Contents

Introduction to CWPPs .....	2
The Collaborative Process.....	3
Collaborative mapping: Identifying boundaries, values, and risk .....	7
Formulating recommendations for structural ignitability.....	8
Developing a prioritized list of fuels reduction projects .....	11
Create a prioritized action plan .....	11
Monitoring and evaluation plan .....	12
Conclusion.....	13
Works Cited.....	14
Appendix A: Recommended data layers for a wildfire risk assessment .....	16
Appendix B: Defining the WUI .....	17
Appendix C: Resources for CWPP Updates.....	19
Appendix D: Facilitation Services.....	20

## Introduction to CWPPs

Wildfire is a natural and integral part of Montana's ecosystems. Because Montana's communities have been, and increasingly are, built in fire-prone and fire adapted ecosystems, these communities must collaboratively plan and collectively act to better live with wildland fire.

Montana's populated areas, on average, face greater wildfire risk than 42 of the 50 states in the country (USDA Forest Service, 2022). From 2005-2010, wildfires destroyed 1,209 structures in the state (Barrett 2020). As the population of the state continues to grow, and summers become hotter, drier, and longer, the problem of wildfire risk to communities is only expected to grow.

A crucial component to community preparedness is the Community Wildfire Preparedness Plan (CWPP). The Healthy Forests Restoration Act of 2003 (HFRA) encourages development of CWPPs to address community risk elements such as wildfire response, hazard mitigation, and community preparedness. Creating and regularly updating a CWPP allows a community to:

- Influence how wildfire is managed on federal and state lands,
- Identify and map wildfire hazards in the local community,
- Identify mitigation strategies that are supported by and are beneficial to the community, and
- Enable communities to receive federal HFRA funds (Miller, et al., 2020) as well as other nationally competitive grants.

According to HFRA, a CWPP must, *at minimum*:

1. Be **collaboratively developed** by local and state government representatives, in consultation with federal agencies and other interested parties.
2. Include **prioritized fuel reduction** projects that identify the areas and methods of treatment to effectively protect one or more at-risk communities and essential infrastructure.
3. Recommend measures for **treatment of structural ignitability** that homeowners and communities can take to reduce the risk that wildfire poses to structures.

Additionally, the HFRA states that 1) the applicable local government, 2) the local fire department, and 3) the state entity responsible for forest management (in this case, the DNRC) must all agree to the final CWPP components following development of the plan.

Ultimately, CWPPs assist communities in planning for, responding to, and recovering from wildfire events. That is why the Montana Forest Action Plan has committed to "supporting the revision of CWPPs, and working to align local, state, and federal resources and priorities" (Montana Forest Action Council, 2020). With this guide,

### THE PROBLEM WITH OUTDATED CWPPS

To be truly useful planning documents, CWPPs should be updated at least every five years. This may seem like a high frequency, but the reality is a lot can happen in five years: subdivisions may go in, planned fuels treatments may be implemented, and new data becomes available that provides a better understanding of wildfire risk.

Without a regularly updated CWPP, a community or county may not have an accurate understanding or representation of its current wildfire risk. Furthermore, planned risk reduction projects may not be aligned with community values, and agencies or organizations often lack the ability to effectively collaborate on risk reduction activities.

the MT DNRC provides basic guidance on creating or updating a CWPP to produce a modernized planning document. We intend for this to provide a roadmap for counties and communities as they embark on CWPP updates to create documents that are collaboratively developed by a broad range of stakeholders, address all 3 tenets of the National Cohesive Strategy (fig. 1), and are effective at guiding the implementation of mitigation projects that effectively reduce wildfire risk to communities.



**Fig 1.** The National Cohesive Strategy is a strategic framework that guides stakeholders to work collaboratively in an All Hands, All Lands approach to make meaning reductions in risk and learn to live with wildfire. By working collaboratively towards these three overarching, interacting goals, stakeholders can make progress towards meaningfully reducing their wildfire risk.

## The Collaborative Process

HFRA requires that a county or community use a collaborative process for establishing a CWPP. Beyond that requirement, however, **broad collaboration in which all key stakeholders are actively engaged and considered** in the CWPP update process is critical to an effective, implementable final CWPP document. This engagement should include not only the three necessary signatories under HFRA (local government, local fire department, and DNRC), but also local representatives of federal agencies such as the Bureau of Land Management (BLM) and Forest Service. It should also include other interested and invested parties, including forest management groups, homeowner’s associations, and the timber industry (SAF, 2004).

Note that the list of key collaborators includes individuals who would not traditionally be considered “fire experts.” This is because a fully collaborative wildfire planning process involves participation by

residents and officials outside the professional firefighting community. True engagement means that key parties are planning, working, and implementing together; the CWPP update process cannot just be one agency creating their own plan and asking for feedback.

#### POTENTIAL KEY COLLABORATORS:

The following list, modified from the 2004 “Preparing a CWPP” handbook, provides a starting point for counties and communities and is not comprehensive.

- Existing collaborative forest and/or fire management groups
- Tribal representatives
- City Council members
- Resource Advisory Councils
- Homeowner’s Associations
- Recreation organizations
- Environmental organizations
- Forest products industry
- Local Chambers of Commerce
- Watershed Councils
- Builders
- Insurance agencies
- Business owners
- Religious leaders

The following groups can identify key resources and infrastructure, such as escape corridors and significant wildlife habitat:

- MT Dept. of Fish, Wildlife, and Parks
- MT Dept. of Transportation
- Water districts
- Utility companies

For example, staffers from the planning and building departments within local governments are an often-overlooked group for inclusion in the CWPP update process. These are key participants that must be engaged early, however, as they are responsible for implementing many of the regulations and/or voluntary programs that may be recommended within a CWPP.

The full list of key collaborators will differ by county or community. In addition, some collaborators may be crucial to the entire planning process, whereas others may only need to engage in a meeting or two to offer their expertise or input. One of the first steps of the CWPP update process should be identifying what individuals or organizations need to be brought to the table and when. When in doubt on the level of engagement necessary, err on the side of more engagement; this will ensure that the final CWPP document reflects the priorities of the whole community. It will also help with the implementation of recommended projects, as these projects will already have buy-in and support from the key players.

Lessons learned from previous CWPP update processes across the country indicate that collaboration around a CWPP update is most successful when a county or community learns from their previous collaborative efforts, whether that was wildfire planning or another process (Jakes, et al., 2011). This can help identify the key people or organizations to involve and allow those facilitating the update process to address existing disagreements upfront, rather than threatening the CWPP update process later down the road.

Prior to final approval of the CWPP update, the county or community should solicit feedback from community stakeholders. This should be accomplished through a concerted public awareness campaign (i.e., targeted mailings, ads in the local newspaper, notices on the county website) that notifies community members of the CWPP update process, emphasizes the importance of community engagement, and informs the larger community of how they can provide feedback. Ideally, this feedback is provided via two-way conversations, with community meetings or online webinars that provide ample time for dialogue.

## Recommended steps to the collaborative process<sup>1</sup>:

### ☐ **Step One: Convene the core team**

- The core team will consist of representatives from local government, local fire authorities, and the state agency responsible for forest management, all of whom must agree and sign off on the plan's final contents according to HFRA.
- Local government officials may include, depending on the scale of the CWPP, city council members and/or county commissioners.
- In counties or communities where several local governments and fire departments fall within the planning area, each level of government/organization may need to identify a representative to participate on their behalf as a core team member.

### ☐ **Step Two: Involve federal agencies**

- Once the core team has been established, they should engage local representatives from the Forest Service and BLM in the planning process. In many cases, these agencies may sit on the core team as well.
- In many counties across Montana, these agencies will be responsible for implementing many of the priority projects identified within the CWPP, and are therefore crucial planning partners.
- Other federal agencies (such as the Fish and Wildlife Service or National Park Service) may be involved as well in the update process; these agencies are not, however, bound by the provisions of HFRA.

### ☐ **Step Three: Engage interested parties**

- It may be useful to think of these parties as representing the “non-fire” interests of the community, and belonging to two groups: the “local staff group” and the “citizen advisory group”
- The local staff group includes representatives from the planning and building departments from all relevant cities and counties included within the planning area. This group will likely implement many of the regulations and/or voluntary programs identified for living with wildfire, and therefore must be involved in the CWPP update process.
- The citizen advisory group encourages active, meaningful engagement from those living within the community. Representation here can include a diverse array of community members and representatives and should include

#### INCLUDING NON-TRADITIONAL STAKEHOLDERS

Low-income, youth, tribal, or other underserved populations are often excluded from the wildfire planning process. A modernized CWPP update should correct this by providing avenues, planning, and support for these populations to effectively engage with the process.

Their engagement is critical to the planning process, as these are also the populations that may face added barriers and need greater assistance to adequately prepare for and recover from a wildfire disaster.

---

<sup>1</sup> Modified from the “Preparing a CWPP” handbook (SAF, 2004) and the “Wildfire Planning Guide for Idaho Communities” (Miller, et al., 2020).

individuals who are interested and invested in the process so that they attend meetings regularly and participate actively.

- These individuals should be recruited using both mass recruitment efforts (i.e., articles in a newspaper, radio/TV ads, or mailed notices), as well as individual, one-on-one invitations to key staff members or community sparkplugs that the core team knows need to be involved.

☐ **Step Four: Call in subject matter experts**

- Some individuals or organizations may be best suited to engage with the CWPP update process in more of an advisory role. For example, representatives from the utility company and water district can advise on key infrastructure in the community or county.
- Such individuals may elect to only engage for a meeting or two to offer their expertise and advice, and then leave it to the larger group of engaged stakeholders to incorporate that information into the CWPP document.
- In other counties or communities, however, those individuals or organizations may wish to stay involved for the entirety of the process, in which case they should be given a seat at the table within the broader CWPP update team.

☐ **Step Five: Solicit broad public feedback**

- This step should be taken when the CWPP update team is close to a final draft for the CWPP update and will, again, involve a concentrated outreach campaign to reach the broadest possible audience.
- Leverage the diversity of your CWPP update team. For example, if you have a representative from a local watershed group, ask them to include invitations to community meetings in their newsletter, and as HOA representatives to spread the word within their community.
- Make engagement at this step as user-friendly as possible. Have both virtual and in-person offerings, schedule community meetings during after-work hours, and view the process as a learning opportunity for local citizens to understand the importance of a CWPP to fostering a fire adapted community.

### Collaboration best practices<sup>2</sup>

Given the importance of collaboration in the CWPP update process, counties and communities should rely on the following “best practices” to gather and effectively leverage a diverse, engaged group of stakeholders throughout the CWPP update process.

- **Emphasize the importance of a strong, modernized, up-to-date CWPP.** Members from the non-fire community are much more likely to engage if they understand how the results of the CWPP update process will directly affect them and their community’s ability to implement hazard and risk reduction work.
- **Make the collaborative process accessible to all stakeholders at every step of the way.** Especially for the citizen advisory group, engagement with the CWPP update process will likely be conducted on a volunteer basis. Reduce this barrier to involvement as much as possible by holding meetings at times and locations (potentially virtual) that are convenient for these

---

<sup>2</sup> Modified from the “Community Guide to Preparing and Implementing a Community Wildfire Protection Plan” (Buettner, et al., 2008).

participants. Additionally, consider accommodations such as refreshments, childcare services, or mileage reimbursement and ensure that all meetings are productive by creating and adhering to an agenda.

- **Provide mutual learning opportunities for those involved.** Participants will vary in their level of knowledge and experience related to wildfire or disaster planning. Ensure that learning opportunities are provided at each step of the process to provide all participants with a solid, base level of understanding on the relevant issues, such as wildfire risk, effective mitigation strategies, and the array of community preparedness actions that can be taken.
- **Create and adhere to a set of mutually agreed upon working agreements.** Provide space for respectful consideration of all ideas and opinions and ensure that all group discussions are civil and productive.

## Collaborative mapping: Identifying boundaries, values, and risk

The first step a community or county should take after creating its diverse, engaged CWPP update team is to begin the collaborative mapping process. This process should always involve the best available data as well as local knowledge and input.

Recommended steps to the mapping process<sup>3</sup>:

- ☐ **Step One: Establish a community base map.** This map designates the boundaries of the community of interest, as well as any adjacent landscapes of interest. For example, a county undergoing the CWPP update process may limit its areas of consideration to just those within county boundaries, or provide a buffer around the county, or choose a different designation all together.
- ☐ **Step Two: Conduct a community risk assessment.** A comprehensive, collaborative risk assessment process is critical to identifying priority areas for treatment, as well as the areas that should receive the greatest allocation of available financial and technical assistance related to wildfire risk.
  - The risk assessment should include spatial data that adequately captures and considers the following risk factors (Appendix A):
    1. **Fuel Hazards:** What areas have vegetative fuel loads that pose a significant wildfire risk? How may topography affect fire behavior?
    2. **Likelihood of wildfire occurrence:** Where has fire occurred in the past? How likely is it that a fire may occur in the future? What may contribute to fire ignitions and/or extreme fire behavior?
    3. **Community assets & infrastructure at risk:** How vulnerable are homes & other structures within the community to ignition?
    4. **Other community values at risk:** What other areas (i.e., critical wildlife habitat, recreation areas, cultural resources) within the community base map require consideration? How may they be impacted by wildfire?
    5. **Local preparedness & firefighting capacity:** how prepared is an area or community for a wildfire emergency? How quickly and adequately may the protection authority be able to respond?

---

<sup>3</sup> Modified from the “Preparing a CWPP” handbook (SAF, 2004).



- The risk assessment should also consider **local preparedness levels and firefighting capability**. This should reflect how prepared a community is to evacuate, the availability of safety zones, as well as the response capacity of the fire protection agencies, among other considerations.
  - The authoritative, updated dataset for wildfire risk is the [Montana Wildfire Risk Assessment](#) (2020). Counties should use this, as well as the county-level risk reports created from the state-wide assessment, as their primary data source for crafting the community risk assessment.
  - Also available for consideration is the [Montana Forest Action Plan](#), which includes a statewide assessment of forest conditions as well as priority areas for focused attention.
- **Step Three: Provide a preliminary designation of the wildland-urban interface.** The wildland-urban interface (or WUI) is defined as the zone where structures and other human development meet and intermingle with undeveloped wildland or vegetative fuels (SAF, 2004). Defining the WUI for a county or community is one of the most important elements of the CWPP process, especially for federal and state partners (Appendix B). Fuel reduction projects on federal land that fall within a WUI designation enjoy a more streamlined approval and implementation process, which in turn allows for quick, prioritized execution of the projects.
- HFRA defines a WUI, within the context of the CWPP process, as “an area within or adjacent to an at-risk community that is identified ... in a community wildfire protection plan” (Buettner, et al., 2008).
  - The WUI designation process must be based on a thoughtful, scientific approach that relies on the best available wildfire risk data, as well as a defensible definition of what constitutes an “at-risk community.” Failure to do so may make planned fuel reduction projects for wildfire risk reduction vulnerable to litigation.
  - The WUI must be geospatially depicted. Original GIS data should be stored & maintained at both the county/community as well as the state level, and that data must be updated when WUI designations are updated.

## Formulating recommendations for structural ignitability

Wildfire risk can be broken down into four components:

1. **Probability**, or how likely a wildfire is to occur
2. **Intensity**, or the heat energy released during a wildfire event
3. **Exposure** of assets and resources based on their location
4. **Susceptibility**, or the likelihood that an area or home is negatively impacted by wildfire.

Since the *probability* of a wildfire occurring can never be brought down to zero, it is important that CWPPs address structural ignitability to reduce the *susceptibility* of communities to wildfire. The 2018 Camp Fire in Paradise, CA, for example, burned over 11,000 homes. These homes had been exposed to fire via lofted embers, and because they were built out of and surrounded by combustible materials, they were destroyed (Cohen & Strohmaier, 2020). To prevent such disasters here in Montana, CWPP updates must address the ignitability of the home and its immediate surroundings, or the home ignition zone (HIZ).

Counties and communities can take many approaches to addressing the importance of the HIZ. Some focus more on individual responsibility, whereas others rely more heavily on a regulatory framework. To

ensure the success of a CWPP's recommendations, the CWPP update team must consider what the local community will support, as a wildfire regulatory approach not supported by the community will not succeed (Miller, et al., 2020).

## Individual Responsibility

Homeowners have the ultimate responsibility for treating and maintaining their own HIZ. This includes replacing the highly flammable components of their home, modifying the home to reduce ember penetration, and removing fuels from around the home. CWPP updates may provide a framework for educating the broader community on this responsibility, as well as the actions that individual homeowners can take to reduce their risk to wildfire. Education efforts may include:

- Campaigns to increase community participation in [site risk assessments](#) or community risk assessments.
- Encouraging community participation in the national Firewise Communities/USA Program ([www.firewise.org/usa](http://www.firewise.org/usa)).

### MOST EFFECTIVE CHANGES TO THE HOME IGNITION ZONE

- Building/retrofitting roofs with Class A roofing materials, or any roofing material that does not self-sustain an ignition and spread fire.
- Screen opening to prevent ember entry to the home.
- Install non-flammable siding.
- Install double-paned windows.
- Reduce fuels within the HIZ [according to NFPA guidance](#).

- Hosting an annual wildfire preparedness day or week to spark action and raise awareness.
- Distribution of educational materials related to home ignitability and the HIZ via mass outreach and education campaigns.
- Encouraging homeowners to develop a fire preparedness plan that includes a communication and evacuation plan.

## Regulatory frameworks

Regulations enforced by the local government reduce wildfire risk to communities by guiding growth and development with wildfire in mind. Doing so ultimately saves the taxpayers money as it reduces fire suppression costs, the bulk of which are

spent to protect homes, infrastructure, and communities from wildfire (NFPA, 2013).

Communities or counties may choose, within their CWPP update, to adopt or recommend regulations at several scales (NFPA, 2013). For more information on each of these recommendations, check out NFPA's "[Community Wildfire Safety Through Regulation](#)" best practices guide.

- **County or community-wide scales.** A county or community may choose to adopt zoning regulations within the high wildfire risk zones of their planning area. Such regulations or ordinances provide special restrictions for development, such as requiring a Fuel Modification Plan at the landscape scale prior to development, or zoning modifications that require non-flammable building components, larger lots, and reduced housing densities.
- **Neighborhood/subdivision scale.** These WUI regulations, when adopted, apply to major new developments, such as subdivisions or Planned Unit Developments (PUDs). Such regulations can include subdivision layout standards that incorporate open space and fuel breaks, structure location standards, and requirements for adequate water supply and road access.

- **Individual lot scale.** Most applied to multi-family and non-residential projects, these regulations create standards for new construction or retrofitting related to driveways, fencing, and landscaping, among others. The most common tool used at this scale is HIZ requirements, such as removing flammable vegetation in the areas around structures and roads.
- **Building scale.** These regulations apply directly to structures and can include requirements for all new construction or retrofitting to use class A roofing materials, small-screened vents, and non-combustible siding, among other requirements.

## HOMEOWNERS ASSOCIATIONS

Homeowner's associations, or HOAs, are another avenue for wildfire planning. In areas where government regulations are not desired, a local community may choose to adopt a regulatory framework via an HOA's Covenants, Conditions, and Restrictions (CC&Rs). For example, an HOA can choose to incorporate Firewise USA® language, such as a requirement to clean and maintain roofs, gutters, and decks throughout the fire season (NFPA, 2009). A CWPP update can include recommended language for interested HOAs. For more information, refer to NFPA's "[Safer from the Start](#)" guidebook.

## Incentives<sup>4</sup>

Many communities or counties may find local regulations unpalatable, despite their proven effectiveness at protecting lives, limiting property damage, and saving taxpayer money. If this is true for your county or community, consider updating the CWPP with recommendations for incentives promoting WUI development best practices. Such incentives include:

- **Transfer of development rights**, a zoning technique that financially compensates landowners for choosing not to develop their land. This technique directs development away from an undesired or restricted area to a location more favorable to denser development by allowing landowner to "sell development rights from their land to a developer or other interested party, who uses those rights to develop another designated location" (Barrett 2019).
- **Density Bonuses**, which allow for higher density zoning once certain developmental standards are developed, such as use of wildfire-resistant home construction materials, planning for adequate ingress and egress, and adoption of HIZ standards.
- **Community Rating Systems** that work with individual homeowners to incentivize wildfire risk reduction measures. This technique is often used to manage flood risk; for example, a homeowner who successfully implements flood risk reduction activities on their property receives a discount on their home insurance. For an example of how this approach has been applied to wildfire risk reduction, see the Wildfire Partners model based out of Boulder, Colorado: [www.wildfirepartners.org/our-program/](http://www.wildfirepartners.org/our-program/).

---

<sup>4</sup> Modified from "Reducing Wildfire Risk in the Wildland-Urban Interface: Policy, Trends, and Solutions" (Barrett 2019)

## Developing a prioritized list of fuel reduction projects

Fuels treatment priority projects should reflect local community values, as well as the most updated and science-based understanding of wildfire risk. Oftentimes, these projects will target high-risk communities, critical ingress/egress routes, and provide fuel breaks for effective fire response.

While identifying these priority projects, the CWPP update team should also consider land ownership boundaries within the priority areas. Rather than drawing priority area boundaries along land ownership lines, the team should instead consider how a multi-jurisdictional area may require a collaborative campaign to remove and reduce fuels. For example, fuel reduction efforts on private, non-industrial land will often require significant education and outreach campaigns, and potentially securement of funding through state or non-governmental organizations (see [MT DNRC's Forestry Assistance program](#)). Ideally, this work should be coordinated with fuels reduction efforts on any adjacent federal and state land. Furthermore, the CWPP update team may begin to identify feasible and effective fuels treatments to reduce wildfire intensity. These fuel treatments can include chipping, mastication, thinning, and prescribed fire, among others.

In the past, identifying the list of fuel reduction projects is where CWPPs have spent the bulk of their time and page count. And while this is still an important and required element of a modernized CWPP, it is important to recognize that conducting fuel reduction projects will not eliminate wildfire risk from the landscape. Therefore, it is important to remember that developing a prioritized list of fuel reduction projects should not come at the expense of other elements of fostering a fire adapted community, such as the home ignitability recommendations.

## Create a prioritized action plan

After wildfire risk and WUI have been collaboratively mapped, the recommendations for structural ignitability have been identified, and the list of prioritized fuel reduction projects developed, the CWPP update team must then create an action plan that identifies realistic mitigation measures (Miller, et al., 2020). This action plan should include a process for continual, collaborative engagement of stakeholders throughout the implementation of these mitigation strategies. This collaborative engagement process ensures that the planned work is not done in silos, but rather relies on collaboration between agencies and departments.

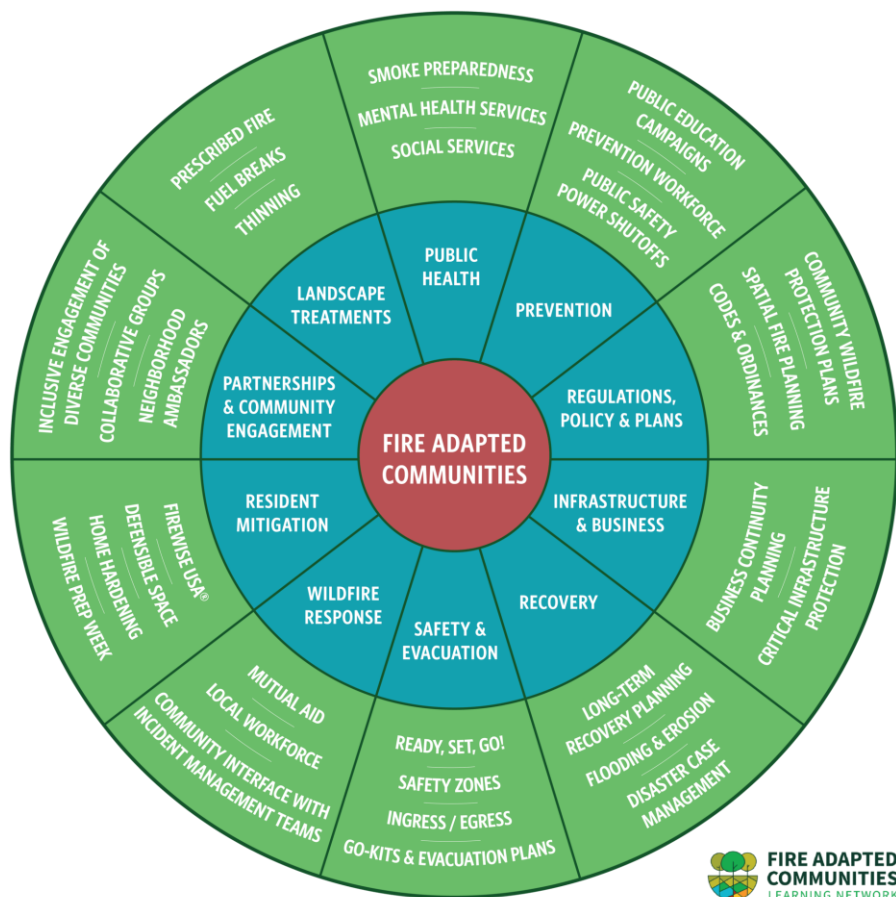
Within the action plan, the CWPP should identify priority areas based on the collaborative risk assessment. Then, the CWPP update team must identify realistic and implementable mitigation actions to be taken in those priority areas (Miller, et al., 2020). Depending on the project areas,

### CREATING A FIRE ADAPTED COMMUNITY

A fire adapted community is a community that understands its wildfire risk and takes action before, during, and after a fire so that it is more resilient to wildfire impacts (FAC Net, 2021a).

Creating a fire adapted community is an ongoing process that relies on participation from many stakeholders. Since every community has its own unique set of challenges and assets, the strategies leveraged will vary to reflect that local context. Each community, however, should consider a range of issues and actions when working to become more fire adapted. Doing so will allow a community to address all elements of wildfire risk.

these actions may be primarily focused on home or landowner education, home ignition zone treatments, landscape fuels reduction treatments, a mix of all the above, or some other fire adapted community effort entirely. For example, CWPP updates provide an excellent time for a county or a community to identify strategies for improving their emergency preparedness and fire response capability (SAF, 2004).



**Fig 2.** The above graphic was created by fire resilience practitioners across the United States and includes examples of the potential programs or actions a community may undertake (FAC Net 2021b). It is not comprehensive but provides a good jumping-off point for discussions related to fostering fire adapted communities.

Within this planning process, the CWPP update team may choose to identify roles and responsibilities for ensuring that the planned projects move forward. In addition, the team can identify funding needs and potential funding sources, as well as a realistic timeline for the planned projects that considers the need for securing funding, engaging the public, crafting working agreements and MOUs, and/or reaching environmental compliance (Buettner, et al., 2008).

## Monitoring and evaluation plan

A CWPP is not useful if it exists only to sit on a shelf. To prevent this from happening, the CWPP update team should develop a plan for monitoring progress made towards the priority projects and strategies

developed in the action plan. In addition, those involved in this process should understand that implementing a CWPP is an iterative cycle: as projects and strategies are implemented, the community will learn from successes and challenges, identify new priorities, and bring in new collaborators (Buettner, et al., 2008). This results in a continuous cycle of cooperative planning, implementation, and adaptation.

Monitoring and evaluation should include a digital (ArcGIS or similar) mapping component to effectively track and display progress made towards CWPP goals. Identifying who will update this map, how it will display information, and how it will be made available to practitioners and the public is an important step to effective CWPP tracking and monitoring.

In many communities, continued success in monitoring and implementing CWPP projects relies on the existence of local collaborative groups. In Montana, for example, [FireSafe Flathead](#) members collaboratively work towards the implementation of Flathead County's 2020 CWPP update. If your

### RECOMMENDATIONS FOR A MODERN, ACCESSIBLE CWPP

CWPPs have traditionally been thick booklets full of dense blocks of text, unintelligible to a general audience. Now, however, the recommendation generally is to keep these documents short and sweet by boiling them down to just the essential points.

In addition, consider creating documents or other communication strategies for specific audiences. These may include summary sheets that can be easily digested by the public, or ArcGIS story maps that provide the essential community context for the CWPP.

county or community does not have a local, collaborative fire adapted group, the CWPP update process is an excellent time to form one to ensure consistent progress towards CWPP implementation. The Fire Adapted Montana Learning Network ([www.fireadaptedmontana.org](http://www.fireadaptedmontana.org)) can help in this process.

## Conclusion

CWPPs are one of the best tools available for communities to proactively plan for and reduce wildfire risk. With a modernized, updated CWPP, Montana's counties and communities can work to collaboratively prioritize risk reduction strategies, align activities with community values, and identify partners, resources, and funding to implement mitigation projections.

Since HFRA was first released in 2003 and communities began publishing CWPPs, many lessons have been learned regarding best practices for CWPP creation and updates (see Appendix C). This guide attempts to capture and summarize those lessons learned and best practices so that counties and communities across Montana can develop effective

roadmaps for relationship building and collective learning around their CWPP update process and, ultimately, reduce wildfire risk.

## Works Cited

- Barrett, K. (2019). Reducing wildfire risk in the wildland-urban interface: policy, trends, and solutions. *Idaho Law Review*, 55, 26.
- Barrett, K. (2020, November). *Wildfires destroy thousands of structures each year*. Retrieved January 3, 2022, from <https://headwaterseconomics.org/natural-hazards/structures-destroyed-by-wildfire/>
- Buettner, G., Daly, C., DeBonis, M., Driscoll, D., Erickson, J., van Hemelryck, K., . . . Yates, R. (2008). *Community Guide to Preparing and Implementing a CWPP*.
- Cohen, J., & Strohmaier, D. (2020, September 21). Community destruction during extreme wildfires is a home ignition problem. *Wildfire Today*. Retrieved from <https://wildfiretoday.com/2020/09/21/community-destruction-during-extreme-wildfires-is-a-home-ignition-problem/>
- FAC Net. (2021a). *FAC/FAC Net Frequently Asked Questions*. Retrieved March 10, 2022, from Fire Adapted Communities Learning Network: <https://fireadaptednetwork.org/resource/facfac-net-frequently-asked-questions/>
- FAC Net. (2021b). *Fire Adapted Communities Graphic and Facilitator's Guide*. Retrieved March 10, 2022, from Fire Adapted Communities Learning Network: <https://fireadaptednetwork.org/resource/fire-adapted-communities-graphic-and-facilitators-guide/>
- Jakes, P., Esposito, C., Burns, S., Cheng, A. S., Nelson, K. C., Sturtevant, V. E., & Williams, D. E. (2011). *Best management practices for creating a community wildfire protection plan*. Newtown Square, PA: Department of Agriculture, Forest Service, Northern Research Station. .
- Martinuzzi, S., Stewart, S. I., Helmers, D. P., Mockrin, M. H., Hammer, R. B., & Radeloff, V. (2015). *The 2010 Wildland-Urban Interface of the Conterminous United States*. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station.
- Miller, S. R., Vos, J., Lindquist, E., Smith, D., Oliver, S., & Holfeltz, T. (2020). *Wildfire Planning Guide for Idaho Communities*.
- Montana Forest Action Council. (2020). *Montana Forest Action Plan*. Missoula, MT: Montana Department of Natural Resources and Conservation.
- NFPA. (2009). *Safer from the start: A guide to Firewise-Friendly Developments*. Quincy, MA: National Fire Protection Association.
- NFPA. (2013). *Community Wildfire Safety Through Regulation: A best practices guide for planners and regulators*. Quincy, MA: National Fire Protection Association.
- SAF. (2004). *Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities*. Society of American Foresters.

USDA Forest Service. (2022). *Explore Risk* . Retrieved from Wildfire Risk to Communities:  
<https://wildfirerisk.org/>



## Appendix A: Recommended data layers for a wildfire risk assessment

Effectively establishing priority treatment areas as well as an action plan requires an up-to-date understanding of the wildfire risk within a community. The [Montana Wildfire Risk Assessment](#) (MWRA) provides the following spatial data layers, which collectively allow for the best understanding of wildfire risk factors within a community:

- Land ownership & management
- Existing vegetation type
- Structure Density
- Fire history
  - Fire Ignitions
  - Fire Perimeters
- Burn Probability
- Average flame lengths
- Probability of >4 ft flames
- Probability of >8 ft flames
- Suppression Difficulty Index
- Risk to homes
- Risk to People and Property
- Potential Impact to Infrastructure
- Overall impact
- Fuel Model Groups
- Risk Transmission
- Functional WUI

The MWRA also provides resources to better understand the components of wildfire risk, as well as additional data layers or tabular data summaries that a county or community may wish to incorporate into its collaborative mapping process. For more information on the MWRA data layers and functionality, please contact the DNRC's planning & intelligence program manager, Don Copple, at [dcopple@mt.gov](mailto:dcopple@mt.gov).

## Appendix B: Defining the WUI

The 2003 Healthy Forest Restoration Act defines Wildland-urban interface (WUI) as:

- “(A) an area within or adjacent to an at-risk community that is identified in recommendations to the Secretary in a **community wildfire protection plan**; or
- (B) in the case of any area for which a **community wildfire protection plan is not in effect**—
  - (i) an area extending 1/2-mile from the boundary of an at-risk community;
  - (ii) an area within 1 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; and
  - (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 fuel reduction to provide safer evacuation from the at-risk community.”

All counties within Montana have an approved CWPP, and therefore have adopted a previous WUI designation. However, many of these CWPPs and the resulting WUI definitions are very out of date, which are ineffective at providing up-to-date project prioritization for fuels projects.

When a county defines their WUI, they should consider what values and resources are critical to their community and therefore should be included within the WUI definition. For example, a water source may be of great value to the community, and therefore merits inclusion within a WUI definition even though no one lives within the watershed. A CWPP should clearly link how the community identifies its values in relation to the WUI definition.

A thoughtful, coordinated approach to defining the WUI is of particular importance to federal agencies, and especially the Forest Service and Bureau of Land Management, as fuel reduction projects on federal land that fall within the designated WUI are allowed some [streamlined NEPA processes](#)<sup>5</sup>, as well as a [Categorical Exclusion](#)<sup>6</sup> for hazardous fuels reduction.

These Categorical Exclusions & streamlined processes mean that fuels work within the WUI can be achieved in a timelier manner than other federal fuels projects. Therefore, counties should carefully consider the WUI definition, and how they may leverage it to reduce wildfire risk to their communities within the CWPP update process. During development of this guidebook, the Forest Service provided the following guidance for WUI development, based on their experience with how WUI definitions have shaped their ability to get work done (or not) within a county.

---

<sup>5</sup> The 2014 Farm Bill established some streamlined NEPA processes for project that are within the WUI, including the Insect and Disease Categorical Exclusion (CE). The use of this CE is limited to projects that are within the WUI, or in Condition Classes 2 or 3 Fire Regime Groups I, II, or III outside the WUI.

<sup>6</sup> The 2018 Omnibus Bill established a new statutory Categorical Exclusion for hazardous fuels within the WUI or, if outside the WUI, the project is in Condition Class 2 or 3 I Fire Regime Groups I, II, or III that contain very high wildfire hazard potential.

1. Forest Service decisions are heavily scrutinized where the CWPP includes a county-wide WUI (i.e., WUI is defined as the county as a whole), as the CWPP does not show any clear support for how fires on the forests may impact the communities.
2. Recent litigation has delayed or held up several projects across north Idaho and Montana due to inconsistent definitions of WUI. It is imperative to clean up our data and be consistent if we want our hazardous fuels projects to move forward.
3. In the Northern Rockies, the Forest Service uses the WUI GIS data to help prioritize hazardous fuels projects across the Forests in coordination with other federal and state agencies. It is imperative that all entities are using the same data to focus on areas of high priority.
4. Fuels treatment projects in lynx habitat must adhere to the Northern Rockies Lynx Management Direction which specifies the HRFA definition of WUI.

For more information on WUI definition best practices, contact the DNRC's community preparedness and wildfire prevention program manager, Julia Berkey, at [julia.berkey@mt.gov](mailto:julia.berkey@mt.gov).

## Appendix C: Resources for CWPP Updates

### Resources specific to CWPP writing & updates:

- [2004 CWPP Handbook](#)
- [2008 CWPP Community Guide](#)
- [“Best Management Practices for Creating a CWPP”](#)

### Incentives & regulations:

- [Reducing wildfire risk in the WUI: policy, trends, and solutions](#)
- [Community Wildfire Safety Through Regulation](#): A best practices guide
- [Safer from the start](#): A guide to Firewise-Friendly Developments

### For help with outlining the CWPP document:

- Utah’s [fill-in-the blank guidebook for updating CWPPs](#)
- [Idaho’s basic CWPP checklist](#)
- [Colorado’s CWPP Template](#)

### For help with planning meetings:

- [Leader’s Guide & Checklist](#)

### Story Map examples:

- [Missoula County, MT](#)
- [Lake County, CA](#)
- [Corona City, CA](#)

## Appendix D: Facilitation Services

The DNRC recommends that counties secure professional facilitation services for their CWPP update, especially if the document has not been updated in a long time. This provides counties with technical assistance throughout the update process that might not otherwise be available in-house and helps to ensure timely completion of the collaborative CWPP update. Contracted services are available to assist with the entirety of the CWPP update process, including data analysis and interpretation, stakeholder engagement, meeting planning and facilitation, as well as document writing and publicizing.

In January of 2022, the DNRC Fire Protection Bureau released a request for information (RFI) to interested contractors. This RFI was intended to assess interest, experience, and cost of services amongst contractors who could provide facilitation services to Montana's counties. To view the RFI, as well as the responses submitted, please follow [this link](#).

To inquire about funding available to assist with the hiring of a professional facilitator, please contact the DNRC's community preparedness and wildfire prevention program manager, Julia Berkey, at [julia.berkey@mt.gov](mailto:julia.berkey@mt.gov).