

# CMAT Report Missoula County



## Missoula County, MT

Prepared by:  
**CMAT**  
USDA Forest Service  
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## Executive Summary

Wildfires hit Montana with a vengeance in 2017, burning more than one million acres and destroying 141 homes. Wildfire is part of Montana's natural environment, but the Lolo Peak Fire, Sapphire Complex, and others made the summer and early fall of that year something quite different. Wildfire was daily news, evacuation for thousands, lost homes for hundreds, and, for some, lost lives.

Missoula County encompasses more than 1.5 million acres; conifer forests cover 80% of the county, riparian woodlands cover 10%, and grasses and shrubs cover 6%. Communities at high risk are dispersed throughout the county, particularly within identified fire sheds.

The Lolo National Forest, the Cohesive Strategy Working Group (CSWG), and the Missoula County Wildfire Protection Association (MCWPA) requested a Community Mitigation Assistance Team (CMAT) in 2017 to work with local land management agencies and community partners in Missoula County. CMAT worked with requesting partners for over 15 months to define needs, scope, enabling conditions, and dates for a deployment when partners could fully engage with CMAT.

Because nailing down those enabling conditions proved challenging for partners due to scheduling, fire recovery, and floods, CMAT opted to do a short assignment to determine need and scope and provide short-term guidance. CMAT ultimately modified the deployment to seven days to accommodate partner engagement and agreed to work collaboratively to:

1. Determine specific common issues among partners.
2. Further define CMAT's ability to address issues.
3. Determine the viability of a longer CMAT assignment at a later date.

CMAT conducted an intensive 2-day SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis and best mitigation practices session and set aside several days to meet individually with partners. Limited availability of partners impacted Team recommendations.

The Team found that CSWG, MCFPA, and other partners\* have made considerable inroads in accomplishing mitigation, finalizing a Community Wildfire Protection Plan (CWPP) update, and hiring a Wildfire Preparedness Coordinator to name a few. The CWPP has quality mapping data and robust spatial risk analysis but does not include specific tasks that would help partners work toward accomplishing goals. Partners identified their priorities for moving forward as building/maintaining a strong coalition, using smoke as a teachable moment, leveraging funding, developing cross-boundary projects and building more community/resident engagement in mitigation.

This report provides recommendations designed to help mitigation partners in Missoula County create an effective partnership to accomplish effective and sustainable mitigation.

CMAT has created a [Community Toolbox](#) that contains research and reference documents relating to our recommendations for your community.

## CMAT Guiding Principles

**Consider these guiding principles when developing a wildfire mitigation strategy and the projects that comprise it; they will make your efforts more effective. These guiding principles apply to mitigation efforts across the board in every community.**

**Be strategic-** Focus on high-risk areas first. Be strategic by doing larger landscape scale fuel treatments and helping clusters of homes reduce risk. Scattered smaller treatments are not as effective.

**No boundaries** - Wildfires do not stop at jurisdictional or property boundaries. Link fuel reduction and defensible space projects to benefit cross-boundary areas. Engage with other neighborhoods and other jurisdictions to accomplish work on adjoining properties.

**Work together** - A group of people who share the same goals can get more done together than separately. They plan together, piggyback on strengths, share resources, staff, and the work. A partnership is more likely to get supporting funding. Collaboratively planning, implementing, sharing successes and lessons learned is an essential first step in building a common vision and gaining broad community support.

**Face-to-face engagement** - Sharing with residents is best done face-to-face through a home assessment and conversations about the realities of living in a wildfire-prone environment. Often this discussion has to take place many times before someone takes action.

**Employ messaging wisely** - Messaging will help raise awareness of wildfire risk and share successes, but messaging alone does not result in mitigation on the ground. That takes face-to-face engagement over time. Brochures, websites, blogs, and other social media are tools to share information and should not replace the critical face-to-face engagement that leads to action. A brochure that illustrates defensible space can be a tool during a one-on-one discussion. Handing out brochures at an event, leaving door hangers, or placing a news release in the local paper asking folks to create defensible space has little value or lasting effects on behavior change.

**Stretch project funds** - Require homeowners to cover (either in cash or sweat equity) half the cost of a mitigation project. This investment empowers the homeowner to take responsibility for what's theirs and makes them more likely to maintain their project over time. Always engage local and regional partners that have something to lose or gain; these individuals and businesses may have financial resources to contribute.

**Promote home hardening and defensible space** - Having homeowners prepare their yard and structure for wildfire is the most important thing they can do to avoid loss, and is always where work should begin.

**Invest most of your time and resources on risk reduction actions** - Meetings, recognition programs, news releases, or going to events do not accomplish mitigation. Respect everyone's time. Do not hold additional meetings if wildfire mitigation discussions can be consolidated into existing forums. Remember, many hands make light work. Make meetings short and strategic. Spend time reducing risk on the ground. Ensure tasks and initiatives are clear at the end of each meeting and are moving the partnership forward.

**Help vulnerable populations** - Provide mitigation assistance for low-income, elderly, and disabled residents in high and medium risk areas who may be unable to accomplish this work on their own.

**Celebrate success!** - Sustained participation in any partnership will require frequent communication and recognition for volunteer contributions. Recognition does not have to be formal and can be as simple as a handwritten thank you. Recognition in the presence of peers and partners goes a long way toward retaining volunteers. Share accomplishments through media, presentations, yard signage, or site visits to build momentum for mitigation work. Stories, especially those from the perspective of the property owner, often have the biggest impact. Statistics are another excellent way to share success. Remember to incorporate these stories and statistics into personal interactions, speaking engagements, and media opportunities.

## Findings and Recommendations

### *Strengthening the Partnership*

*Findings:* The Cohesive Strategy Working Group formed in early 2017. This effort has been a start at improving information sharing and project coordination across jurisdictions. The group, while busy with numerous activities, however, has not designated geographic focus areas or collectively agreed upon specific tasks. While several individuals support building a coalition, it is unclear to CMAT whether CSWG and other partners are open to including additional partners and whether they would like to develop into more of an organized coalition or partnership.



*Missoula County partners and cooperators engage with CMAT members during SWOT exercise.*

### *Recommendations:*

1. Using the current Community Wildfire Protection Plan action items, develop specific tasks with timelines, resources needed, and responsible partners.
2. Set aside quality time for all participants to develop short and long-term **goals** with specific action items for wildfire preparedness using an annual working session.
3. At regular intervals, have all partners share prioritized work plans, project plans, ideas, and concerns as a way of identifying a wider group of participants for cross-boundary projects. Provide maps that delineate geographic scope of the project.
4. Develop a communications plan. This will help to focus messages, reach the target audiences, and solidify the common mitigation voice.
  - Annually create talking points for partners, which include value of prescribed fire, need for mitigation, contact points for mitigation assistance, etc. pertinent to the fire season. Remember that messaging is effective for information sharing but not for behavior change.
5. Ensure that participation occurs at all levels – include on-the-ground practitioners in particular meetings to ensure dissemination and buy-in.
6. Invite the Blackfoot Challenge to a meeting to discuss their model, how it's working, and lessons learned to see if it's a model that could be emulated.
7. If the CSWG chooses to develop a more formal partnership, CMAT suggests the following actions:
  - Develop a mission statement, vision, and goals/objective. What is the desired outcome?
  - Develop a charter and clearly define roles and responsibilities. [The current charter appears to only be for the Oversight Committee.]
  - Clarify the geographical and philosophical boundaries of the Coalition/Partnership including project focus areas.
  - Use maps to show risk and treatments. Designate priorities and set timelines. Share widely with the public.
  - Set regular meeting schedule (e.g. first Wednesday of every month at 6pm).
  - Publicly acknowledge the group and formalize the partnership.

- Increase participation by looking around the table, asking who is missing, and then bringing strategic partners to the table.
- If established, make sure working groups have clear tasks and deadlines and are held accountable for action to minimize the amount of “extra” meetings that participants must attend. Evaluate needs for committees and working groups annually.

### **Cross-boundary Projects**

*Findings:* Partners acknowledge that work is occurring. However, better project coordination is needed to improve and increase outcomes. Landscape-scale efforts, including private and public lands, have numerous benefits for all parties including:

1. Cross-boundary projects appeal to diverse funders because they often have varied ecosystem and community benefits.
2. Bundled projects can increase the scale of the treatment, thus reducing overall costs.

*Recommendations:*

1. Plan and implement cross-boundary projects by reviewing project maps, identifying gaps, and aligning work where the impact can be greatest.
2. Share project plans/maps regularly with all partners. Encourage partners to develop projects on the ‘other side of the fence’.
3. Develop open-invitation, cross-boundary projects such as burn exchanges, fuels reduction projects, fire trainings/academies, weekend mitigation work days, etc.
4. Communicate with one another.

### **Wildfire Preparedness Coordinator**

*Findings:* The addition of the Wildfire Preparedness Coordinator presents many opportunities for the CSWG and has the potential to increase collaboration, track projects, improve communication, and facilitate more mitigation on the ground. Challenges arise when partners aren’t clear on coordinator roles/responsibilities or when there are unrealistic expectations of what a coordinator can accomplish. The CSWG Oversight Committee will provide guidance to the coordinator.

*Recommendations:*

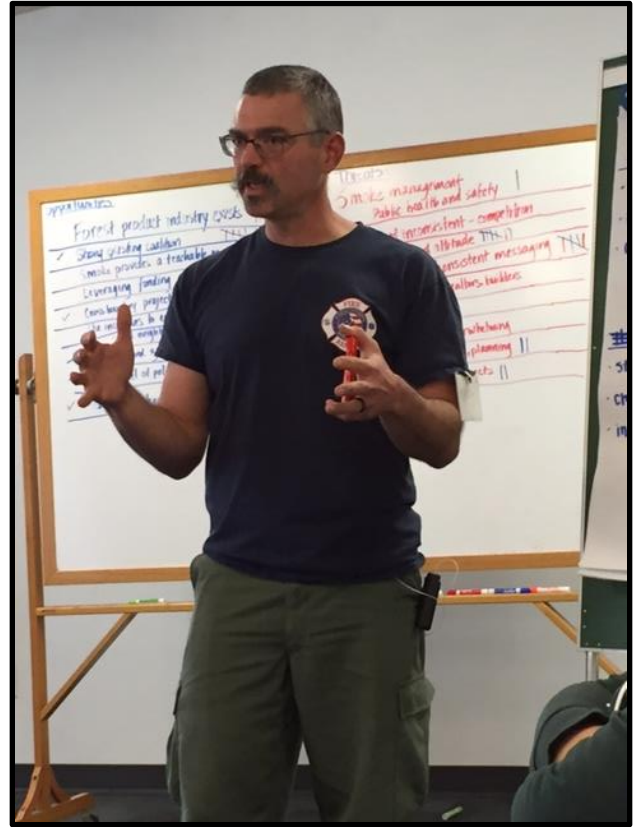
1. Clearly define what is and is not the Wildfire Preparedness Coordinator’s responsibility, and share with all partners to manage expectations.
2. Make sure it is clear who Coordinator reports to and receives direction from.
3. Provide clear short and long range goals and objectives. The Oversight Committee must speak with one voice.
4. Have Coordinator gather and disseminate all prior work, current priorities and planned actions into one map with appropriate project narratives. This will help the Coordinator as well as the CSWG.
5. Develop a regular report-out schedule for the Coordinator on accomplishments, barriers, and opportunities

## Increasing Mitigation Capacity

**Findings:** Partners expressed concern regarding the lack of capacity to meet the “overwhelming” nature of community fire adaptation. Partners should not underestimate their accomplishments. While mitigation in Missoula County is a challenge, significant strides have already been made. Until more funding is dedicated to mitigation, it’s important to work smarter not harder. For instance, the current risk assessment process is not well defined and the intent of the program may not be aligned with the desired outcomes.

### Recommendations – Strategy:

1. Be strategic. Concentrate on highest risk areas first, focus on contiguous risk reduction efforts for both homes and acres, use maps to share highest risk areas and where projects are planned long before the projects are initiated, include residents in determining priority, actions, and implementation, and openly communicate need for public involvement and assistance to reduce risk.
2. Take advantage of smoke in the air, a teachable moment, throughout the year (during wildfires and prescribed fire) and during red flag warnings to offer home wildfire risk assessments/site visits and additional targeted help for homeowners to mitigate. This might be done using the “40 days of fire” model being discussed between DNRC (Matt Hall) and Frenchtown Fire (Taylor Blakely and Ben Murphy). This model involves creating a local mitigation team to share resources and provide services to priority areas where the demand for mitigation can’t be met as well as to staff mitigation outreach and home assessment needs during teachable moments.
3. Conduct inventory of existing internal/partner resources available to the collective group (e.g. equipment, skill sets, funding sources, contractor contacts, etc.)
  - Consolidate all mitigation contractor lists and share.



*Ben Murphy, Frenchtown Fire, explains to the group his table's results of the SWOT exercise.*

### Recommendations – Assessments:

1. Use assessments strategically. Ask: What is the intent of the assessment? Suppression/response planning (red rock/green rock) and/or homeowner engagement and mitigation in the home ignition zone. Can both kinds of assessments be accomplished at the same time? Can they be combined?
2. Use HOA contact list on the city's website to determine which associations/neighborhoods are in high risk areas and determine mitigation needs and effective outreach methods.
3. Prioritize assessments in high risk areas. Designate priority risk using CWPP maps and county subdivision GIS data.
4. Identify the responsible entity that will complete those assessments in that specific area and provide the local contact information for this organization, individual or entity. Assure follow up with homeowners. Don't assume an assessment will result in mitigation.
5. Do not over promise and under deliver. Only offer assessments when they can be completed and are in high/medium risk areas and when follow-up is assured. A random approach is ineffective.
6. Provide training and qualification process to contractor base in order to increase awareness of mitigation standards and best practices as well as assist with assessments/site-visits.

*Recommendations – Funding/Incentive Programs:*

1. Use existing funding to offer micro-grants or capacity building awards to communities, fire districts, or non-profit groups working to implement mitigation projects and programs.
2. Implement incentive programs for property owners to complete mitigation. For example:
  - Chipper/equipment rental rebate, curbside slash disposal/chipping, or slash depots.
  - Cost-share programs.
3. Leverage funding opportunities among partners and coalition members.

**Increasing Public Engagement**



*Findings:* Increasing grassroots participation in community wildfire preparedness means increased capacity for citizen action, citizen impact on legislation, opportunities for enhanced understanding of the value of fire on the environment, and opportunities for residents to take action to promote wildfire preparedness in a variety of ways. Public engagement is focused on two fronts: A) residents taking responsibility on their own property or in conjunction with neighbors to reduce community wildfire risk and B) resident level participation in helping partners accomplish mitigation tasks through committees, volunteer work groups, subject matter experts, or other advocacy and on-the-ground work.

*Adrienne Beck shares Missoula County mitigation practices with the team.*

*Recommendations A - residents taking responsibility on their own property or in conjunction with neighbors to reduce community wildfire risk:*

1. Prime residents for mitigation by ensuring they understand their community’s wildfire risk, how fire behaves when it impacts a home, and the dangers of the ‘stay and defend’ mindset both to their lives and the lives of firefighters.
2. Speak candidly about homeowner risk/responsibility, the reality of the fire department's ability to respond during an incident, and the risk to firefighters when attempting to protect an unmitigated structure.
3. Understand that local voices carry the most weight in engaging with homeowners and that eventual action is based ultimately on trust, understanding of mitigation barriers, and help at the right time.
4. Implement high visibility demonstration projects centered on home ignition zone hazard reduction in neighborhoods with committed or willing residents. Start with members of the coalition living in the wildland urban interface and grow from there.
5. Encourage residents to take advantage of cost-share programs with a 50% match (except for low income households) to stretch funding dollars and to increase likelihood that residents will maintain mitigation over time. Consider if “recognition” programs genuinely reduce risk before investing time and resources.

*Recommendations B - resident-level participation in helping partners accomplish mitigation tasks through committees, volunteer work groups, subject matter experts, or other advocacy and on-the-ground work:*

1. Identify interested and committed residents -- recognizing that they might need some mentoring and/or education -- who can help carry the burden of mitigation, especially with engaging other residents in reducing risk on private property. Residents who participate in the mitigation planning process (i.e.

where/when will treatments happen, what homes/neighborhoods are targets for mitigation) are more likely to support the resulting plans and implementation. Seek out interested residents to participate in mitigation partnership activities.

2. Engage with known potential candidates that are interested in and have been active in past mitigation efforts such as the residents and groups that supported the Marshall Woods restoration project in the Rattlesnake National Recreation Area and Woods Gulch area.
3. Identify and recruit retired subject matter experts who can bring knowledge, skills, and action to the table.
4. Investigate the value of existing efforts, such as groups like the Montana Elders for a Livable Tomorrow (MELT) and the potential that inclusion in partner projects could bring.
5. Target forestry and fire program students, University of Montana Fire Club, Master Naturalists, etc. who can share expertise and gain on-the-ground experience in mitigation practices by conducting site assessments, creating defensible space, and promoting prescribed fire.
6. Review Forest Service social science research on why people do or don't mitigate.
7. Focus the county health department's Smoke Ready Communities program on vulnerable residents. The SRC campaign could provide a valuable mitigation connection to the community if "good fire" messages are integrated into the campaign.

## ***Additional Findings and Recommendations***

### ***Prescribed Fire***

*Findings:* Using smoke as a teachable moment was high on the priority list. The team felt it important to include some recommendations for prescribed fire as it is one of the contributing factors to the smoke issue. During the SWOT, it became apparent that there were two prongs to the prescribed fire issue -- A) the need to *increase* prescribed fire, and B) the need for social license to conduct prescribed burns.

*Recommendations A – the need to increase prescribed fire:*

1. Share planned prescribed fire opportunities and burn windows as far in advance as possible with cooperators and the public.
2. Engage cooperators to support prescribed fire. Provide reimbursements, training opportunities, and wildfire qualification/taskbook sign-offs as incentives for participation.
3. Develop, or work with your state to develop, a certified burner program to increase the number of qualified burners and provide reduced liability incentives to cooperators.

*Recommendations B - the need for social license to conduct prescribed burns:*

Residents like to be kept informed of what is happening -- especially when there is smoke in the air. This awareness can build support for prescribed fire. It is imperative to use a variety of tools to disseminate information and publicize opportunities. As with most public engagement, a key focus should be face-to-face engagement.

1. Build awareness, buy-in, and social license for prescribed fire by planning a field trip for the public to a prescribed burn to discuss safety tactics and talk about how the burn occurs (especially if the burn is next to a neighborhood as the experiential opportunity is much better than a public meeting).
2. Be transparent about the potential risk(s) of any prescribed burn and be honest if your burn goes awry.
3. Use social media to keep public updated on burn status and post pictures of firefighters and burn intensity.
4. Share hazards of being in burn area once burn is complete.
5. Share fire effects monitoring with community to help them understand the objectives you met (i.e. tell your success story).



## **Codes, Ordinances, and Zoning**

*Findings:* The Missoula County CWPP, updated in 2018, places a significant emphasis on the use of codes, ordinances, and zoning to achieve wildfire protection results. However, partners ranked codes, ordinances, and zoning as a very low priority during the SWOT. The CWPP update indicates that a significant amount of WUI development is expected. Zoning and subdivision regulations are in place for unincorporated Missoula County, but no wildfire specific development standards exist and there is little public support for additional land-use regulations at this time.



*Jennifer Hensiek, Missoula District Ranger with the Lolo National Forest, discusses strengthening the coalition with the group.*

### *Recommendations:*

1. Avoid additional zoning conflict, but instead implement and enforce existing building/fire codes that result in community fire adaptation (access, building design, site improvement standards).
2. Promote wildfire-centric covenants and ordinances on a local level with willing HOA's in high risk areas.
3. Consider requiring defensible space and home hardening requirements for new construction.

## **Thank You!**

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## The Team

The Community Mitigation Assistance Team (CMAT) is sponsored by the U.S. Forest Service to assist communities impacted by wildfire. CMATs are comprised of public and private wildland-urban interface (WUI) mitigation professionals from across the country. The Team provides technical and strategic mitigation support to build and strengthen sustainable mitigation programs. The team mentors organizations, helps to identify and provide tools, advises on the highest priorities for risk reduction, and shares best management practices for mitigation.



*CMAT Team Members From left to right:  
Jon Bruno, Erin O'Connor, Pam Wilson, and Eric Lovgren  
Not shown: Pam Leschak*

## Team Members:

### [Jonathan Bruno](#)

CMAT Team Leader  
Chief Operations Officer  
Coalitions and Collaboratives, Inc.  
Cell: 719-433-6775

### [Pam Leschak](#)

National WUI/FAC Program Manager  
United States Forest Service  
Cell: 218-341-1952

### [Pam Wilson](#)

Wildfire Mitigation Specialist

### [Erin O'Connor](#)

Wildland Urban Interface Specialist II  
Texas A&M Forest Service

### [Eric Lovgren](#)

Wildfire Mitigation Coordinator  
Eagle County Colorado

## [Community Toolbox](#)

*(You may have to update your browser to use Google Drive)*

The Community Toolbox contains this report and numerous resources that will help you increase mitigation in your area.

## [USDA National Forest Service CMAT](#)

