



Yellowstone County, Montana,

Community Wildfire Protection Plan

Executive Summary

February 28th, 2006

***Vision:** Institutionalize and promote a countywide hazard mitigation ethic through leadership, professionalism, and excellence, leading the way to a safe, sustainable Yellowstone County.*



Acknowledgments

This Community Wildfire Protection Plan represents the efforts and cooperation of a number of organizations and agencies; through the commitment of people working together to improve the preparedness for wildfire events while reducing factors of risk.



Yellowstone County Commissioners
and the employees of Yellowstone County



State of
Montana



USDI Bureau of Land Management



USDI Bureau of Indian Affairs



USDA Forest
Service



FEMA

Federal Emergency Management
Agency



Montana Disaster and Emergency
Services



USDI Bureau of Reclamation



Beartooth Resource
Conservation & Development
Council



Montana Fish, Wildlife, &
Parks



Montana Department of Natural
Resources and Conservation



City of Billings
City of Laurel
Town of Broadview
Yellowstone County Sheriff's Office
Yellowstone County Fire Departments
Yellowstone County Fire Districts
Yellowstone County Fire Service Areas
Deaconess Hospital
&
Local Businesses and Citizens of Yellowstone
County

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Executive Summary

1 Introduction

This Community Wildfire Protection Plan for Yellowstone County, Montana, is the result of analyses, professional cooperation and collaboration, assessments of wildfire risks and other factors considered with the intent to reduce the potential for wildfires to threaten people, structures, infrastructure, and unique ecosystems in Yellowstone County, Montana. This Community Wildfire Protection Plan is an amendment to the Yellowstone County Pre Disaster Mitigation Plan, which was approved by FEMA in January 2005. The Yellowstone County Commissioners led the planning team responsible for implementing this project. Agencies and organizations that participated in the planning process included:

- Yellowstone County Commissioners and County Departments
- Yellowstone County Fire Warden
- Yellowstone County Disaster and Emergency Services
- Montana Department of Natural Resources and Conservation
- USDI Bureau of Land Management (also providing funding through the National Fire Plan)
- USDA Forest Service
- USDI Bureau of Indian Affairs
- Yellowstone County Fire Departments
- Town of Broadview
- Big Sky Economic Development Authority
- Yellowstone County Fire Districts and Fire Service Areas
- City of Billings
- Deaconess Hospital
- USDI Bureau of Reclamation
- U.S. Department of Homeland Security
- Beartooth Resource Conservation and Development Council
- Montana Fish, Wildlife, & Parks
- City of Laurel
- USDA Natural Resources Conservation Service
- Montana Disaster and Emergency Services
- Northwest Management, Inc.

The Yellowstone County Commissioners solicited competitive bids from companies to provide the service of leading the assessment and the writing of the **Yellowstone County Community Wildfire Protection Plan**. The Commissioners selected Northwest Management, Inc., to provide this service. Northwest Management, Inc., is a professional natural resources consulting firm located in Helena, Montana. Established in 1984, NMI provides natural resource management services across the USA. The Project Manager from Northwest Management, Inc. was Dr. William E. Schlosser, a professional forester and regional planner.

1.1 Goals and Guiding Principles

1.1.1 Federal Emergency Management Agency Philosophy

Effective November 1, 2004, a Local Hazard Mitigation Plan approved by the Federal Emergency Management Agency (FEMA) is required for Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation Program (PDM) eligibility. The HMGP and PDM program provide funding, through

state emergency management agencies, to support local mitigation planning and projects to reduce potential disaster damages.

1.1.2 Additional State and Federal Guidelines Adopted

The Community Wildfire Protection Plan will include compatibility with FEMA requirements while also adhering to the guidelines proposed in the National Fire Plan and the Healthy Forests Restoration Act (2004). This Community Wildfire Protection Plan has been prepared in compliance with:

- The National Fire Plan; A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment 10-Year Comprehensive Strategy Implementation Plan– May 2002.
- Northern Rockies Coordinating Group
- Healthy Forests Restoration Act (2004)
- The Federal Emergency Management Agency’s guidelines for a Local Hazard Mitigation Plan as defined in 44 CFR parts 201 and 206, and as related to a fire mitigation plan chapter of a Natural Hazards Mitigation Plan.

The objective of combining these four complimentary guidelines is to facilitate an integrated wildland fire risk assessment, identify pre-hazard mitigation activities, and prioritize activities and efforts to achieve the protection of people, structures, the environment, and significant infrastructure in Yellowstone County while facilitating new opportunities for pre-disaster mitigation funding and cooperation.

1.1.2.1.1 Montana’s Endorsement of the National Fire Plan

In May 2002, Montana Governor Martz, as a member of the Western Governors' Association, helped develop the *10-Year Comprehensive Strategy* and an implementation plan, titled *A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment*. With the Western Governors’ Association endorsement of the Implementation plan, Montana adopted the national implementation plan as its own.

The DNRC NFP Program is implemented primarily within the Forestry Division's Fire and Aviation Management Bureau (FAMB) and Service Forestry Bureau (SFB). The National Fire Plan is delivered, wherever appropriate, through existing state and private forestry programs. These programs are:

- County Cooperative Fire Program (FAMB)
- State Fire Assistance Program (FAMB)
- Private Forestry Assistance Program (SFB)
- Stewardship Program (SFB)

1.1.3 Local Guidelines and Integration with Other Efforts

1.1.3.1 Yellowstone County Fire Mitigation Planning Effort and Philosophy

The goals of this planning process include the integration of the National Fire Plan, the Western Governors Association Implementation Strategy, the Healthy Forests Restoration Act, and the requirements of FEMA for a countywide Community Wildfire Protection Plan, a component of the County’s All Hazards Pre-Disaster Mitigation Plan. This effort will utilize the best and most appropriate science from all partners, the integration of local and regional knowledge about wildfire risks and fire behavior, while meeting the needs of local citizens, the regional economy, the significance of this region to the rest of Montana and the Inland West.

1.1.3.1.1 Mission Statement

To make Yellowstone County residents, communities, state agencies, local governments, and businesses less vulnerable to the negative effects of wildland fires through the effective administration of wildfire hazard mitigation grant programs, hazard risk assessments, wise and efficient fuels treatments, and a coordinated approach to mitigation policy through federal, state, regional, and local planning efforts. Our combined prioritization will be the protection of people, structures, infrastructure, and unique ecosystems that contribute to our way of life and the sustainability of the local and regional economy.

1.1.3.1.2 Vision Statement

Institutionalize and promote a countywide wildfire hazard mitigation ethic through leadership, professionalism, and excellence, leading the way to a safe, sustainable Yellowstone County.

1.1.3.1.3 Goals

- To reduce the area of WUI land burned and losses experienced because of wildfires where these fires threaten communities in the wildland-urban interface
- Prioritize the protection of people, structures, infrastructure, and unique ecosystems that contribute to our way of life and the sustainability of the local and regional economy
- Educate communities about the unique challenges of wildfire in the wildland-urban interface (WUI)
- Establish mitigation priorities and develop mitigation strategies in Yellowstone County
- Strategically locate and plan fuel reduction projects
- Provide recommendations for alternative treatment methods, such as modifying forest stand density, herbicide treatments, fuel reduction techniques, and disposal or removal of treated slash
- Meet or exceed the requirements of the National Fire Plan and FEMA for a County level Wildfire Protection Plan

2 Administration & Implementation Strategy

Critical to the implementation of this Community Wildfire Protection Plan will be the identification of, and implementation of, an integrated schedule of treatments targeted at achieving an elimination of the lives lost, and reduction in structures destroyed, infrastructure compromised, and unique ecosystems damaged that serve to sustain the way-of-life and economy of Yellowstone County and the region.

All risk assessments were made based on the conditions existing during 2005, thus, the recommendations have been made in light of those conditions. However, the components of risk and the preparedness of the county's resources are not static. It will be necessary to fine-tune this plan's recommendations annually to adjust for changes in the components of risk, population density changes, infrastructure modifications, and other factors.

As part of the Policy of Yellowstone County in relation to this planning document, the Community Wildfire Protection Plan should be reviewed annually at a special meeting of the Yellowstone County Commissioners, open to the public and involving all municipalities/jurisdictions, where action items, priorities, budgets, and modifications can be made or confirmed. A written review of the plan should be prepared (or arranged) by the Chairman of the County Commissioners, detailing plans for the year's activities, and made available to the general public ahead of the meeting (in accord with the Montana Open Public Meeting Laws). Amendments to the plan should be detailed at this meeting, documented, and attached to the formal plan as an amendment to the Community Wildfire Protection Plan. Total re-evaluation of this plan should be made on the 5th anniversary of its acceptance, and every 5-year period following.

2.1 Recommendations

Throughout the course of the planning process members of the committee and the public came up with many mitigation activities that they felt would help reduce the risk of wildfire in Yellowstone County. Action items were categorized by their effectiveness in "Safety and Policy", "People and Structures", "Infrastructure", and "Firefighting Resources and Capabilities". All recommended mitigation activities are detailed in the recommendation tables in Chapter 5 of the Plan. The following is a summarized list of the recommendations made by the committee. A full record of the recommended activities is found in Chapter 5 of the Community Wildfire Protection Plan.

2.1.1 WUI Action Items in Safety & Policy

- Adoption and enforcement of International Building Codes and/or more stringent hazard--related building code provisions.
- Develop County policy concerning building materials used in high-risk WUI areas on existing structures and new construction.
- Develop County policy requiring the installation of dry hydrants in subdivisions with 5 or more dwellings.
- Begin distributing "New Code of the West" pamphlets with sub-division permit requests.
- Develop a policy to enforce "No Burning" restrictions in specified high risk subdivisions.
- Review need to inspect and enforce access and water issues in new subdivisions and individual homes.
- Develop county policy concerning access in moderate to high-risk WUI areas where subdivisions are built to insure adequate ingress and egress during wildfire emergencies.
- Develop a county policy to support grant applications for projects resulting from this plan.

2.1.2 WUI Action Items for People and Structures

- Youth and Adult Wildfire Educational Programs and Professional Development Training.
- Wildfire risk assessments of homes in identified communities.

- Home Site WUI Treatments
- Community Defensible Zone WUI Treatments, specifically in the Clapper Flats, Buffalo Trails, Rehberg Ranch Estates, Alkali Creek, Hills Estates, Indian Cliffs, Pleasant Hollow, Shadow Canyon, Cedar Ridge, White Buffalo, High Trails, and Emerald Hills subdivisions.
- Maintenance of Home Site WUI Treatments
- Re-entry of Home Site WUI Treatments
- Implement proposed home defensible space projects.

2.1.3 WUI Action Items for Infrastructure Enhancements

- Post “Emergency Evacuation Route” signs along the identified Primary and Secondary access routes in the County.
- Access improvements of bridges, cattle guards, and limiting road surfaces.
- Improve communications throughout the County by installing additional repeater towers and obtaining portable repeaters for emergency response personnel.
- Erect a repeater tower on the site donated by the Conover Ranch near Broadview.
- Fuel mitigation of the “Emergency Evacuation Routes” in the County to insure these routes can be maintained in the case of an emergency.
- Erect a repeater tower system to support the Shepherd Volunteer Fire Department and Shepherd community.
- Access improvements through roadside fuels management.

2.1.4 WUI Action Items in Firefighting Resources and Capabilities

- Enhance radio availability in each department, link into existing dispatch, improve range within the region, and conversion to consistent standard of radio types.
- Retention of Volunteer Fire Fighters.
- Increased training and capabilities of firefighters.
- Obtain a Type 6 wildland fire truck, a ProPAC foam kit, a floater pump, and additional personal protective equipment for the Broadview Fire District #3.
- Support the construction of the new Fire Station/Clinic/Pharmacy/Community Center proposed in Lockwood.
- Obtain a Type 6 engine, two 1,000 gallon pumper trucks, and a heated truck storage facility for the Worden Volunteer Fire Department.
- Obtain a 4x4 pumper truck and a 1,500-2,000 gallon water tender for the Laurel Fire Department.
- Construction of a Shepherd Volunteer Fire Department satellite station in the Hidden Lake area.
- Additional heated equipment storage facility for the Broadview Fire Department #3.
- Establish onsite water sources such as dry hydrants or underground storage tanks for rural housing developments.
- Establish a site and install a higher capacity municipal well and pump and a 100,000 gallon storage tank for the town of Broadview.
- Establish a non-potable water well and storage system to supply fire hydrants, dry hydrants, and fire suppression systems in public buildings in the town of Broadview.
- Obtain a Type 3 WUI pumper truck for the Laurel Urban Fire Service Area.
- Obtain funding to add structural fire responsibilities to Broadview Fire District #3, which would include personnel incentives, additional rolling stock equipped with structural firefighting capabilities, structural turnout gear, and a larger equipment storage facility.
- Obtain a Type 6 wildland engine and a wood chipper for Lockwood Fire District #8.
- Acquire sites and install dry hydrants on Pine Hills Road, High Trails Road, Coburn Hill Road, Yellowstone Trail Road, and Box Canyon Spring Road.
- Obtain one structural engine, 3 Type 3 engines (to replace old 6x6’s), and one Type 2 water tender for the Shepherd Volunteer Fire Department.
- Secure funding for a full time Laurel Volunteer Fire Department Chief.
- Equip Laurel Emergency Operations Center with radios and phone lines.

2.2 Prioritization of Mitigation Activities

The Yellowstone County Community Wildfire Protection Plan committee has outlined a prioritization process for the mitigation activities recommended in the plan. The prioritization process includes a special emphasis on cost-benefit analysis review, but also incorporates factors such as population benefit, economic benefit, project feasibility, hazard magnitude, future development, and project effectiveness and sustainability. Each planning project or mitigation activity was analyzed and given a numerical score, which prioritized it into a “high”, “medium”, or “low” category. Priority rankings are listed with the specific action item in the recommendation tables in Chapter 5 of the Plan.

This plan was developed by Northwest Management, Inc., under contract with the Yellowstone County Commissioners, with funding provided by the USDI Bureau of Land Management and Yellowstone County.

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Schlosser, W. E. and T. R. King. *Lead Authors*. 2006. Yellowstone County, Montana, Community Wildfire Protection Plan Appendices. Northwest Management, Inc., Helena, Montana. February 28, 2006. Pp. 66.

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