City of Golden Fire Department Draft Community Wildfire Protection Plan

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LIST OF ACROYNMS AND ABBREVIATIONS

AOP	Annual Operating Plan
ASTER	Advanced Spaceborne Thermal Emission and Reflection Radiometer
BLM	Bureau of Land Management
CSFS	Colorado State Forest Service
CWPP	Community Wildfire Protection Plan
ERC	Energy Release Component
EV	Existing Vegetation
FBFM	Fire Behavior Fuel Model
FEMA	Federal Emergency Management Agency
FPD	Fire Protection District
FRCC	Fire Regime Condition Class
HFRA	Healthy Forests Restoration Act
IC	Incident Commanders
JFDRS	Jefferson County Fire Danger Rating System
mph	miles per hour
NEPA	National Environmental Protection Act
NFDRS	National Fire Danger Rating System
NFPA	National Fire Protection Association
OEM	Office of Environmental Management
PNV	Potential Natural Vegetation
psi	pounds per square inch
RAWS	Remote Automated Weather Stations
USFS	US Forest Service
WALSH	Walsh Environmental Scientists and Engineers, LLC
WFU	Wildland Fire Use
WUI	Wildland Urban Interface

EXECUTIVE SUMMARY

Steep terrain, large areas of continuous fuels, and frequent high fire danger weather conditions make wildfire a significant concern in Jefferson County, as substantiated by recent large fires. The Community Wildfire Protection Plan (CWPP) is a strategic plan that identifies wildland fire issues facing the community and outlines prioritized mitigation actions. Once the CWPP is adopted, it is the community's responsibility to move forward and implement the action items. This may require further planning at the project level, acquisition of funds, or simply motivating community members.

The Healthy Forests Restoration Act (HFRA) of 2003 provides the impetus for wildfire risk assessment and planning at the county and community level. HFRA refers to this level of planning as Community Wildfire Protection Plans. The CWPP allows a community to evaluate its current situation with regards to wildfire risk and devise ways to reduce risk for protection of human welfare and other important economic or ecological values. The CWPP may address issues such as community wildfire risk, structure flammability, hazardous fuels and non-fuels mitigation, community preparedness, and emergency procedures. A Core Team provides oversight to the development of the CWPP and its implementation in the assessment area.

The focus of this CWPP is on the City of Golden in Jefferson County, Colorado. Values at risk include human life and welfare, private residences, wildlife habitat, recreational land, businesses, and critical infrastructure. This risk is primarily associated with the large areas of grass and brush fuels bordering the community.

Wildfires are a relatively common occurrence in Jefferson County. The Golden Fire Department responded to 143 fires in grass, brush, forests, and natural fuels from 2000 through 2006. While the major fires that scorched hundreds of thousand of acres within the county in the last decade have occurred in the forested mountains some distance to the west and southwest of Golden, they indicate the scale of the wildland fire issue within Jefferson County. Four of the five largest fires were human caused.

Natural resource management policy and changing ecological conditions have interacted to produce vegetation management concerns in and near the assessment areas. These issues include historic fire exclusion policy, overstocked or decadent vegetation communities, invasive plants, and changing climatic patterns. The accumulation of wildland fuels may set the stage for problematic wildfires, resulting in the loss of important economic and ecological values. Key concerns in the Golden area are invasive weeds, encroachment of mountain mahogany into grasslands, and overall grassland health.

The Golden Fire Department maintains 12 pieces of apparatus out of four stations. Of the 48 volunteer firefighters, all have received training in wildland firefighting and 24 are on the wildland team. These dedicated volunteers respond to an average of over 1,100 calls and 15 to 20 wildland fires per annum.

Public meetings were convened on February 8 and April 5, 2007 at 7:00 p.m. in the Golden community center. The meetings were announced through the Golden *Informer* newsletter, county and city websites, the posting of over 100 fliers, and direct contact outreach to homeowner's associations. The purpose of the first meeting was to explain the wildfire risk assessment, present the findings of the risk assessment, provide an opportunity for the public to participate in the process, and comment on proposed mitigation possibilities such as hazardous fuels management and non-fuel projects. The purpose of the second meeting was to present the findings of the CWPP to the public.

Questionnaires were distributed at meetings to obtain information on public opinion on the level of wildfire risk in Golden, evaluate values at risk, and assess mitigation practices needed to reduce risk (Appendix D). Wildland urban interface (WUI) safety pamphlets and brochures that explained proper home construction and landscaping practices to reduce the risk of wildfire loss were also handed out at the meetings (Appendix F). A draft report of the CWPP was posted on the County's emergency website to encourage public review and comment.

The National Fire Protection Association (NFPA) Form 1144, Standard for Protection of Life and Property from Wildfire 2002 Edition, was used to assess the level of risk and hazard to communities and individual houses during the community assessment conducted in February 2007. The evaluation rated attributes such as means of access, surrounding vegetation (fuels), presence of defensible space, topography, roofing and other construction materials, available fire protection, and placement of utilities. Scores were assigned to each element and then totaled to determine the level of risk. Low, moderate, and high hazard categories were determined based on the total score.

The City of Golden was divided into three assessment areas (Map 2). Though the urban core of Golden was not assessed as WUI, several general recommendations are made regarding this area. Each assessment area was rated as moderate (Table ES-1).

Priority action items include:

- Improving defensible space
- Phasing out wood shake roofs
- Clean-up of brush in proximity to homes
- Fire prevention education

Implementing, sustaining, and monitoring the CWPP is key to success. Building partnerships among community-based organizations, fire protection authorities, local governments, public land management agencies, and private landowners is necessary in identifying and prioritizing measures to reduce wildfire risk. Maintaining this cooperation is a long-term effort that requires the commitment of all partners involved. The CWPP encourages citizens to take an active role in the CWPP process by identifying needs, developing strategies, and implementing solutions.

Table ES-1. Community Hazard Rating and Contributing Factors

Area	Hazard Rating	Contributing Factors
North	Moderate	• (+) Generally light fuels • (-) Clusters of homes with wood shake roofs and combustible building materials • (+) Excellent fire department response, water and street systems • (-) Cul-de-sacs in excess of 300 feet • (-) Steep slopes in proximity to homes • (-) Most homes would benefit from improved defensible space
Southwest	Moderate	• (+/-) Generally light fuels with some pockets of brush close to homes • (+/-) Combustible building materials, but generally non-combustible roofs • (+) Excellent fire department response, water and street systems • (-) Cul-de-sacs in excess of 300 feet • (-) Steep slopes in proximity to homes • (-) Most homes would benefit from improved defensible space
Southeast	Moderate	• (+) Generally light fuels • (+/-) Combustible building materials, but generally non-combustible roofs • (-) Above ground utilities • (+) Excellent fire department response, water and street systems • (-) Cul-de-sacs in excess of 300 feet • (-) Steep slopes in proximity to homes • (-) Most homes would benefit from improved defensible space
Urban Areas	NA	• (+) Much of the occluded open space is being developed or becoming irrigated for parks and golf courses • (-) Some park areas are remaining in undeveloped state and are more susceptible to fire • (-) Drainage and trail corridors are prone to brush build-up, often in proximity to homes • (+/-) Issues of weed problems typical of urban areas • (+) Wildfire is of a low and diminishing concern, though some unkempt areas merit attention

Table ES-2. Proposed Wildfire Mitigation Project Schedule

Year	Project	Actions
1	Annual spring outreach	▪ Contact and/or organize homeowners
	Annual spring mitigation (Defensible Space)	▪ Basic yard clean-up and disposal: ▪ Clean roofs and gutters ▪ Trim limbs/bushes within 3-5 feet of home ▪ Rake yard ▪ Help a neighbor ▪ Organize debris disposal
2	Annual spring outreach	▪ Contact and/or organize homeowners
	Annual spring mitigation (Defensible Space)	▪ Brush clean-up along property lines ▪ Repeat basic yard clean-up ▪ Organize debris disposal
3	Annual spring outreach	▪ Contact and/or organize homeowners ▪ Advise individual home owners on needed improvements to construction features
	Annual spring mitigation (Defensible Space)	▪ If necessary, coordinate defensible space efforts between homeowner groups who have created defensible space, and adjacent open space land managers.
4	Annual spring outreach	▪ Contact and/or organize homeowners ▪ Follow-up on construction feature recommendations
	Annual spring mitigation (Defensible Space)	▪ Complete any outstanding projects from previous years ▪ Begin maintenance phase ▪ Initiate construction feature improvements