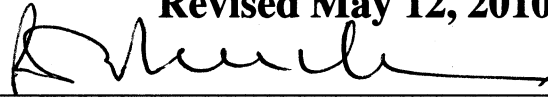


# Summit County Community Wildfire Protection Plan

Adopted September 11, 2006

Revised November 16, 2006

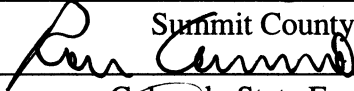
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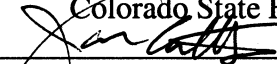
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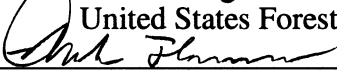
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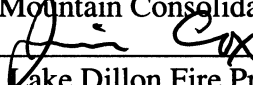
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United States Forest Service



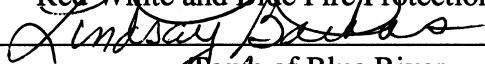
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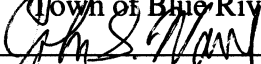
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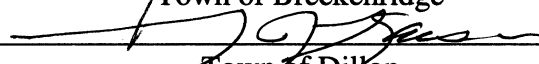
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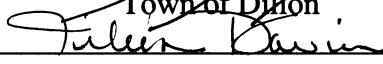
Town of Blue River



Town of Breckenridge



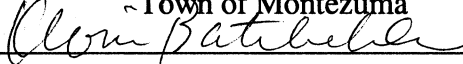
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Town of Frisco

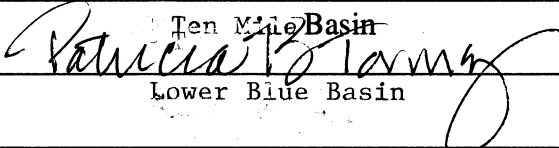


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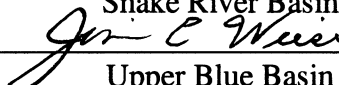
Town of Silverthorne

Ten Mile Basin



Lower Blue Basin

Snake River Basin



Upper Blue Basin

Division of Wildlife

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<b>I. EXECUTIVE SUMMARY .....</b>	<b>4</b>
<b>II. AUTHORIZATION.....</b>	<b>5</b>
<b>III. PURPOSE.....</b>	<b>5</b>
<b>IV. GOALS.....</b>	<b>5</b>
<b>V. COMMUNITY WILDFIRE PROTECTION PLAN.....</b>	<b>6</b>
A. COMMUNITY AND AGENCY ENGAGEMENT IN THE DEVELOPMENT OF THIS COMMUNITY WILDFIRE PROTECTION PLAN.....	6
<b>VI. HISTORICAL BACKGROUND.....</b>	<b>7</b>
A. 2006 SUMMIT COUNTY COMMUNITY WILDFIRE PROTECTION PLAN.....	7
B. FORMATION OF THE SUMMIT COUNTY WILDFIRE COUNCIL.....	7
C. HISTORICAL SUPPORT FOR WILDFIRE PROTECTION .....	8
<b>VII. CURRENT COMMUNITY STATUS.....</b>	<b>9</b>
A. COMMUNITY PROFILE .....	9
B. WILDLAND URBAN INTERFACE (WUI) .....	10
C. THE PINE BEETLE EPIDEMIC.....	10
D. NEED FOR FOREST MANAGEMENT .....	11
E. FOREST MANAGEMENT ACTIVITIES .....	12
F. PROJECT PRIORITIZATION.....	12
G. NEED FOR CITIZEN PREPAREDNESS AND EVACUATION PLANNING .....	13
H. REDUCTION OF STRUCTURAL IGNITABILITY .....	14
I. DEFENSIBLE SPACE/ FUELS REDUCTION.....	14
J. PUBLIC EDUCATION .....	14
<b>VIII. EXISTING FIRE PROTECTION INFRASTRUCTURE.....</b>	<b>15</b>
<b>IX. COMMUNITY BASE MAP.....</b>	<b>16</b>
<b>X. COMMUNITY PROTECTION ASSESSMENT.....</b>	<b>18</b>
A. SUB-MODEL 5A – FUELS HAZARDS .....	21
B. SUB-MODEL 5B- RISK OF WILDFIRE OCCURRENCE .....	23
C. SUB-MODEL 5C- ESSENTIAL INFRASTRUCTURE AT RISK .....	25
D. SUB-MODEL 5D- COMMUNITY VALUES AT RISK.....	27
E. SUB-MODEL 5E- LOCAL PREPAREDNESS AND FIRE FIGHTING CAPABILITY .....	29
<b>XI. FOCUS AREAS FOR REDUCING WILDFIRE RISKS.....</b>	<b>31</b>

<b>XII. FIRE PROTECTION STRATEGIES AND IMPLEMENTATION.....</b>	<b>33</b>
A. OBJECTIVE – ESTABLISH AND MAINTAIN A COMMUNITY BASE MAP ...	33
B. OBJECTIVE – ESTABLISH AND MAINTAIN COMMUNITY PROTECTION ASSESSMENT MAPS .....	33
C. OBJECTIVE - ESTABLISH AND MAINTAIN MAPS THAT IDENTIFY WHERE RISK REDUCTION EFFORTS SHOULD BE PURSUED .....	34
D. OBJECTIVE- ESTABLISH PRESCRIPTIONS FOR MINIMIZING THE IMPACTS OF WILDFIRE .....	34
E. OBJECTIVE - FUND AND IMPLEMENT THE SCCWPP. ....	35
F. OBJECTIVE – SUPPORT NEIGHBORHOOD, SUBDIVISION AND COMMUNITY EFFORTS TO REDUCE THE RISK OF WILDFIRES .....	35
G. OBJECTIVE- INFORM PUBLIC ABOUT RISK OF WILDFIRE AND RESPONSIBILITY TOWARD EMERGENCY PREPAREDNESS.....	36
H. OBJECTIVE- ENSURE NOXIOUS WEEDS DO NOT PROLIFERATE IN FUELS REDUCTION AREAS .....	37
I. OBJECTIVE –SUPPORT UTILIZATION OF FOREST PRODUCTS .....	37
 APPENDIX “A”	
CWPP Implementation 2006 to the Present.....	38
 APPENDIX “B”	
Public Education Efforts Recognizing Five Specific Programmatic Target Areas.....	39
 APPENDIX “C”	
Management Recommendations for Reducing Fire Hazards.....	40

# **I. EXECUTIVE SUMMARY**

Summit County's permanent resident population has more than doubled in the last 20 years, with much of this new development occurring in forested areas that have a high risk of wildfire. In an effort to minimize the risk of wildfire in these areas, the community through various forums has expressed its desire to maintain forests that not only have a reduced risk of wildfire but that are also diverse and healthy.

Given that resources to address this concern are limited, officials from Summit County, local fire districts, state and federal forest agencies, towns and others joined forces to develop the community's first wildfire protection plan. This plan, known as the Summit County Community Wildfire Protection Plan (SCCWPP), was adopted in 2006.

Early in the development of this first plan, participating entities agreed that it should be generally consistent with the national model for community wildfire protection planning, as set forth by the National Association of Counties and other organizations. This national model for wildfire protection planning is an extension of the Healthy Forest Restoration Act authorized by Congress in 2003.

This first plan was prospective in nature in that it established the Summit County Wildfire Council and set forth various objectives, actions and policies designed to reduce the risk and impact of wildfire.

Since the adoption of the first plan, the Wildfire Council has made a number of important refinements in how the community should reduce wildfire risks. The more significant refinements include: the establishment of "focus areas," the creation of an annual grant program that encourages and financially supports private efforts at reducing hazardous fuels, and the creation of a long-term funding mechanism through the adoption of Measure 1-A in 2008 to help pay for these efforts. While the 2006 plan envisioned cooperation between various agencies, one of the most important refinements that make this an extremely effective program is the close collaboration between the county, the fire-protection districts, the Colorado State Forest, the U.S. Forest Service and the towns.

This 2010 plan reflects additional refinements, updates the 2006 plan and incorporates new language regarding the use of the five models that form the Community Protection Assessment (Chapter X), the need for community preparedness and evacuation planning (Chapter VII), the importance of minimizing the proliferation of noxious weeds in fuel-reduction projects (Chapter XII) and management recommendations for the reduction of fire hazards for each "focus area" (**Appendix C**).

## **II. AUTHORIZATION**

The initial authorities for community fire planning came under the Healthy Forests Restoration Act (HFRA). Title I of HFRA outlined requirements for reducing hazardous fuels on federal lands. The Summit County plan was developed to be consistent with requirements of HFRA and provide Summit County with a countywide baseline from which to begin community fire planning in coordination with the U.S. Forest Service. The Colorado Legislature has since created specific law guiding the community planning at a county government level. The statutes providing authorization for this planning are outlined below:

- C.R.S. 23-31-312 Community wildfire protection plans, county government, guidelines and criteria, legislative declaration, definitions
- C.R.S. 29-22.5-103 Wildland fires – general authority and responsibilities
- C.R.S. 30-10-512 Sheriff to act as fire warden
- C.R.S. 30-10-513 Sheriff in charge of forest or prairie fire
- C.R.S. 30-10-513.5 Authority of Sheriff relating to fire within unincorporated areas of the County

## **III. PURPOSE**

The purpose of this plan is to identify areas where the risk and potential community impact of wildfire is greatest and to guide and coordinate community efforts to reduce the risk of wildfire through public education, reducing hazardous fuels and reducing structural ignitability.

## **IV. GOALS**

The goals of this plan are:

1. Identify areas that are at particular risk from wildfire loss, especially those areas that are “at risk” as identified in Title I of the Healthy Forests Restoration Act of 2003.
2. Develop and/or inform plans to reduce potential loss of property, critical infrastructure and valued ecological resources while protecting the safety of the public and firefighters.
3. Implement, manage or fund projects identified in this plan.
4. Improve our understanding of our existing community fire protection infrastructure.
5. Outline a strategy for informing members of the public of their responsibilities to reduce wildfire risk.
6. Provide a meaningful structure to update plans and strategies in the future.
7. Engage interested members of the public and affected governmental agencies to shape and effectively implement this plan.

## **V. COMMUNITY WILDFIRE PROTECTION PLAN**

Community Wildfire Protection Plans are a direct extension of the Healthy Forest Restoration Act (HFRA) authorized by Congress in 2003. In an effort to promote these plans and to encourage consistency in the development of these plans, a model handbook was prepared by the Communities Committee, National Association of Counties, National Association of State Foresters, Society of American Foresters and the Western Governors' Association. The Board of Summit County Commissioners, Dillon District Ranger, Upper Colorado River Interagency Fire Management Unit, the Colorado State Forest Service and fire chiefs for Lake Dillon, Red White and Blue, and Copper Mountain Consolidated Metropolitan Districts agreed that the development of the Summit County Wildfire Protection Plan (SCCWPP) should be generally consistent with this national model.

The main goals of HFRA are to enhance life safety for residents and responders, mitigate undesirable fire outcomes to property and infrastructure, and mitigate undesirable fire outcomes to the environment and quality of life. This CWPP addresses these goals and guides the Summit County community in implementation.

### **COMMUNITY AND AGENCY ENGAGEMENT IN THE DEVELOPMENT OF THIS COMMUNITY WILDFIRE PROTECTION PLAN**

The Healthy Forest Restoration Act calls for collaboration among affected agencies and interested members of the public with an emphasis on involvement of federal agencies. The Summit County Wildfire Council (SCWC) is the collaborative body for Summit County. The SCWC meets regularly to discuss and direct the implementation of the SCCWPP.

In 2009, during periodic review of the SCCWPP, it was determined that significant activity had occurred to warrant a revision to the SCCWPP. This revision, like the original SCCWPP, is a collaborative effort of all parties of the SCWC. Information from members of the SCWC was incorporated into this revised SCCWPP.

## **VI. HISTORICAL BACKGROUND**

### **A. 2006 SUMMIT COUNTY COMMUNITY WILDFIRE PROTECTION PLAN**

In March of 2005, the local fire protection districts/departments, the Dillon Ranger District, Upper Colorado River Interagency Fire Management Unit, the Colorado State Forest Service, Northwest Colorado Council of Governments and the Board of Summit County Commissioners agreed to create a Countywide Community Wildfire Protection Plan based on the national model promulgated by the National Association of Counties and others. There was agreement that the multi-jurisdictional effort in the Upper Blue basin, spearheaded by the Town of Breckenridge and facilitated by Gary Severson with the Northwest Colorado Council of Governments, would be a component of this countywide plan and would serve as a model as to how the countywide program should be structured. After approval of the draft plan, the Summit County Wildfire Council was formed and formally adopted the first Summit County Wildfire Protection Plan in September of 2006.

### **B. FORMATION OF THE SUMMIT COUNTY WILDFIRE COUNCIL**

Consistent with the charge given in the joint March 2005 meeting referenced above, the outline of this report and general strategy for reducing the risk of wildfire were developed jointly by the staffs of the Lake Dillon Fire Protection District, the Northwest Colorado Council of Governments and Summit County on April 15, 2005, and subsequently presented to both the federal and state forest services for their endorsement. An important mechanism established in this April outline was the creation of the Summit County Wildfire Council (SCWC). Key charges of the SCWC include:

- **Directing** the determination of the geographic area(s) to address the formation of mutually agreed upon objectives for the countywide community wildfire protection plan, and determination of the level of financial and human support necessary and the priorities for resource application for the success of the Council and its activities.
- **Reviewing** staff-produced documents from the perspective of whether “the product or process being proposed [would] aid locally elected officials and federal land management agency managers make better, cooperative decisions.”
- **Guiding** revisions to proposed plans to improve their qualities as decision tools and the implementation of these plans.
- **Evaluating** the plans and the process used to produce them.
- **Recommending** follow-up actions for the participating jurisdiction’s actions to improve the process.



- **Communicating** actions and proposed actions regarding wildfire mitigation and forest-health activities to the public and other governmental jurisdictions.
- **Adopting and Revising** the Summit County Community Wildfire Protection Plan.

The Summit County Wildfire Council oversees staff recommendations on fuel-reduction projects, allocation of grant funding and strategic policymaking on critical issues.

### **C. HISTORICAL SUPPORT FOR WILDFIRE PROTECTION**

Summit County has been an area leader in proactive wildfire-mitigation issues for the past two decades. After the Black Tiger Fire in July of 1989 destroyed some 44 structures in Boulder County, the Summit County Board of Commissioners, along with stakeholders in the fire-protection community, formed a task force to examine wildfire issues. This diverse task force made several strategic recommendations to the community. After analysis of these strategic recommendations, a two-tiered approach was initiated. One strategic goal was to enhance the public-education efforts on wildfire prevention and mitigation issues to the community. The second broad strategic goal was to establish some criteria in local building and/or fire codes to reduce structural ignitability and improve defensible space around new construction.

In 1992 a chapter was added in the Uniform Building Code that contained specific criteria on defensible space, non-combustible roofing materials and key provisions to reducing structural ignitability. A part-time employee was added to the staff of the Summit County Building Department to enforce the new provisions in the Building Code and educate the public on the new provisions. The Summit County fire districts provided enhanced education efforts on the strategic and tactical issues involving wildfire mitigation. This part-time position was expanded to a full-time position in 2001, with the Summit Fire Authority funding one-half of the position and Summit County funding the other half.

Since the infancy of the wildfire program, Summit County has received numerous grants from various sources at the state and federal levels totaling approximately \$725,000. Summit County received its first grant of \$30,000 in 2002 for funding fuel-reduction efforts and to form a comprehensive countywide plan. Community support for wildfire issues was clearly demonstrated in 2008 with the approval of Resolution 1-A. The Board of County Commissioners has voiced their intent to devote up to \$500,000 annually, for the 12-year life of the measure, toward wildfire-mitigation efforts and to build a cash reserve to fund fire suppression costs.

In December of 2008, the Summit County Commissioners adopted the Summit County Multi-Hazard Mitigation Plan (MHMP). This plan is in accordance with the requirements of the Disaster Mitigation Act of 2000, which is necessary to achieve grant eligibility from the Federal Emergency Management Agency (FEMA). The MHMP is a comprehensive natural-disaster planning document that incorporates the wildfire-specific planning contained within the CWPP. The MHMP contains community specific hazard and risk information regarding erosion and deposition, landslide, mud and debris flow, mountain pine beetle infestation and wildfire.

## **VII. CURRENT COMMUNITY STATUS**

### **A. COMMUNITY PROFILE**

#### **Geographical Overview**

Summit County is located in the central mountains of Colorado, approximately 70 miles west of Denver. Interstate 70 bisects the county east to west, serving as a conduit to bring visitors from the Denver metropolitan area and Colorado's Western Slope.

Summit County's land area covers approximately 619 square miles, of which about 80 percent are public lands managed by the U.S. Forest Service and the Bureau of Land Management. About 20 percent of lands in the county are privately owned and managed.

Elevations in the county range from 7,500 feet in the broad valley of the Blue River to 14,270 feet at the summit of Gray's Peak. The county's lowest elevations, in the lower Blue Valley, are comprised mainly of sage meadows. Above 9,000 feet, vast coniferous forests of lodgepole pine, Englemann spruce and subalpine fir dominate the landscape. Areas above 11,500 feet (approximate treeline) consist of rock, snow and alpine tundra.

The Blue River flows from south to north through the county, serving as Summit County's only drainage basin. Two major tributaries spill into the Blue River: the Snake River and Ten Mile Creek. The Blue River supplies two large reservoirs: the Dillon Reservoir in the central part of the county, and Green Mountain Reservoir in the county's northern end.

## **Population Growth and Development in the Wildland Urban Interface**

Summit County's permanent resident population has more than doubled in the last 20 years, with an estimated permanent resident population of 29,280 in 2009<sup>1</sup>. Much of this residential growth has occurred in the forested "wildland urban interface" (WUI), where private lands abut federal lands, largely due to the beauty, recreational opportunities, solitude and scenery that these areas provide. As development in the WUI continues, there is a corresponding increase in the risk that wildfire presents to lives, property and community resources.

Additionally, with the county's reputation as a national and international center for winter sports and outdoor recreation, peak seasonal population in Summit County may swell to nearly 150,000 people<sup>2</sup>, greatly increasing the potential risk posed by wildfire.

### **B. WILDLAND URBAN INTERFACE (WUI)**

For the purposes of this plan, the Wildland Urban Interface is defined as forested lands within town boundaries and those areas within one-half mile of any town boundary. In addition significant development exists within unincorporated Summit County that is more than one-half mile from an existing town boundary. These areas of significant development are also included in the WUI area. Through the Community Wildfire Planning process we are able to define a WUI that reflects the unique development of the community. A visual depiction of the Summit County WUI area can be found in Map IX-A.

### **C. THE PINE BEETLE EPIDEMIC**

For the past decade, Summit County has been experiencing an epidemic outbreak of mountain pine beetle. Currently, there are no lodgepole pine stands in Summit County that do not have some mountain pine beetle activity. This outbreak extends far outside of the boundaries of Summit County. In 2009, it was estimated that 2.5 million acres of forest in Colorado and southern Wyoming had some level of mountain pine beetle activity.

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<sup>1</sup> Source: Summit County Planning Department, February 2010

<sup>2</sup> Source: Summit County Multi-Hazard Mitigation Plan, September 2008

This is the second pine beetle epidemic in the county over the last 30 years. Many factors have contributed to the extent of these outbreaks. Many experts suggest that a lack of landscape-scale forest management has led to a widespread, even-aged, over-mature forest. The over-mature forests are often very dense and heavily infested with dwarf mistletoe. A drought from 2001 to 2008 played a major role in weakening the already aged trees. The lack of water decreased the amount of pitch that the trees produced, thus reducing the trees' natural defense against the mountain pine beetle. The combination of these factors allowed the mountain pine beetle populations to grow from endemic levels to the epidemic levels we see today.

#### **D. NEED FOR FOREST MANAGEMENT**

All lodgepole pine forests, live or dead, are considered a high fire hazard forest type. Fire within the lodgepole type tends to be infrequent (on the order of 150-250 years), but very intense in nature. A typical fire in lodgepole pine is very fast moving and burns through the crowns of the trees. In addition to intense crown fire, spot fires can be expected one-half to one mile from the head of the fire.

Any time people place their homes in the forest, a need arises to manage the forest. In Summit County, this management is centered on reducing the wildfire hazard. Reducing fire hazard comes in many forms and is not just the responsibility of one party. Fuels-reduction work needs to be a coordinated effort by all parties, and projects must cross jurisdictional lines.

It is estimated that within Summit County, more than 75,000 acres of forested land administered by the U.S. Forest Service have a management prescription including fuels reduction. In addition, it is estimated that there are an additional 35,000 acres of non-federally owned forested land that may benefit from forest-management activities. While it is clearly not necessary to pursue fuels reduction and forest management on all these lands, a large percentage of these 110,000 acres would benefit from some type of fuels-reduction treatment.

## **E. FOREST MANAGEMENT ACTIVITIES**

When Summit County first wrote the SCCWPP, very little fuels-reduction or forest-management activities were occurring in the county. The activities occurring at the time were mostly focused on controlling pine beetle activity. A great deal has changed since that time. With the creation of the original SCCWPP came the establishment of the Summit County Wildfire Council (SCWC). The SCWC has made a tremendous impact on the forest management in Summit County. Through regular meetings, public outreach and various programs, the SCWC has helped to coordinate efforts and direct many landowners to conduct fuels-reduction activities on their own property.

The SCWC strives to implement cross-boundary, multi-jurisdictional projects. These projects provide the most amount of protection to life and property. One the first of these projects in Summit County occurred in the Iron Springs/ Hospital focus area. This project included completing fuels-reduction activities on Forest Service, county and private properties. Activity began in 2006 and was completed in 2009, creating a dramatic effect. These projects have provided protection for the hospital, Summit County government offices and the shops at the County Commons and more than 75 residences in the Bill's Ranch community and the Town of Frisco.

Appendix A includes a list of management activities that have occurred in Summit County from 2006 to the present.

## **F. PROJECT PRIORITIZATION**

The CWPP process identifies areas that are in critical need of fire hazard-reduction projects. Since resources – both time and money – are limited, prioritizing projects is paramount to implementing this CWPP. Through hazard mapping and field visits, the SCWC has identified several “Focus Areas,” or locations most in need of project work. Annually, the SCWC reviews the focus areas and determines priorities based on several factors, including organization within the community, community buy-in, resources within the community and cooperative projects in the vicinity. The SCWC strives to complete treatment within one focus area before diverting resources to a new one. Community involvement is the most important factor in successfully implementing projects.

## **G. NEED FOR CITIZEN PREPAREDNESS AND EVACUATION PLANNING**

The increase in wildfire hazard means that notification regarding fire conditions and evacuations must be communicated to the public by a number of redundant methods. The communication methods available in Summit County are:

- Reverse telephone dialing (commonly referred to as Reverse-911™)
- Cellular device text messaging
- Emergency Alert System (EAS) supported by the National Weather Service broadcast
- Radio and television announcements and scroll
- Public address systems and announcement from public safety vehicles
- Door-to-door notification

The risk of dangerous wildfires means the public must be prepared to evacuate their properties when ordered to do so. The assessment of wildfire behavior will be a factor in the decision of the sheriff, fire or police chief to order an evacuation. The evacuation route will be identified by the incident commander and will be communicated to the public by the methods identified above. The Summit County GIS Department has prepared a wildfire evacuation map book, which creates uniquely identified zones, population numbers and road miles for all developed areas of Summit County. Municipal government evacuation planning has been done in coordination with the Summit County map book.

The decision to order an evacuation because of a wildfire entails a series of steps that are contingent upon the personal preparedness of the members of the public and their ability to evacuate their property immediately and then follow the instructions being provided. Each wildfire incident and situation will be influenced by the current fire behavior, current weather conditions and available fuels. Therefore, it has been the decision of the Office of Emergency Management not to pre-identify and establish evacuation routes for wildfire.

All wildfire evacuations will contain these consistencies: the incident commander will identify major thoroughfare roads as evacuation routes; the sheriff's office or police department will isolate the impacted area with a large-area perimeter and restrict access; the incident commander will use the notification methods identified above to announce and give directions regarding the evacuation; and the Office of Emergency Management will establish a place for those evacuated to report and continue to receive incident-specific information.

## **H. REDUCTION OF STRUCTURAL IGNITABILITY**

Building modifications can have a significant impact on a structure's ability to withstand a wildland fire. Items which can reduce ignition include but are not limited to: non-combustible Class A-rated roof materials; non-flammable material on the exterior sides and decks such as stucco, Hardie Plank™, stone or brick veneer; and recycled plastic compounds for decking material.

In 1992, Summit County added a chapter to the Uniform Building Code that contained specific criteria on defensible space, non-combustible roofing materials and key provisions to reducing structural ignitability. Chapter 44 provides guidance to builders for the implementation of fire-wise construction. Chapter 44 has different requirements for construction, depending on the hazard rating of the subdivision. Similar discussions have taken place in several of the towns within Summit County. Each town has its own codes to assist with reducing structural ignitability.

## **I. DEFENSIBLE SPACE/ FUELS REDUCTION**

Defensible space is an area around a structure where fuels and vegetation are treated, cleared or reduced to slow the spread of wildfire towards the structure. It also reduces the chance of a structure fire moving from the building to the surrounding forest. In addition defensible space provides room for firefighters to do their jobs.

There are several different specific standards for defensible space within Summit County. Some examples of these Standards are the Colorado State Forest Service no.6.302, Summit County Residential Building Code Chapter 44, Breckenridge Voluntary Defensible Space Ordinance and others. Each standard varies slightly, but they all agree in general principal. Specifics of each of these standards or general information about defensible space can be obtained from the specific agencies listed above or the local fire protection district.

## **J. PUBLIC EDUCATION**

Community outreach and education are key activities toward the continued success of the SCWC. From the beginning, the SCWC recognized community outreach and education as the cornerstone of a successful wildfire-mitigation program. The SCWC recognizes five specific programmatic target areas: defensible space; fuels reduction; reducing structural ignitability; preparedness and family planning for evacuation; and general forest health and continued vegetation maintenance.

To improve wildfire protection efforts in the community, numerous community-outreach and education efforts have been implemented. Additionally, ongoing outreach and education strategies around five programmatic target areas have

been developed and are being disseminated. The overarching goal of this effort is to increase public awareness of the inherent risks associated with living in a forested area, while providing residents and visitors tools to protect themselves, their property and vital infrastructure.

Public Education in Summit County is the responsibility of many agencies. To provide a coordinated public-information message, the SCWC directed staff to form the Education Subcommittee of the Wildfire Council to address this issue. This subcommittee is tasked with organizing educational information to be disseminated to all Summit County agencies that maintain public outreach. Ultimately, this coordinated information is made available to residents and guests so they are prepared in the event of a wildfire.

In addition to educating the residents of Summit County, the SCWC recognized the need to educate the large number of guests who visit the county each year. The SCWC is currently working on addressing this large and ever-changing group. One project that has been implemented to address this group was the interpretive sign project. Six permanent sets and one mobile set of interpretive signs are placed throughout Summit County to answer visitors' questions about forest health and wildfire. Education focus areas are in Appendix "B."

## **VIII. EXISTING FIRE PROTECTION INFRASTRUCTURE**

Summit County fire districts and local federal resources are fortunate to have strong support from fire district boards of directors, the Summit County Wildfire Council, elected public officials and the general public. Local resources were tested during a record local wildfire season in the summer of 2005, and they performed extremely well. All Summit County firefighters and federal Upper Colorado River firefighters are certified at a federal level to engage in wildfire suppression on both private and federal land. In addition, significant training opportunities are available in classroom settings and on out-of-county, campaign-type fires. Significant interaction of local federal units and local fire districts has lead to more efficiency in field and tactical operations.

Significant improvements continue to be made at the local level among local and federal personnel. The spirit of joint cooperation through exercises and incident-management teams continues to add efficiency and ultimately provide firefighter and public safety. Areas of improvement continue to be identified at tactical and planning levels. Ultimately, the involvement of the Summit County Wildfire Council, the implementation of the Community Wildfire Protection Plan and strict compliance with the National Incident Management System will continue to improve local suppression capabilities.



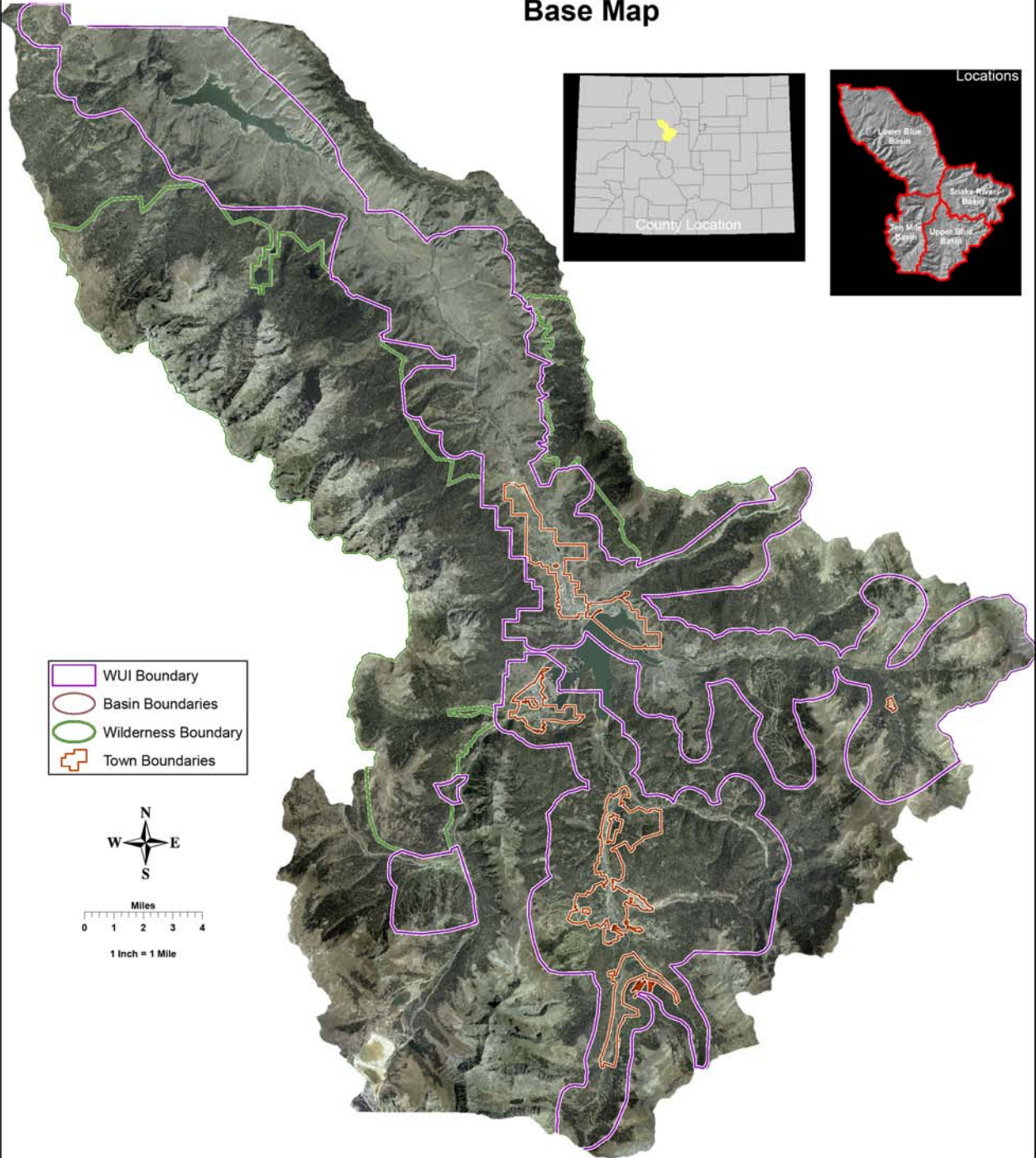
## **IX. COMMUNITY BASE MAP**

Understanding the basic geography of the County is a prerequisite to developing any effective strategy to reduce wildfire risk within a community. A community base map has been prepared to provide this understanding of the basic geography within the county through the preparation of a series of digital data layers used to describe the details of the county. The base map contains the following data layers:

1. Basin Boundaries
2. Town Boundaries
3. Private Parcel Boundaries – with Summit County Assessor data for ownership
4. White River National Forest Lands
5. Wilderness Area Boundaries
6. Streams, Lakes, and Reservoirs
7. Fire Response Zones
8. Roads and Trails Centerline
9. Aerial Imagery from August 2009
10. Dip sites for Aerial Resources
11. 10M Digital Elevation Model

The different layers may be overlaid to allow closer examination of an area and to aid in mapping. These data layers are to be used with the Community Protection Assessment (see Chapter X) to better understand and analyze the conditions in Summit County.

# Summit County, CO Community Wildfire Protection Plan Base Map



Map IX-A



## **X. COMMUNITY PROTECTION ASSESSMENT**

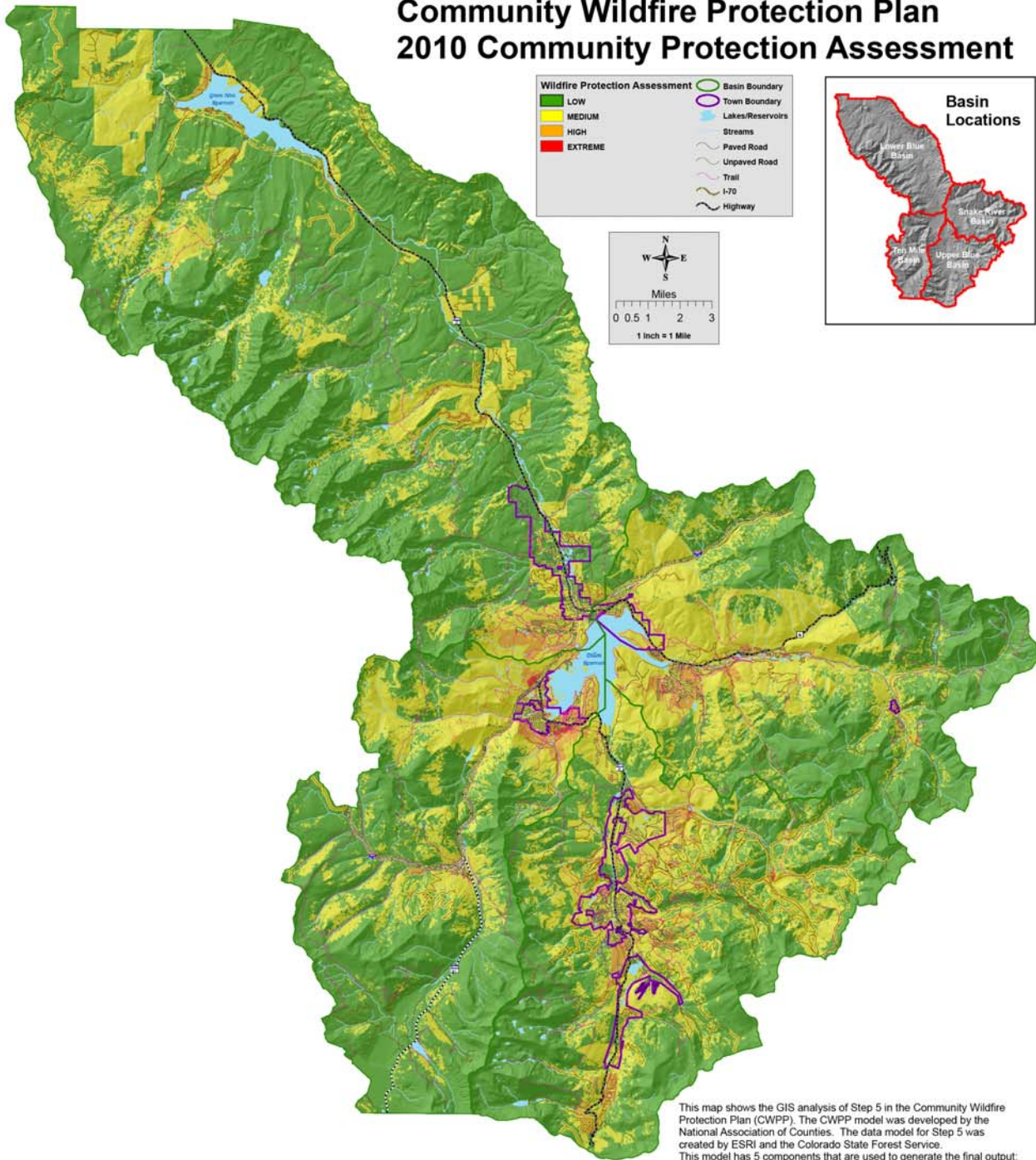
The Community Protection Assessment map (Map X-A) was developed using standard GIS modeling techniques. The original model was developed by ESRI in partnership with the Colorado State Forest Service and Teller County. GIS staff with Summit County modified the original model to fit more accurately the environmental and infrastructure conditions in Summit County and prepared all data for input. The model consists of five components adopted directly from the Community Wildfire Protection Plan handbook:

1. Fuel hazards
2. Risk of wildfire occurrence
3. Essential infrastructure at risk
4. Community values at risk
5. Local preparedness and firefighting capability

Below is a breakdown of each of these sub-models. Once all sub-models were run, the outputs were combined using standard data-merging protocols which simultaneously incorporate all five contributing factors outlined above. Each sub-model received equal weighting in the final model analysis. This assessment can also be interpreted in depth by examining each model component individually.

The real strength of this approach is that the final output establishes those areas where the need for fire protection is the greatest. Map X-A depicts the level of community protection needed as Extreme, High, Medium and Low.

# Summit County, CO Community Wildfire Protection Plan 2010 Community Protection Assessment



This map is for display purposes only. It is not intended for legal purposes. All information is provided as a general guide. The user assumes all responsibility for the use of this map. © 2010 Summit County Government. Map produced by Summit County.

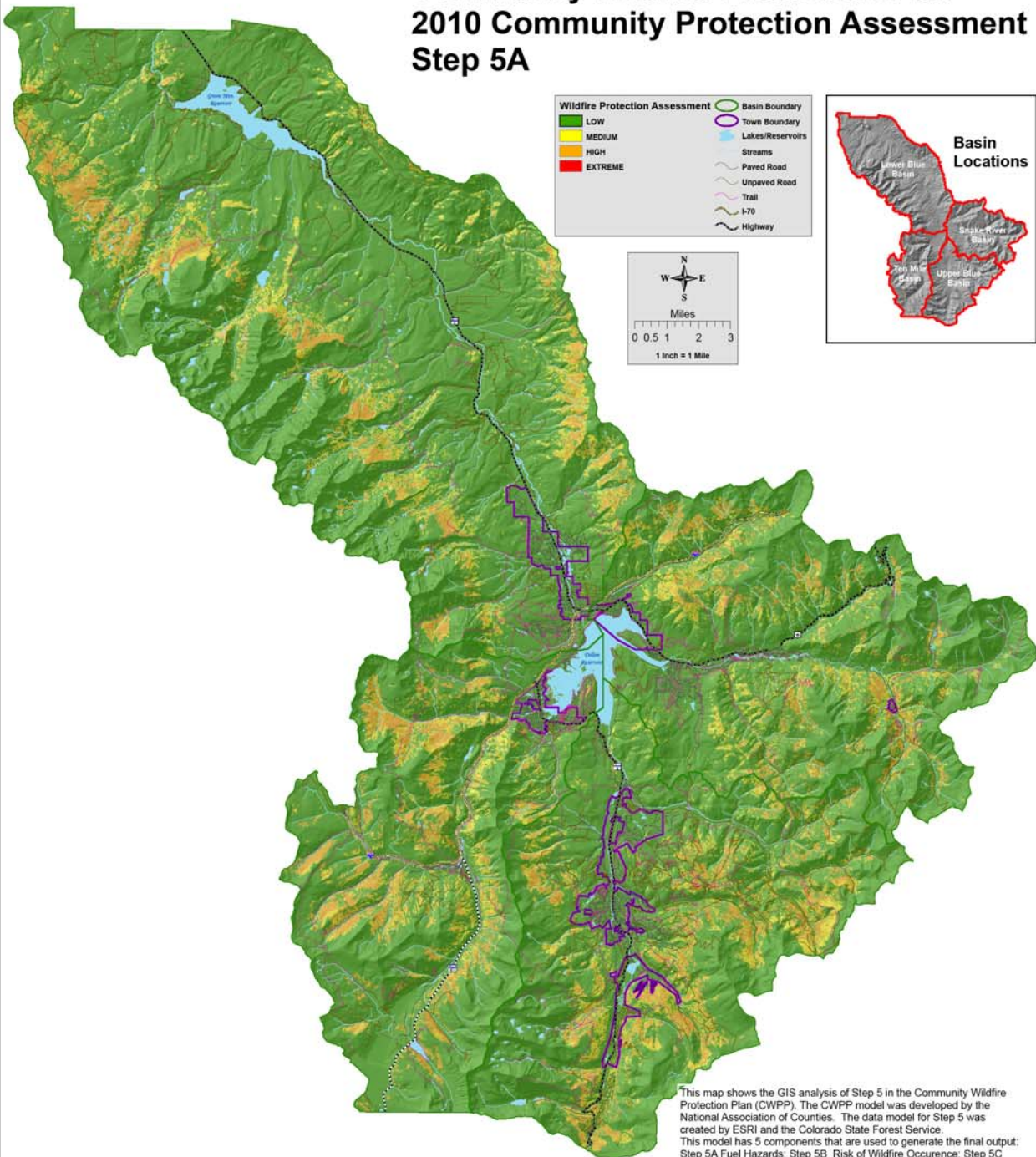
**Map X-A**

## **A. SUB-MODEL 5A – FUELS HAZARDS**

Fuels hazards are modeled in 5A using information obtained from the software FlamMap. **FlamMap** is a fire behavior mapping and analysis program that computes potential fire behavior (spread rate, flame length, fire line intensity, etc.) over an entire FARSITE landscape for constant weather and fuel moisture conditions. 5A uses the outputs of crown-fire activity, heat per unit area, rate of spread and flame length to model the fuels hazard present across the country. Each one of these four components gets equal weighting in the model. Map X-B shows the results of sub-model 5A.



# Summit County, CO Community Wildfire Protection Plan 2010 Community Protection Assessment Step 5A



This map is for digital purposes only. It is not to be used for printing. The data model for Step 5 was created by ESRI and the Colorado State Forest Service.

**Map X-B**

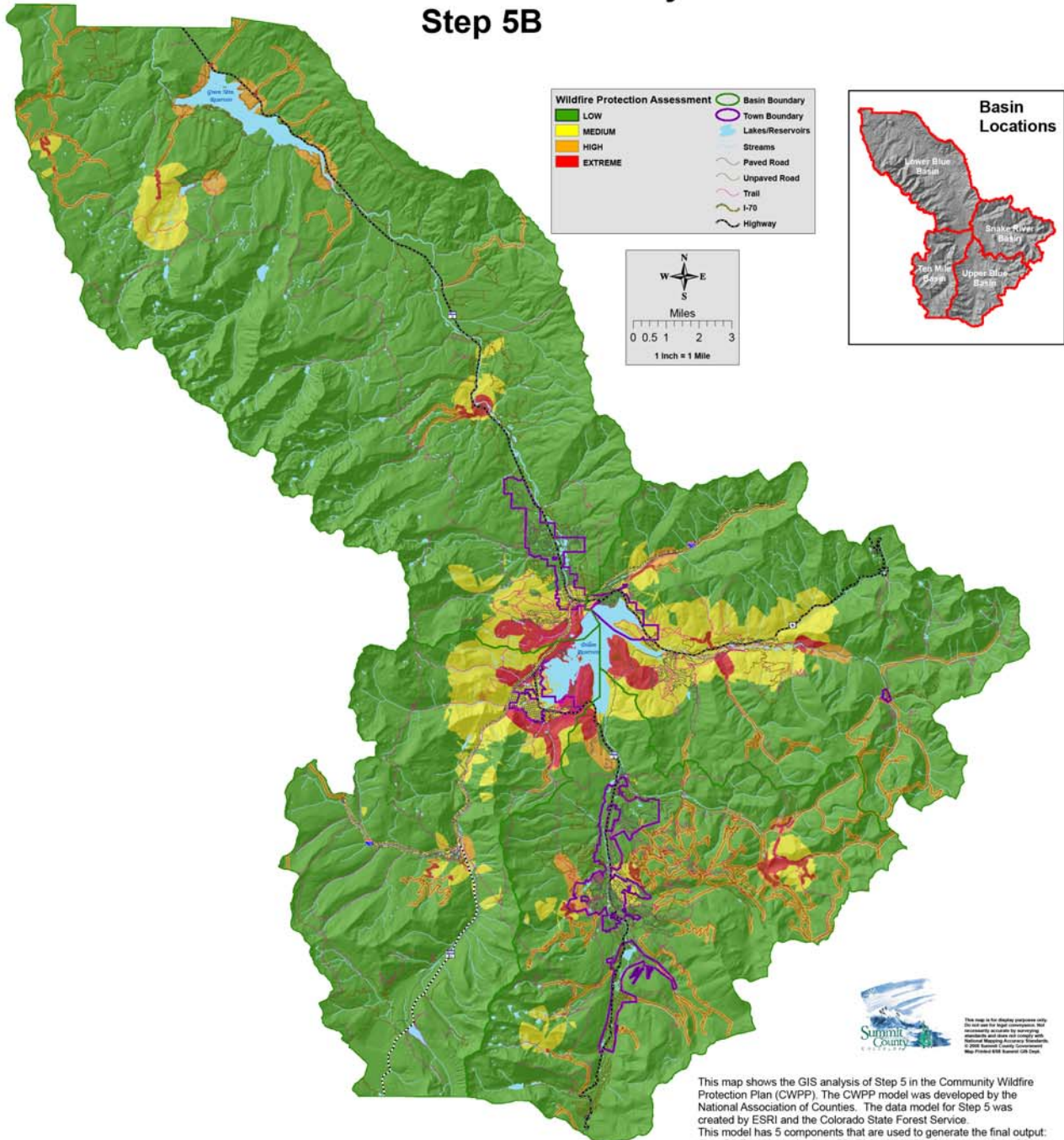
This map shows the GIS analysis of Step 5 in the Community Wildfire Protection Plan (CWPP). The CWPP model was developed by the National Association of Counties. The data model for Step 5 was created by ESRI and the Colorado State Forest Service. This model has 5 components that are used to generate the final output: Step 5A Fuel Hazards; Step 5B Risk of Wildfire Occurrence; Step 5C Essential Infrastructures at Risk; Step 5D Community Values at Risk; Step 5E Local Preparedness and Firefighting Capabilities. These steps are merged using a weighted overlay analysis where all five parts are given a percent of influence (See Analysis Model). The output, Wildfire Protection Assessment, is divided into 4 categories, LOW, MEDIUM, HIGH, and EXTREME to show the overall conditions in Summit County, CO.

Data for the model was prepared by USFS Dillon Ranger District, and Summit County Government. CWPP model was developed by ESRI and Colorado State Forest Service.

## **B. SUB-MODEL 5B- RISK OF WILDFIRE OCCURRENCE**

Risk of wildfire occurrence is modeled in 5B. Layers utilized in this model include buffered roads, lightning strike density, historical wildfire sites, known dispersed camping areas and developed campsite. These five layers are combined into four major fire-risk categories; roads grid, lightning, fire occurrence and camping areas. Each one of the four components received equal weighting in the model outputs. Map X-C shows the results of sub-model 5B.

# Summit County, CO Community Wildfire Protection Plan 2010 Community Protection Assessment Step 5B



This map shows the GIS analysis of Step 5 in the Community Wildfire Protection Plan (CWPP). The CWPP model was developed by the National Association of Counties. The data model for Step 5 was created by ESRI and the Colorado State Forest Service. This model has 5 components that are used to generate the final output: Step 5A Fuel Hazards; Step 5B Risk of Wildfire Occurrence; Step 5C Essential Infrastructures at Risk; Step 5D Community Values at Risk; Step 5E Local Preparedness and Firefighting Capabilities. These steps are merged using a weighted overlay analysis where all five parts are given a percent of influence (See Analysis Model). The output, Wildfire Protection Assessment, is divided into 4 categories, LOW, MEDIUM, HIGH, and EXTREME to show the overall conditions in Summit County, CO.

Data for the model was prepared by USFS Dillon Ranger District, and Summit County Government. CWPP model was developed by ESRI and Colorado State Forest Service.

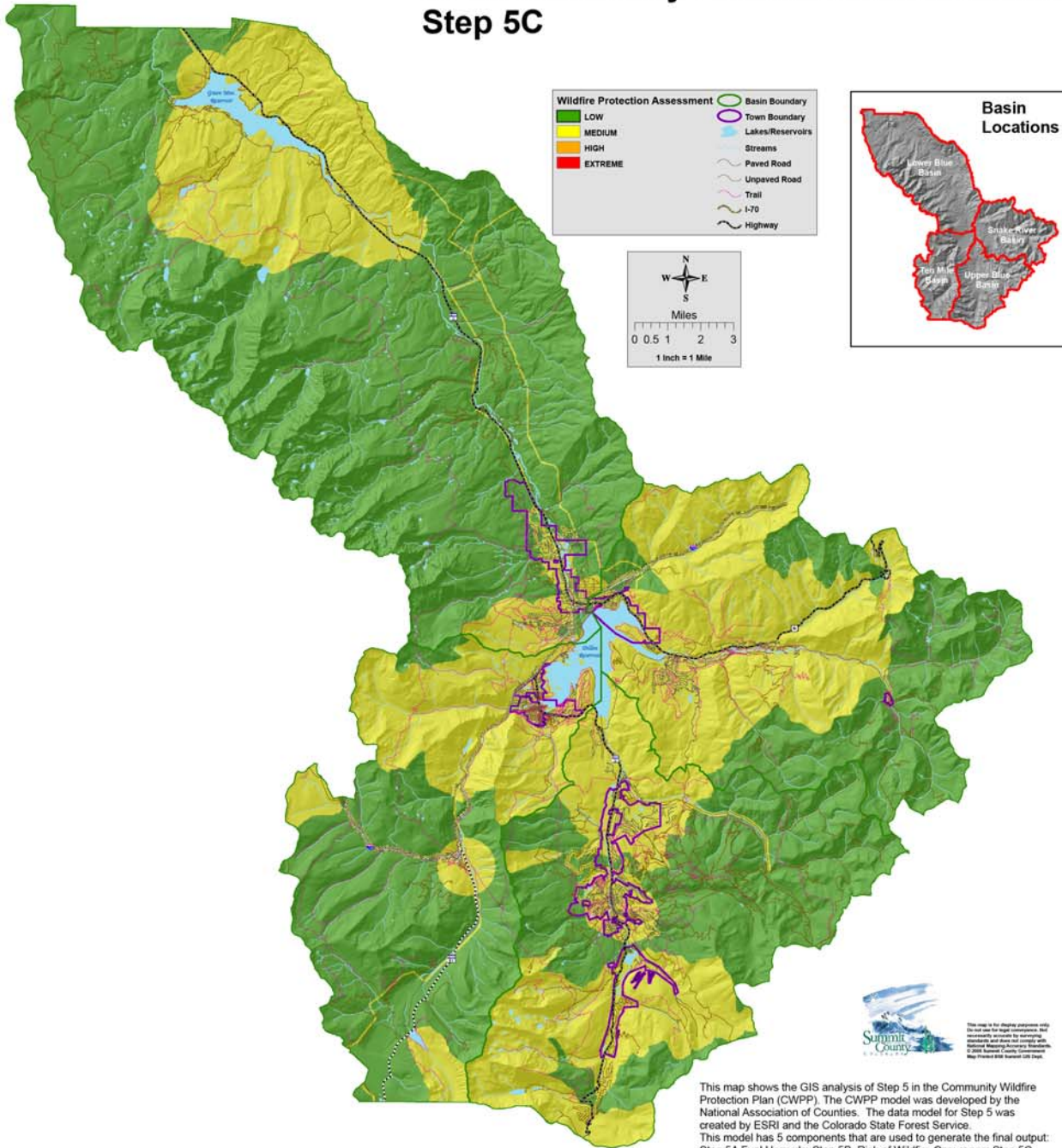
**Map X-C**



### **C. SUB-MODEL 5C- ESSENTIAL INFRASTRUCTURE AT RISK**

Essential infrastructure at risk is modeled in 5C. Six different layers were utilized for this model: watersheds, homes, businesses, communications structures, power lines and escape routes. The watershed layer that was utilized was the critical watershed layer from the 2010 Blue River Watershed Assessment. The six layers were not giving equal weighting in this model. Homes and businesses were given 18 percent weighting, while the rest received only 16 percent weighting. This difference reflects the intent of this CWPP. Map X-D shows the results of sub-model 5C.

# Summit County, CO Community Wildfire Protection Plan 2010 Community Protection Assessment Step 5C



This map shows the GIS analysis of Step 5 in the Community Wildfire Protection Plan (CWPP). The CWPP model was developed by the National Association of Counties. The data model for Step 5 was created by ESRI and the Colorado State Forest Service. This model has 5 components that are used to generate the final output: Step 5A Fuel Hazards; Step 5B Risk of Wildfire Occurrence; Step 5C Essential Infrastructures at Risk; Step 5D Community Values at Risk; Step 5E Local Preparedness and Firefighting Capabilities. These steps are merged using a weighted overlay analysis where all five parts are given a percent of influence (See Analysis Model). The output, Wildfire Protection Assessment, is divided into 4 categories, LOW, MEDIUM, HIGH, and EXTREME to show the overall conditions in Summit County, CO.

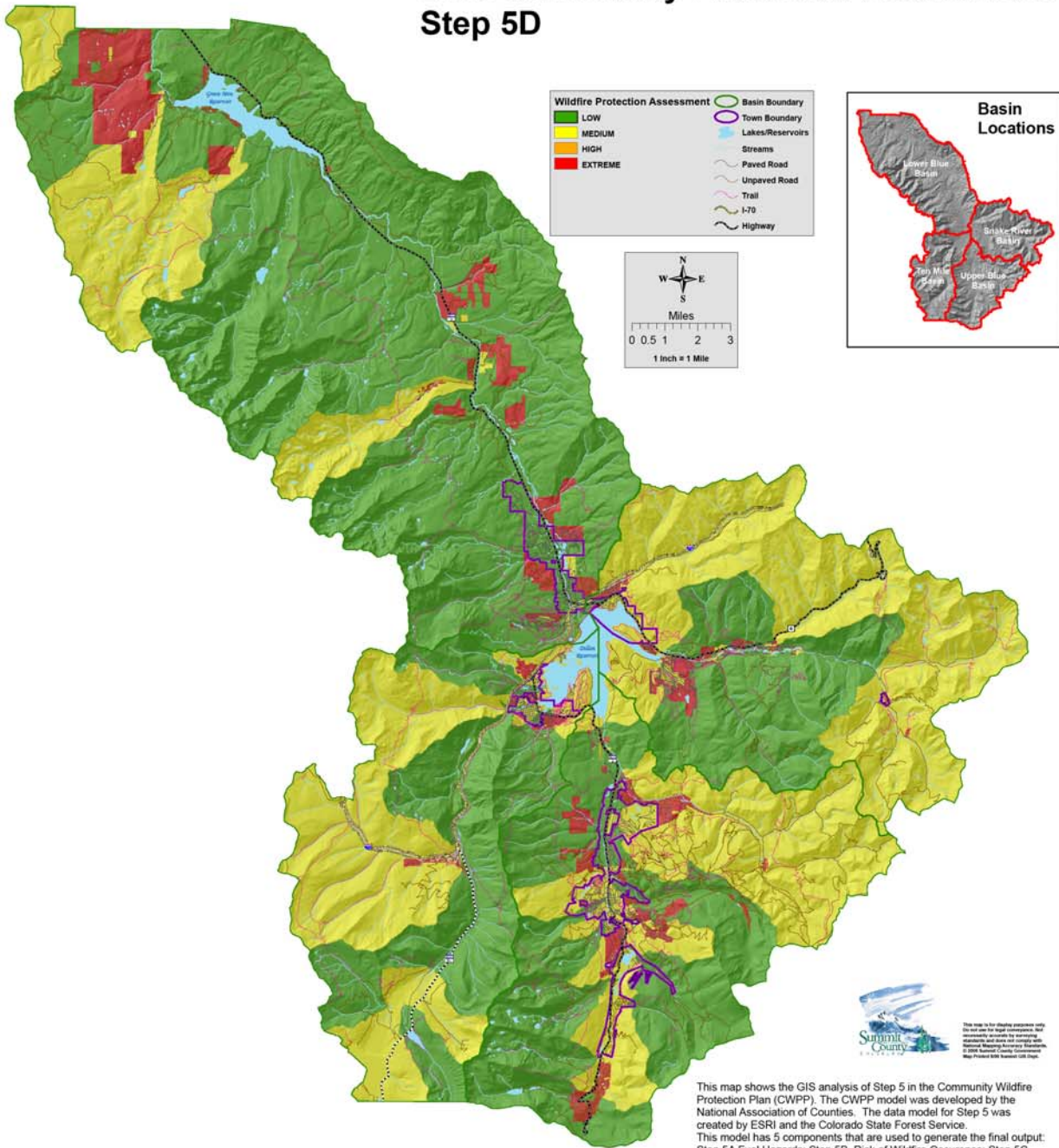
Data for the model was prepared by USFS Dillon Ranger District, and Summit County Government. CWPP model was developed by ESRI and Colorado State Forest Service.

**Map X-D**

#### **D. SUB-MODEL 5D- COMMUNITY VALUES AT RISK**

Community values-at-risk is modeled in 5D. Two different layers were utilized for this model: subdivision hazard rating and threatened and endangered species. The subdivision hazard rating is derived from the rating a subdivision is given when it is platted in unincorporated Summit County. No information is available for subdivisions within town boundaries because the rating is not required for their plats. The two layers are not equally weighted. Subdivision rating is weighted at 75 percent and threatened and endangered species are weighted at 25 percent. Map X-E shows the results of sub-model 5D.

# Summit County, CO Community Wildfire Protection Plan 2010 Community Protection Assessment Step 5D



**Map X-E**

This map shows the GIS analysis of Step 5 in the Community Wildfire Protection Plan (CWPP). The CWPP model was developed by the National Association of Counties. The data model for Step 5 was created by ESRI and the Colorado State Forest Service. This model has 5 components that are used to generate the final output: Step 5A Fuel Hazards; Step 5B Risk of Wildfire Occurrence; Step 5C Essential Infrastructures at Risk; Step 5D Community Values at Risk; Step 5E Local Preparedness and Firefighting Capabilities. These steps are merged using a weighted overlay analysis where all five parts are given a percent of influence (See Analysis Model). The output, Wildfire Protection Assessment, is divided into 4 categories, LOW, MEDIUM, HIGH, and EXTREME to show the overall conditions in Summit County, CO.

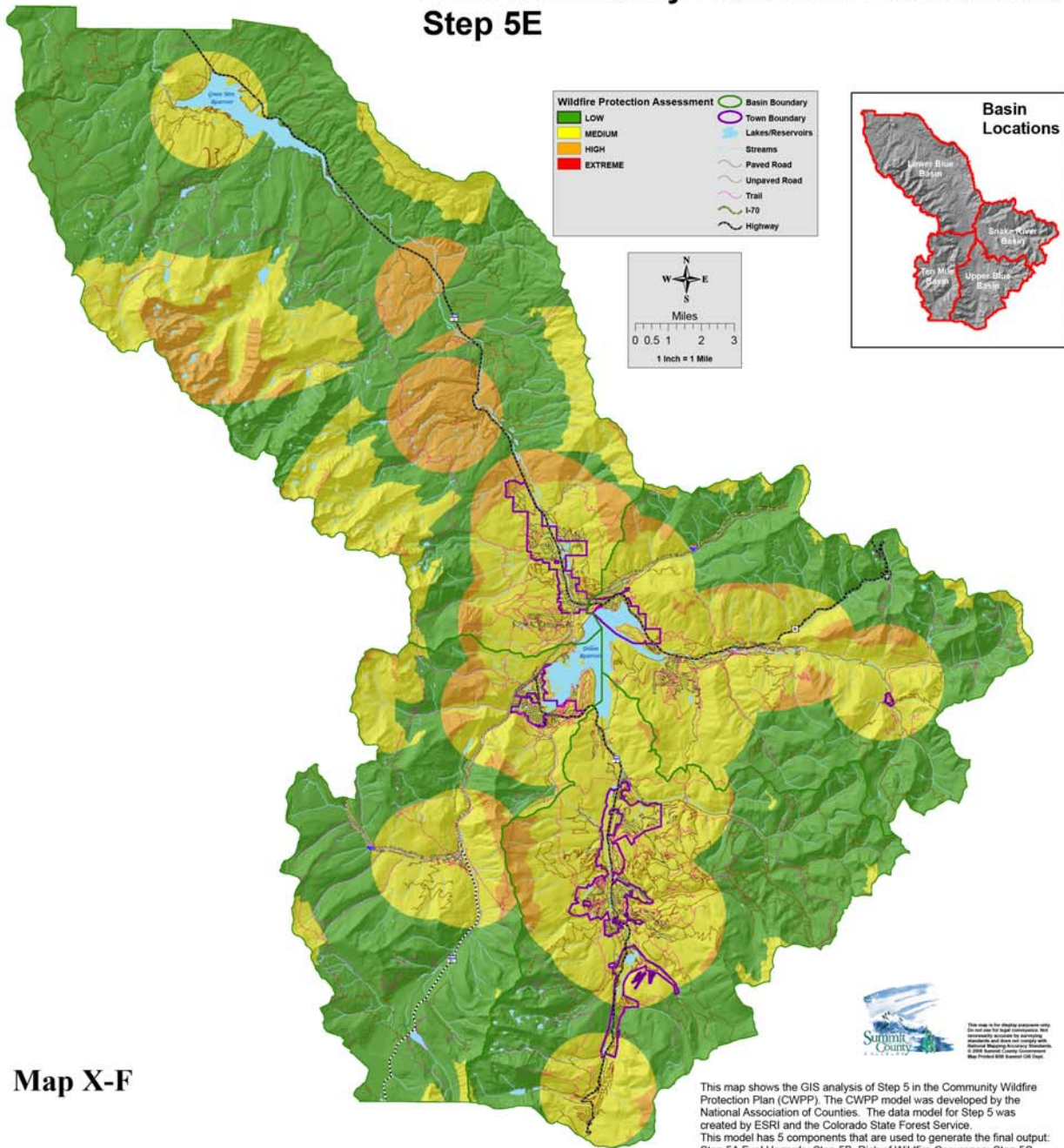
Data for the model was prepared by USFS Dillon Ranger District, and Summit County Government. CWPP model was developed by ESRI and Colorado State Forest Service.

## **E. SUB-MODEL 5E- LOCAL PREPAREDNESS AND FIRE FIGHTING CAPABILITY**

Local preparedness and firefighting capability are modeled in 5E. Five different layers were utilized in this model: fire stations, slope, roads, water sources, and dead-end roads. These five layers were combined into four different categories for the model: fire stations, roads, water sources and dead-end roads. These four categories were equally weighted in the sub- model. Map X-F shows the results of sub-model 5E.



# Summit County, CO Community Wildfire Protection Plan 2010 Community Protection Assessment Step 5E



This map shows the GIS analysis of Step 5 in the Community Wildfire Protection Plan (CWPP). The CWPP model was developed by the National Association of Counties. The data model for Step 5 was created by ESRI and the Colorado State Forest Service. This model has 5 components that are used to generate the final output: Step 5A Fuel Hazards; Step 5B Risk of Wildfire Occurrence; Step 5C Essential Infrastructures at Risk; Step 5D Community Values at Risk; Step 5E Local Preparedness and Firefighting Capabilities. These steps are merged using a weighted overlay analysis where all five parts are given a percent of influence (See Analysis Model). The output, Wildfire Protection Assessment, is divided into 4 categories, LOW, MEDIUM, HIGH, and EXTREME to show the overall conditions in Summit County, CO.

Data for the model was prepared by USFS Dillon Ranger District, and Summit County Government. CWPP model was developed by ESRI and Colorado State Forest Service.

## **XI. FOCUS AREAS FOR REDUCING WILDFIRE RISKS**

Using the Community Protection Assessment Map (Map X-A) to identify those areas with the greatest need for fire protection, the SCWC established more limited areas where community resources should be focused to reduce potential damage from wildfire. Map XI-A shows the 26 “focus areas” identified by the SCWC in 2010. The identification and designation of these focus areas relies heavily on the Protection Assessment Map (Map X-A) as well as the recommendations of staff and site inspections of each area by members of the SCWC. The interjection of common and practical sense through the recommendations of staff and adjustments made to reflect the values of the community as expressed by the SCWC eliminate some of the modeling imperfections that are apparent in the computer generated Community Protection Assessment (Map X- A). Focus areas may also be adjusted to include critical community infrastructure such as transmission lines and protection of watersheds that supply municipal and community water systems. Adjustments to focus area boundaries to reflect watershed protection should be based on detailed scientific analysis.

Concurrent with the identification of these focus areas, the SCWC established management recommendations to reduce the risk of wildfire. Management recommendations for reducing the risk of wildfire are outlined in Appendix “C.”





## **XII. FIRE PROTECTION STRATEGIES AND IMPLEMENTATION**

### **A. OBJECTIVE – ESTABLISH AND MAINTAIN A COMMUNITY BASE MAP**

DISCUSSION: Knowing the location of residences, businesses, governmental buildings, water supply improvements, roads and other physical improvements is a prerequisite to developing wildfire protection strategies that can effectively guide efforts to protect these improvements. (Please see section VI for more discussion.)

#### **ACTION/POLICY:**

1. Periodically the SCWC should review the Community Base Map to determine if there is reason to believe community patterns have changed sufficiently to warrant updates to the Community Base Map.
2. If the SCWC determines that the Community Base Map should be updated, the SCWC should request Summit County Information Service to make appropriate update to the Community Base Map.

### **B. OBJECTIVE – ESTABLISH AND MAINTAIN COMMUNITY PROTECTION ASSESSMENT MAPS**

DISCUSSION: With limited community resources available to implement wildfire-reduction efforts, it is imperative to understand where the risk of wildfires is the greatest and where these fires may have the greatest impact on individuals, homes, businesses, essential community infrastructure and other values that the community has defined as important. (Please see section VII for more discussion.)

#### **ACTIONS/POLICIES:**

1. As new data is available, the SCWC should review the community values that are used in weighting the Community Protection Assessment maps with affected jurisdictions to determine if there is reason to believe community values have changed which may substantially alter the Community Protection Assessment.
2. If the SCWC determines that community values influencing the Community Risk Assessment have substantially changed, the SCWC should work with affected jurisdictions and interested citizens to update these community values.

3. If the SCWC determines that the protection assessment maps need to be updated, the SCWC should request that County GIS update these maps as necessary.

**C. OBJECTIVE - ESTABLISH AND MAINTAIN MAPS THAT IDENTIFY WHERE RISK REDUCTION EFFORTS SHOULD BE PURSUED**

DISCUSSION: Excluding land within wilderness areas, there are more than 8,000 acres or approximately 12.5 square miles of land within the County classified as having a high or extreme need for fire protection (see Map X-A). Given the magnitude of the problem, especially in light of limited resources to reduce this risk, the community must focus wildfire protection efforts to those areas where the risk is the greatest and essential community values threatened. (Please see Chapter VIII for more discussion.)

**ACTIONS/POLICIES:**

1. Each January or as otherwise established by the SCWC, it is recommended that the SCWC should review the current “focus area” map (see Map XI-A). If the SCWC determines that either the focus areas to reduce the risk of wildfire need to be updated, the SCWC should direct the appropriate changes and formally adopt the amendments to the plan.

**D. OBJECTIVE- ESTABLISH PRESCRIPTIONS FOR MINIMIZING THE IMPACTS OF WILDFIRE**

DISCUSSION: Reducing the impact of wildfire on essential community infrastructure and community values requires sound and practical measures be established to reduce these risks. These measures need to reflect technical factors as well as practical considerations and community values.

**ACTIONS/POLICIES:**

1. Each January or as otherwise established by the SCWC, the SCWC staff should review prescriptions for minimizing the impacts of wildfire to determine if, based on the experience of the prior year, the prescriptions are still valid. If staff feels changes are needed, the changes shall be brought to the SCWC for discussion and formal adoption.

## **E. OBJECTIVE - FUND AND IMPLEMENT THE SCCWPP**

DISCUSSION: Promoting forest health and reducing the risk of wildfire are monumental efforts. Aggressive funding at all public and private levels are necessary if we are to significantly reduce the risk of wildfire and impacts of wildfire to our communities and essential infrastructure. Funds from local government agencies should be used to encourage funding by private, corporate, state and federal entities. Funds received shall be directed to promoting efforts that will significantly reduce the risk of wildfire and the risk to life and structures.

### **ACTIONS/POLICIES:**

1. In developing annual budgets, entities endorsing this plan should give consideration to funding programs to reduce the risk of wildfire.
2. Any recommendation for funding supported by the SCWC should meet all of the following criteria:
  - The project should be within an identified area of focus;
  - Substantial private and/or other governmental funded match is required;
  - The project will significantly reduce the risk of wildfire and the risk to life and structures; and
  - The project is or will be ready to implement during the funding cycle.
3. Prior to the annual grant cycle, grant guidelines will be established and approved by the Wildfire Council.

## **F. OBJECTIVE – SUPPORT NEIGHBORHOOD, SUBDIVISION AND COMMUNITY EFFORTS TO REDUCE THE RISK OF WILDFIRES**

DISCUSSION: Wildfire-risk mapping shows numerous areas within the county as having significant risk of wildfire. The ownership pattern in these areas is often fragmented with multiple diverse ownerships and interests. Planning beyond the scope of this CWPP is ever present and ongoing. The SCWC should provide information and support to all efforts which are practical.

### **ACTIONS/POLICIES:**

1. Work with homeowner associations and neighborhood groups to develop effective programs for reducing wildfire risk using neighborhood resources.
2. To the extent practical, encourage subdivisions, homeowner associations and neighborhood groups to coordinate efforts to maximize the efficiency and effectiveness of fire reduction efforts.
3. Where significant governmental resources are requested to assist homeowner association or neighborhood efforts, these requests should be incorporated into the countywide plan for reducing wildfire risk and prioritized accordingly.

## **G. OBJECTIVE- INFORM PUBLIC ABOUT RISK OF WILDFIRE AND RESPONSIBILITY TOWARD EMERGENCY PREPAREDNESS**

DISCUSSION: All members of the SCWC and signers of this CWPP have agreed that informing the public about the risk of wildfire coupled with an emphasis on personal responsibility toward emergency preparedness is an important part of implementation of this plan. These parties have also agreed that the messages provided to the public should be as uniform as possible.

### **ACTIONS/POLICIES:**

1. Coordinate a consistent message to educate the public about defensible space, fuels reduction, reducing structural ignitability, preparedness and family planning for evacuation, and general forest health and continued vegetation maintenance.
2. Annually the SCWC should direct staff to prepare and review a public information plan. The public information plan, at a minimum, should include:
  - Public education efforts from the previous year;
  - Identification of the education material and program to be used and the strategy for distribution and community outreach;
  - How public education efforts are targeted to those areas with high wildfire risk;
  - How public education efforts can be devised to augment private and neighborhood endeavors;
  - How public education will be directed to the second homeowner and guest populations.
3. Support cooperative efforts to:
  - Reduce the number of human-caused fires by raising overall public awareness of the potential losses from wildfire and promoting good wildfire prevention safety measures as a civic responsibility.
  - Maintain coordination and collaboration among agencies with fire and fuel management responsibilities in enacting fire restrictions and developing and disseminating prevention and restriction materials and information.
  - Increase public understanding of landscape dynamics as part of the overall effort to create a community vision of this forested landscape as a fire-adapted ecosystem that needs disturbance such as insects and wildland fire to remain resilient and productive.
  - Develop consistent fire prevention and mitigation messages. These messages should explain the need to exclude wildland fires and mitigate the risks from escaped wildfires in areas where they are difficult to manage and have the potential for great destruction, as well as the need to manage wildland fires in areas where they

are desirable and can be managed safely to help restore and sustain the ecosystem.

#### **H. OBJECTIVE - PREVENT PROLIFERATION OF NOXIOUS WEEDS IN FUELS REDUCTION AREAS**

DISCUSSION: Noxious weeds can become an issue after any ground disturbing activity, including logging. The Summit County Board of County Commissioners has stated that they “do not want to trade the wildfire problem for a noxious weed problem.” Every effort should be made to prevent noxious weeds from taken over areas where fuels reduction efforts have occurred.

##### **ACTIONS/POLICIES:**

1. Work with Summit County Weed Department to monitor and control noxious weeds in logged areas.
2. Educate landowners and loggers on the identification and control of noxious weeds.
3. Work with municipal, state and federal agencies to control weeds on the lands under their management.
4. Provide inexpensive solutions and incentives to landowners who control weeds on their own properties.

#### **I. OBJECTIVE – SUPPORT UTILIZATION OF FOREST PRODUCTS**

DISCUSSION: Management of forested lands to promote forest health and reduce the risk of wildfire is expensive. Markets for logs and biomass would significantly reduce costs.

##### **ACTIONS/POLICIES:**

1. Work with the U.S. Forest Service and Colorado State Forest Service to promote wood products within the county and state.
2. Provide technical support and guidance for any business utilizing forest products in and around Summit County.
3. Promote utilization of wood produced by projects implemented using Wildfire Council Grant funds.

***APPENDIX “A”***  
***CWPP Implementation 2006 to the Present***

2006	Acres Treated
Summit County Wildfire Grant Program	110
U.S. Forest Service	13
Municipalities, County, Other Land Managers	89
Denver Water Board/ Colorado State Forest Service	10
Total	222
2007	
Summit County Wildfire Grant Program	285
U.S. Forest Service	0
Municipalities, County, Other Land Managers	226
Denver Water Board/ Colorado State Forest Service	37
Total	548
2008	
Summit County Wildfire Grant Program	47
U.S. Forest Service	258
Municipalities, County, Other Land Managers	319
Denver Water Board/ Colorado State Forest Service	71
Total	695
2009	
Summit County Wildfire Grant Program	361
U.S. Forest Service	513
Municipalities, County, Other Land Managers	12
Denver Water Board/ Colorado State Forest Service	31
Total	917
<b>Total Acres Implemented 2006 to Present</b>	<b>2382</b>

\*Specific project details can be obtained from each managing entity.

\*\* Additional acres of treatment have occurred as a result of work completed by members of the Wildfire Council and its grant program. These acres have not been captured by any entity to date.

## ***APPENDIX “B”***

### ***Public Education Efforts Recognizing Five Specific Programmatic Target Areas***

#### Defensible Space

- Summit County CWPP posted on the Summit County Government website
- Chapter 44, Summit County Building Code wildfire mitigation requirements in place
- Wildfire mitigation and defensible space inspections are made and certified when appropriate on new construction and remodels
- Displays presented at fire station open houses annually
- Burn permits issued through inspection and interview process

#### Fuels Reduction

- Red Zone community assessments are performed
- U.S. Forest Service severity crews patrol area when available
- Colorado State Forest Service “Fire Wise” Kiosk displayed in the Summit County Buildings

#### Reducing Structural Ignitability

- Summit County Community Development matrix identifies Low, Moderate and High risk subdivisions
- Fire restrictions enacted when conditions call for it (coordinated through the Summit County Sheriff and U.S. Forest Service)

#### Preparedness and Family Planning for Evacuation

- National Wildfire Prevention Team visited Summit County to help form the U.S. Forest Service ~ Summit County Wildfire Prevention Program
- Summit County emergency services, fire departments, and emergency personnel staged a “mock” wildfire event for first responder preparedness and community understanding
- Smokey Wildfire Danger signs posted in Silverthorne, Keystone, Breckenridge South and Breckenridge North, and Copper Mountain Fire Station
- CDOT – I-70 reader boards, updated for public communication
- Elementary School programs teach fire safety
- Summit County Wildfire Safety brochure distributed countywide
- Public service announcements run frequently on television media networks

#### General Forest Health and Continued Vegetation Maintenance

- Seven sets of three interpretive signs are on display throughout Summit County, one set is mobile
- Annual letter to HOA groups invites them to have wildfire mitigation presentations at their meetings
- Participation in the Our Future Summit, Forest Health Task Force group

## ***APPENDIX “C”***

### ***Management Recommendations for Reducing Fire Hazards***

The Management Recommendations listed below are an idealistic set of treatments that when complete will greatly reduce the impact of wildfire on life and property in Summit County. The management recommendations are not specific prescriptions. Specific prescriptions must be developed by the entity charged with the management of the property. Project implementation on U.S. Forest Service property must go through the NEPA (National Environmental Policy Act) process. During the NEPA process, specific prescriptions will be developed. For more information on the specific prescriptions and the entire NEPA documents, contact the Dillon Ranger District of the White River National Forest.

The general management recommendation for all homes and businesses within Summit County is to create good defensible space and maintain it. In addition, all homes and businesses should comply with Chapter 44 of the International Code of Residential Construction with regard to building materials. For specific information about creating defensible space contact your local fire protection district or visit the Summit County Wildfire Mitigation webpage at: <http://www.co.summit.co.us/wildfiremitigation/>

The focus areas listed below cross multiple ownerships and jurisdictions. To accomplish these management recommendations, all parties must work together toward the common goal of protection life and property.

**Acorn Creek** - The majority of this focus area has light flashy fuels. Mowing grasses and shrubs near homes will reduce fire danger to property. The homes located in the forested sections should create a good defensible space.

**Blue River** - Blue River focus area covers all of the Town of Blue River as well as some communities in unincorporated Summit County and U.S. Forest Service property. Fuels reduction varies greatly throughout the focus area and mostly coincides with mountain pine beetle mitigation activity. Very few homes have good defensible space. Road conditions vary greatly from nearly impassible 4x4 roads to state highways. Water also varies greatly throughout the focus area. It is recommended that every home and business within the focus area have good defensible space. Trees should be cleared from road rights of way to reduce the threat of trees blocking egress. Wherever possible, roads should be brought up to county standards to accommodate emergency vehicle traffic. Development of water for firefighting would greatly increase suppression abilities. Work on adjacent U.S. Forest Service property would add additional protection for this community.



**Boulder Creek Ranch** - Many homes within Boulder Creek Ranch are older and are not constructed with non-combustible roofing or siding. Access is limited to one narrow, steep road. The majority of trees within the focus area have been killed by pine beetle. All homes within the focus area should create a good defensible space and maintain it yearly. Clearing of trees along the access road is also recommended to reduce the likelihood of a tree blocking access or egress. Replacement of combustible roofs and siding with non-combustible materials is recommended. A fuel break on U.S. Forest Service property surrounding the community would greatly reduce the threat to life and property.

**Boreas Pass/Baldy Road** – The Boreas Pass/Baldy Road focus area includes many individual subdivisions and multi-family housing complexes. Road access and water are good; however in the event of an evacuation, traffic volume may overwhelm road capacity. Defensible space varies greatly within this focus area. Some subdivisions have good defensible space while others have not created any defensible space. Property owners who have not created defensible space should do so. Property owners who have created defensible space should maintain the defensible space by mowing fine fuels near homes and removing debris from roofs and gutters annually. Some older homes within the focus area are built with combustible roofing and siding. It is recommended that these home replace these roofs and siding with non-combustible materials. Work on adjacent U.S. Forest Service property would add additional protection for this community.

**Eagle's Nest** - Nearly every home within this focus area has good defensible space. Road access is good and water is available in hydrants throughout the community. Property owners should maintain the defensible space by mowing fine fuels near homes and removing debris from roofs and gutters annually. A fuel break on U.S. Forest Service property west of the community would help reduce the threat to life and property.

**Fredonia Gulch** - This focus area is entirely on U.S. Forest Service property. Fuels reduction is recommended and is addressed in the NEPA documents covering this focus area. Specific prescriptions can be obtained by contacting the Dillon Ranger District.

**French Gulch** - Ownership within French Gulch consists of private, Town of Breckenridge, and Summit County property. Land use can be classified into two categories: developed and open/forest. In the developed areas, few homes have good defensible space. Defensible space is recommended in all developed areas. Property owners who have created defensible space should maintain the defensible space by mowing fine fuels near homes and removing debris from roofs and gutters annually. In the open/forest areas, fuels reduction should occur. Fuels reduction should be focused on providing maximum protection to the adjacent development. Each land management entity will develop its own specific prescription for reducing hazardous fuels.

**Golden Horseshoe** - Ownership within the Golden Horseshoe consists of private, Town of Breckenridge, Summit County, and U.S. Forest Service property. Land use can be classified into two categories: developed and open/forest. In the developed areas, good defensible space is present on approximately half of the homes. Defensible space is recommended in all developed areas. Property owners who have created defensible space should maintain the defensible space by mowing fine fuels near homes and removing debris from roofs and gutters annually. In the open/forest areas, fuels reduction should occur. Fuels reduction should be focused on providing maximum protection to the adjacent development. Each land management entity will develop its own specific prescription for reducing hazardous fuels.

**Hamilton Creek** - Significant fuels reduction activity has occurred in this focus area. Most home have good defensible space. Road access is good, and water is available in hydrants throughout the community. Property owners should maintain the defensible space by mowing fine fuels near homes and removing debris from roofs and gutters annually. A small fire break should be implemented to separate the homes from the steep draw on the north side of the community.

**Iron Springs/Gold Hill** - Significant fuels reduction has occurred with this focus area. The U.S. Forest Service completed a fuel break on the western part of the focus area. Defensible space throughout the focus area is good, with areas still needing some work. Property owners who have not created defensible space should do so. Property owners who have created defensible space should maintain the defensible space by mowing fine fuels near homes and removing debris from roofs and gutters annually. Some older homes within the Gold Hill are built with combustible roofing and siding. It is recommended that these home replace these roofs and siding with non-combustible materials.

**Iron Springs/Hospital** - Major work has been accomplished within this focus area. A very good fuel break exists around the southeast and eastern portions of this focus area. Many homes within the Bill's Ranch subdivision have created a defensible space. It is recommended that all homeowners within the Bill's Ranch subdivision should create defensible space. In addition, homes with combustible roofs and siding should replace them with non-combustible materials. Where fuels reduction project have been implemented, management should be conducted in the future to keep tree densities down.

**Keystone** - The Keystone focus area is a mix of fire hazards. Roads and water are good throughout the focus area. Some areas have completed major fuels-reduction projects while other areas still have major hazardous-fuels issues. Fuels reduction and defensible space is badly needed in the Ski Tip and Soda Springs road areas. Work on adjacent U.S. Forest Service property would add additional protection for this community. Property owners who have created defensible space should conduct annual maintenance.

**Keystone Ranch** – Fuels-reduction projects have occurred within this focus area. In general, the forest has been thinned out and the ground fuels have been removed. Very little defensible space exists throughout the focus area. Defensible space is recommended around every home. Defensible space will make the general fuels reduction activity much more effective.

**Lewis Ranch** - Lewis ranch is a single family and duplex home community bordered on the south by Copper Mountain Ski Area. Approximately half of the homes within the community have defensible space. Road access and water are good throughout the community, although it is a one way in, one way out, road accessing Lewis Ranch. Fuel breaks are recommended for the west and north sides of the community. Property owners who have not created defensible space should do so. Property owners who have created defensible space should maintain the defensible space by mowing fine fuels near the homes and removing debris from roofs and gutters annually. Public Education is recommended to encourage better defensible space surrounding homes. Work on adjacent Copper Mountain Resort and U.S.F.S. property would add additional protection for this community.

**Mesa Cortina** - Significant fuels-reduction efforts have occurred in this focus area. Nearly every home in the western half of the community has good defensible space. Homes on the eastern half of the community have mostly light flashy fuels and aspen stands located on the property. Roads and water in the community are generally good. Property owners should maintain the defensible space by mowing fine fuels near the homes and removing debris from roofs and gutters annually. A fuel break on the U.S. Forest Service property would add additional protection for this subdivision.

**Pebble Creek Ranch** - Major fuels reduction and defensible space work has occurred in this focus area. Every home has defensible space and a 30-acre clear cut removed hazardous fuels inside the subdivision. Property owners should maintain the defensible space by mowing fine fuels near the homes and removing debris from roofs and gutters annually. A fuel break on U.S. Forest Service property surrounding the community would greatly reduce the threat to life and property.

**Peak 7** - The Peak 7 focus area is made up of more than 400 individual lots, several tracts of land greater than five acres and U.S. Forest Service property. Access and water throughout the focus area are generally good. The road system has two access points. However, in the event of an evacuation, traffic volume may overwhelm road capacity. Defensible space has been created on a portion of the homes within the community. Property owners who have not created defensible space should do so. Property owners who have created defensible space should maintain the defensible space by mowing fine fuels near homes and removing debris from roofs and gutters annually. Some older homes within the Peak 7 are built with combustible roofing and siding. It is recommended that these homeowners replace their roofs and siding with non-combustible materials. Work on adjacent U.S. Forest Service property would add additional protection for this community.

**Peak 8** - Peak 8 is a grouping of many individual subdivisions and multi-family housing complexes. Road access and water are good; however, in the event of an evacuation traffic volume may overwhelm road capacity. Defensible space varies greatly within this focus area. Some subdivisions have good defensible space, while others have not created any defensible space. Property owners who have not created defensible space should do so. Property owners who have created defensible space should maintain the defensible space by mowing fine fuels near homes and removing debris from roofs and gutters annually. Several subdivision specific fuels reduction plans exist within this focus area; communities should follow their specific plan.

**Ptarmigan** - Ptarmigan contains a mix of fire hazards. Roads and water are major limiting factors within the community. Many homes are built with combustible roofs and siding. Two egresses exist within the community, but secondary roads are narrow, steep and in poor condition. Defensible space is recommended for all homes within the focus area. Wherever possible, roads should be brought up to county standards to accommodate emergency vehicle traffic. Development of water for firefighting would greatly increase suppression abilities. Homeowners should consider replacing combustible roofs and siding with non-combustible materials.

**Quandary Village** - The Quandary Village focus area consists of many small developments. Fuels in the area consist of heavy spruce-fir types. Defensible space varies greatly throughout the focus area, as do roads and water. It is recommended that every home and business within the focus area have good defensible space. Trees should be cleared from road rights of way to reduce the threat of trees blocking egress. Wherever possible, roads should be brought up to county standards to accommodate emergency vehicle traffic. Development of water for firefighting would greatly increase suppression abilities. Work on adjacent U.S. Forest Service property would add additional protection for this community.

**Ruby Ranch** - About half of the homes in this focus area have good defensible space. Fuels reduction efforts throughout the community have been patchy, but where implemented have made a significant impact. Terrain within the focus area is steep and gullied. To the extent possible, landowners should clear as much of the dead trees and ground fuel as practical. Homeowners should create good defensible space and maintain it yearly. Clearing of trees along the access roads is recommended to reduce the likelihood of a tree blocking access.

**Salt Lick Gulch** - This focus area is entirely on U.S. Forest Service property. Fuels reduction is recommended and is addressed in the NEPA documents covering this focus area. Specific prescriptions can be obtained by contacting the Dillon Ranger District.

**Sierra Bosque** - The majority of homes within this focus area have good defensible space. Homes around the perimeter of the subdivision should complete cutting of defensible space. Once all the defensible space has been created, landowners should perform yearly maintenance to maintain the defensible space. A fuel break on the U.S. Forest Service property would add additional protection for this subdivision.

**Summit Cove** - This focus area is entirely on U.S. Forest Service property. Fuels reduction is recommended and is addressed in the NEPA documents covering this focus area. Specific prescriptions can be obtained by contacting the Dillon Ranger District.

**Summit Estates** - Summit Estates consists of a one-way-in, one-way-out access. Terrain throughout the focus area is steep and gullied. Roads and water are generally good. Defensible space throughout the community is generally good. Property owners should maintain the defensible space by mowing fine fuels near homes and removing debris from roofs and gutters annually. Fuel breaks on community owned open space, adjacent private, county owned, and U.S. Forest Service. land would add additional protection for this community.

**Warrior's Mark** – Warrior's Mark is a grouping of many individual subdivisions and multi-family housing complexes. Road access is fair and water is available in some parts of this focus area. Defensible space is limited within this focus area. A few subdivisions have good defensible space while most have not created any. Terrain varies throughout the focus area and can exceed 60 percent slopes in places. Property owners who have not created defensible space should do so. Property owners who have created defensible space should maintain the defensible space by mowing fine fuels near homes and removing debris from roofs and gutters annually. Some older homes within the focus area are built with combustible roofing and siding. It is recommended that these homes replace roofs and siding with non-combustible materials. Work on adjacent U.S. Forest Service property would add additional protection for this community.