

# COMMUNITY WILDFIRE PROTECTION PLAN

*Hotchkiss Fire District*

*(Delta County Fire Protection District No. 4)*

And

Colorado State Forest Service

Delta County Emergency Manager

Town of Hotchkiss

Delta County Sheriff's Office

Bureau of Land Management

8/12/2007



## **Introduction:**

This is the Community Wildfire Protection Plan for Delta County Fire Protection District No. 4, otherwise known as the Hotchkiss Fire District (HFD). The plan encompasses all the land within the District, and meets all state and federal requirements for Community Wildfire Protection Plans.

This plan will become part of the Delta County Fire Plan. It was ratified by the entities that have authority, jurisdiction, and responsibility for wildfires within the Fire District. These entities include but are not limited to: the Hotchkiss Fire District, the Delta County Sheriff's Office, the Delta County Emergency Manager, the Town of Hotchkiss, Colorado State Forest Service, and the Bureau of Land Management.

The plan is the result of more than twenty years of experience fighting wildland fires in the District, and seven years of concentrated effort to reduce the risks wildfire presents to our citizens and our firefighters. A number of large catastrophic wildfires have shaped the fire suppression strategies and tactics used by HFD to suppress fire, and influenced our equipment purchases. More importantly, our experience has led us to the conclusion that making homes safer from wildfire by reducing nearby fuels and increasing a structure's resistance to fire are critical components to successful operations in the Wildland/Urban Interface.

Since 2001, the Fire District has assisted landowners by providing grants for fuel reduction projects. Based on those successful projects, the HFD was able to credibly suggest that Fuel Reduction Projects be performed on BLM lands adjoining the Fire District. Several areas were identified at meetings in late 2005, and were toured in the summer of 2006. Plans are presently being formed by Jim Cunio and Bruce Krickbaum of the BLM for fuel reduction projects in the North Hotchkiss and the Big Gulch areas.

In early 2006, while working on local wildfire issues with Maggie McCaffrey of the BLM, it was noted that the Hotchkiss Fire District had completed many of the components required for the completion of a Community Wildfire Protection Plan, or CWPP. Ms. McCaffrey strongly suggested that the Fire District begin the process of creating a plan, and helped acquire funding from a grant. A series of meetings were held in the winter of 2006-2007 to begin work on the plan.

Local citizens, representatives of WSERC (a local environmental group), firefighters, Town Council members, Colorado State Forest Service personnel, the Delta County Sheriff's Office, representatives from the Delta County Emergency Manager, and members of the BLM, attended the first meeting. Other meetings were held throughout 2007, and this plan is the result of comments and suggestions that resulted from those meetings.

## **The Hotchkiss CWPP**

This plan documents the ongoing efforts of the Hotchkiss Fire District and other agencies to reduce the risk of wildfires within the District, while providing an action plan for the long-term continuation of this work. The plan employs an integrated approach to solving the wildfire problem by applying several different strategies that have the potential to effect changes on the ground. These strategies include:

- **Acquire and maintain an inventory of the homes and other values at risk from wildfire. This data must be integrated into the County GIS system.**
- **Provide Fuel Mitigation grants to landowners in the Fire District, particularly concentrating on Defensible Space Projects.**
- **Improve fire suppression abilities by acquiring suitable equipment and providing advanced training.**
- **Participate in Delta County's Planning process by advocating that new subdivisions in the Fire District meet Firewise standards.**
- **Take a leadership role in wildfire issues at the County level.**

### **The Plan Area:**

The entire Hotchkiss Fire District is included in the CWPP. The Fire District has a population of more than 4000 people residing in approximately 1000 homes, and consists of 115 square miles of private land. Through various agreements, the District has first response on 65 additional square miles of Federal land and lands within other fire districts. Our Fire District includes agricultural lands, wet lands, river bottom, desert, large blocks of sagebrush, and quite a bit of Pinyon-Juniper Forest, most of which is at a very high density/high slope angle.

Virtually every house in our Fire District has exposure to wildfire during some part of the year. Many homes in the Town of Hotchkiss are exposed to ditches and wetlands that are tinder dry during several periods during the year. Local farmhouses are usually close to irrigation ditches that are burned yearly. This burning generates many emergency fire calls, and often has the potential to spread into nearby heavy brush and forest. Much of our new residential development is in high density Pinyon-Juniper Forest, usually with long driveways and poor water supply. See "FUELS MAP", Appendix A

The Upper Leroux Creek area will be added to the CWPP in the future.

## **Wildland Fire Occurrence and History of Hotchkiss FPD**

Delta County is a fire-prone area. Statistics show that between the years of 1980 to 2006, the Montrose Interagency Fire Management Unit (of which Delta County is a part) averaged 180 fires per year. During the most current (2006) fire season, Montrose Interagency Dispatch reported more than 250 vegetation fires on over 1500 acres. Undoubtedly, many more fires occur than are accounted for. The majority of these fires are relatively insignificant in terms of size and fire intensity. Periodic stand replacement events, however, typically burn intensely, can be several thousand acres in size, and can pose significant threats to lives, structures or other improvements.

The Hotchkiss Fire District is located on the south-facing side of Grand Mesa, where fuels and topography combine to form a significant wildfire hazard. Typically, the primary fuel types of sagebrush, Gambel oak, and pinyon-juniper woodlands become very dry and capable of supporting a large fire relatively early in the spring. This early and usually long fire season is also complicated by the prolific invasion of cheatgrass (*Bromus tectorum*), which grows extensively throughout the Fire District. Cheatgrass is an annual grass that germinates in the fall or early spring, then grows to maturity and cures very early in summer, adding a layer of fine fuels to the already highly flammable overstory of brush and timber.

The fuels and topography of this area have combined at times to produce intense fires during periods of hot, dry weather. Delta County has had four fires that have made use of the State's Emergency Fire Fund (EFF), a fund that counties contribute to annually in order to defray some of the costs of large fire suppression. Only large fires that exceed the capabilities of local firefighting resources qualify as EFF fires. Most of these large fires in the County quickly cross jurisdictional boundaries, and become multi-jurisdictional. Three of these fires impacted Hotchkiss FPD: the Redlands Mesa Fire (1987), the Wake Fire (1994), and the Wolf Park Fire (2007).

The Redlands Mesa Fire started on July 22, 1987. It began from a trash fire, and then burned over 418 acres during a several hour period, all of which were on privately owned land. The primary fuels were sagebrush and Pinyon-Juniper woodland. A Type 2 Incident Management Team (IMT) managed the fire and the final cost was over \$100,000. Although no structures were lost during this fire, it caused the evacuation of more than 50 homes in the area. One firefighter was injured when a fire engine was burned over.

The Wake Fire started from a lightning strike on the afternoon of July 4, 1994. Primary fuels were once again pinyon-juniper woodlands, sagebrush, and some oakbrush. Due to extreme burning conditions, the Wake Fire consumed over 2500 acres in the initial 7 hours, sending up a tremendous smoke plume that was visible over 100 miles away. Much of the vegetation within the final 3500-acre area of this fire was completely incinerated. This left a fire scar that has been occupied by little

other than cheatgrass to this day. Three homes were lost and several more damaged, in addition to 1-1/2 miles of power line and several radio towers. Approximately 50 homes were evacuated during this fire as well. The fire was managed by a Type 2 IMT, at a final cost of about \$1.5 million. About 40% of the Wake Fire was on private land; with the remainder BLM owned lands.

From Grandview Mesa in the southern part of the Hotchkiss Fire District, one can see the sites of eight large wildfires, many of which qualified for Emergency Fire Funds in the past twenty years. There is a continuing potential for large fires in the Pinyon-Juniper forest on the south exposures of the Grand Mesa. See Appendix E for a map showing fires in and near the HFD during the past twenty years, along with some fires more than 50 years old.

## **Community Vision/Values**

Recognition of the real possibility of another fire similar to the Redlands and Wake Fire has provided much of the impetus for creation of this plan. The Wake Fire occurred immediately adjacent to the east border of the planning area/Fire District and significantly altered the view shed, changed wildlife habitat, and destroyed homes.

The Fire District invited stakeholders and advertised to the community that meetings would be held to develop a Community Wildfire Protection Plan. Those attending the first few CWPP meetings in early 2007 identified the following values:

- *Minimize death and injury due to wildfire*
- *Property protection*
- *Reducing the frequency, intensity and size of wildfires in the planning area.*
- *Protecting the view shed*
- *Protect water shed above the Town of Hotchkiss*
- *Reduce the chance of flooding and erosion above and in the Town of Hotchkiss*

## **Desired future condition/community vision:**

***The desired future conditions should include lessened ignitability of threatened structures, adequate defensible space around homes in vulnerable locations, more fuel reduction treatments in areas near threatened homes, improved water supplies for fire fighting, and creation of mosaic pattern of fuel reduction in the forests on the water sheds located upstream from the Town of Hotchkiss.***

## **Planning process used to develop vision**

The planning process consisted of a series of public meetings, planning sessions and the use of a community wild fire assessment tool/survey. Printed survey forms along with reference maps were made available at six public buildings in Hotchkiss as well as at meetings. Geographic areas of concern, types of concerns, common concerns and desires were multiple-choice selections on the survey form.

Responding citizens were asked to evaluate resources that would be impacted by fire (i.e. what values need to be protected and priority of those values). Opinions were referenced by considering the impact of specific local wildfires like the Wake Fire, as well as the widely known effects of wildfires on resources.

The surveys were found to be difficult to complete without the assistance of a facilitator, and most of the surveys that were placed in public buildings yielded no response. At meetings and other events, when we asked people to complete the survey, however, we found that many people were willing to take the time and give thoughtful responses to the questions.

## **Results of surveys**

- Number completed: 47
- Types of concerns:
  - Damage to Homes – 72%
  - Loss of Trees- 36%
  - Loss of Viewshed- 30%
  - Dangerous Escape Route's- 17%
  - Watershed Damage - 44%
  - Damage to Wildlife- 49%
  - Defensible Space- 53%
  - Improve Fire Protection- 32%
  - Watershed damage to Leroux Creek? 21%

## **Risk Assessment Maps**

The BLM has provided a Risk Assessment Map, which is based on: topography, fuels, roads, number of parcels, and other factors. Areas of concern from the combination of the above factors are portrayed in red shading. This map (see Appendix I) identified several high-risk areas in the Hotchkiss Fire District. One, located on the northern part of Redlands Mesa, has been the focus of much of the Fire District's Fuel Reduction work.

A second area, in the southeast Redlands Mesa and Leroux Creek region, has also received Fuel Reduction Projects, and has been the subject of fire pre-plans and training exercises.

The other major concern, illustrated by the Risk Assessment Map is the plans North of Hotchkiss. This is area will be the focus of much of our efforts in the upcoming years. The Hotchkiss Fire District and BLM have worked on a fuels treatment strategy that was summarized in a document that can be found in Appendix K.

A map was made by the Delta County GIS department combining the Risk Assessment Map with data taken from the surveys. This map can be found in a Appendix J, and shows the public has a special concern is the risk that the town of Hotchkiss faces from the effects of a wildfire North of Hotchkiss. The same map also shows Fuel Reduction Projects completed in the District.

## **The Inventory and Mapping of the Fire District**

Early in 2003, Dennis Hovel from Painted Sky RC&D approached the HFD Fire Chief with a grant proposal to map all the homes at risk from wildfire in the Fire District. It was proposed that the Fire District be divided into areas of concern, neighborhoods, or zones where fire behavior was predictable because of fuels, aspect, prevailing winds, topography, and likely direction of spread. Another factor driving the need for mapping was Delta County's impending change of the addressing system, which had the potential for creating confusion when responding to emergency fire calls. Four areas were identified, and became known as "Preplans".

Two local men, one a resident and the other a firefighter for the District, were trained in geographical information systems at the Vo-Tech School. The mapping project commenced in 2003 with the goal of having all of the homes in the Fire District that have exposure to wildfire from heavy fuels mapped and rated with the Delta County GPS receiver. An important component to the mapping project was the inclusion of driveways, because the Delta County GIS system did not have that data. The driveways were also rated for firefighter safety.

The Leroux Creek Preplan was chosen to start the project. It was selected because the roads and driveways in the area were especially confusing and poorly marked. Fire engines were driven to each home in the Preplan area and HFD firefighters were able to meet with many of the residents. A flyer describing the mapping and other Firewise-type handouts were left at each home in a "door knob bag" provided by the Red Cross. See Appendix B for a copy of the flyer. Homeowners were also invited to apply for cost share grants for Defensible Space and Fuel Reduction Projects. Firefighters particularly enjoyed meeting the homeowners, and conducted similar visits for the other three preplan areas in the following months.

The homes were rated for their likelihood to survive wildfire based on nearby trees, topography, construction materials, and other factors. The scoring is based on Colorado State Forest Service ratings for subdivisions and slightly modified to fit our

requirements. The data acquired was entered into Montrose BLM's GIS system with much help from Bob Vlahos, the BLM GIS technician. While the current ratings are directly entered into laptop computers, a sample of the first rating sheet can be found in Appendix D.

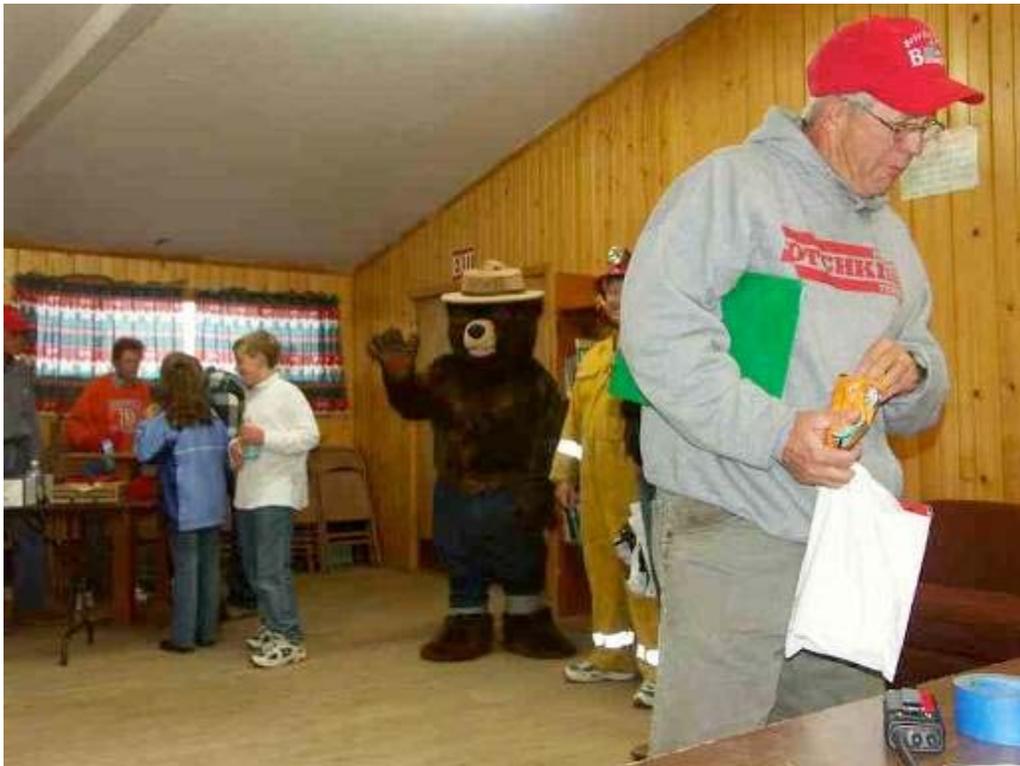
The first preplan maps were printed in early 2004, showing each home's relative risk by displaying its location dot in one of three colors as follows:

Green - relatively safe, requiring little assistance to survive wildfire

Orange - requiring assistance to survive wildfire and less safe than green

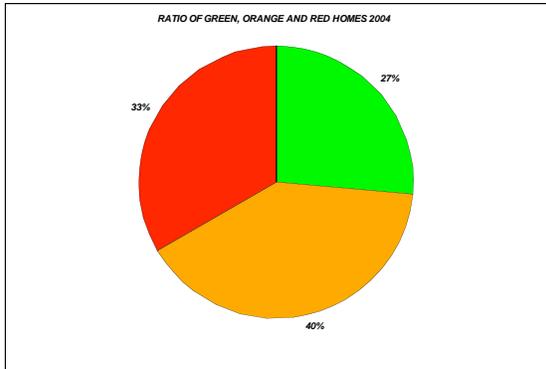
Red - may be dangerous to firefighters and impossible to save from a wildfire.

Additionally, a green circle around any of the colored dots indicated that there was a Safety Zone nearby providing a survivable area for a fire engine and crew.

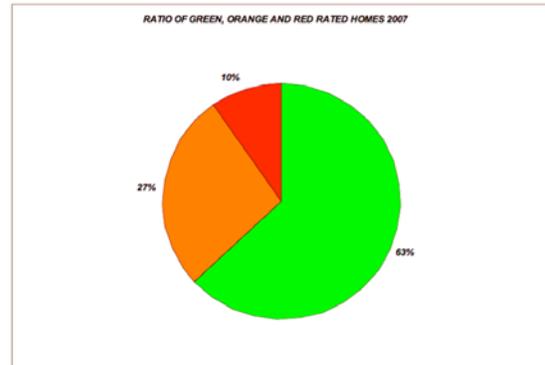


*A homeowner examines Fuel Reduction Grant applications at the Fire Fair*

After all of the maps were completed, the Hotchkiss Fire District held a "Fire Fair" at the Redlands Mesa Grange on September 19, 2004. Over a hundred people attended, visiting with Smokey Bear, Federal and State agencies, fuel reduction contractors, and Fire District firefighters. The Preplan Maps were prominently displayed, and elicited strong reactions regarding the ratings of the homes. This proved instrumental in getting many Defensible Space projects started in the Fire District, as homeowners sought to change their score from "red" to "orange" or "green".



**2004 (475 homes)**



**2007 (489 homes)**

## Updates to the Preplan

In early 2007, the mapping was updated to show houses and the results of the fuel reduction projects, particularly defensible space projects. A method was found to integrate previously collected data into the Delta County GIS system. It was also determined that the data should be collected and input on a Fire District-wide basis, rather than for each individual preplan area, with printed maps displaying the area. This concept is likely to carry over throughout the whole County. The map showing the ratings for the Hotchkiss Fire District can be found in Appendix C.

New map printing has improved symbols, and now includes a color aerial photomap. Smaller versions of each map are carried on every Hotchkiss fire engine, and by all the officers, while larger sets of maps are displayed on the walls of the fire stations and stored in tubes for use at Incident Command Posts. Firefighters routinely train with the maps on large-scale scenarios in the Fire District, and on simulated incidents in the firehouse, using video projectors and a sand table.

## Fuel Mitigation

In 2001, Hotchkiss Fire District received a Fuel Reduction Grant from the Colorado State Forest Service and BLM. The grant provided a 50-50 cost share allowance for landowners to create Defensible Space near their homes and to thin nearby forest.

This was the start of the Fire District's long-term commitment to reducing the risk of heavy fuels near homes. More than twenty landowners participated in the first year. For the next few years, this grant was unavailable; however, we worked closely with the Grand Junction District Office of the Colorado State Forest Service on similar projects in our area. In 2004 and 2006, we were again awarded grant monies and funded projects.

The Fire District has directly worked on more than one hundred fuel reduction projects, and provided information and assistance to scores of other projects. See Appendix C for a map showing locations of the projects. Many of the projects have been implemented over several years and grant cycles, and are counted as multiple projects. See Maps of Fuel Reduction Projects- Appendix F, G, and H.

Our efforts have achieved statewide recognition from the Colorado State Forester, and national experts on tours have viewed some of our projects. We have had several documented ignitions on lands that have undergone fuels treatment, and in all cases, the fires either self-extinguished, smoldered until suppression arrived, or were controlled by fire suppression activities without damage to adjacent structures.

We have extended our services and grants to landowners throughout the County, particularly in the Cedaredge, Crawford, and Paonia Fire Districts, although the majority of the projects have taken place in the Redlands Mesa /Leroux Creek area of our Fire District. We have found that once one homeowner starts a project, many of his neighbors will follow suit in following years. In fact, all the residents on a 1.5-mile section of P25 Road have completed projects. See Appendix H.

We routinely receive media coverage on these projects, and actively emphasize the need for landowners to do this important work.

## **Structure Ignitability**

No matter how effective our efforts at Fuel Mitigation are, the homes in our Fire District will not truly be safe until the issues surrounding Structure Ignitability are addressed. The Fire District has not focused on educating homeowners on this key component, but beginning in early 2008, we will deliver a comprehensive message to the local residents through various media and methods including:

- Radio and print PSAs,
- A Hotchkiss Town Council meeting appearance, generating a resolution regarding a designated "clean-up week",
- Other actions that may present themselves to spread the word,
- Fire Department website space devoted to Structure Ignitability, and
- Provide realtors and Town and County Offices with information packets to give to new homeowners and those who wish to build.

## **SUMMARY OF THE HOTCHKISS CWPP**

This is the Community Wildfire Protection Plan for the Hotchkiss Fire District (HFD). The plan encompasses all the land within the District, meets all state and federal requirements for Community Wildfire Protection Plans, and will become part of the Delta County Fire Plan. The plan is the result of more than twenty years of experience fighting wildland fires in the District, and seven years of concentrated effort to reduce the risks wildfire presents to our citizens and our firefighters.

Since 2001, the Fire District has assisted landowners by providing grants for fuel reduction projects. Based on those projects, the HFD was able to ask that Fuel Reduction Projects be performed on BLM lands adjoining the Fire District. Maggie McCaffrey of the BLM noted that the Hotchkiss Fire District had already completed many of the components required for the completion of a Community Wildfire Protection Plan, or CWPP and suggested we complete a formal plan which will be needed for future funding of these type projects. A series of meetings were held in 2007 to work on the plan.

This plan documents the efforts of the Hotchkiss Fire District and other agencies to reduce the risk of wildfires within the District, provides an action plan for the long-term continuation of this work, and employs an integrated approach to solving the wildfire problem by applying several different strategies that have the potential to effect changes on the ground. These strategies include:

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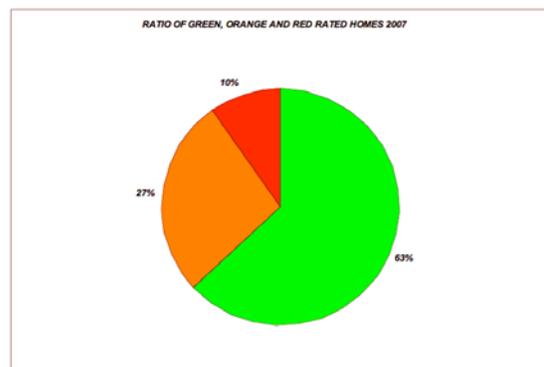
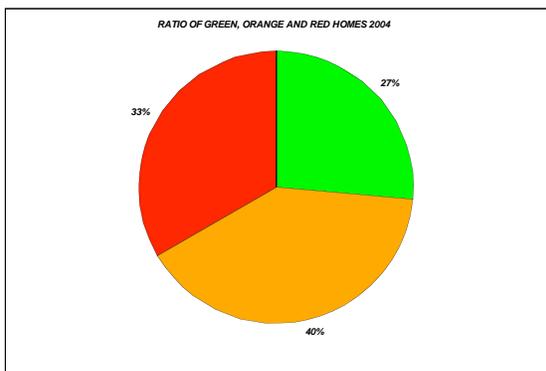
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Additionally, a green circle around any of the colored dots indicated that there was a Safety Zone nearby providing a survivable area for a fire engine and crew.

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## **Fuel Mitigation**

In 2001, Hotchkiss Fire District received a Fuel Reduction Grant from the Colorado State Forest Service and BLM. This was the start of the Fire District's long-term commitment to reducing the risk of heavy fuels near homes. More than twenty landowners participated in the first year. The Fire District has directly worked on more than one hundred fuel reduction projects, and provided information and assistance to scores of other projects. See Appendix C for a map showing locations of the projects. See Maps of Fuel Reduction Projects- Appendix F, G, and H.

Our efforts have achieved statewide recognition from the Colorado State Forester, and have extended our services and grants to landowners throughout the County.

## **Mapping and Mitigation Work Hand-In-Hand**

A significant number of landowners have undertaken projects to reduce their homes' risks from wildfire after noting their scores on the 2004 map. Many have stated that one of their main goals was to drop a level in the rating system. The many dynamic changes represented in the above graphs are a major incentive to update the maps, and have to be considered a community success story.

## **WILDFIRE SUPPRESSION**

The Fire District's history and experience in fighting both small and large fires has driven the selection of strategies, tactics, training and the purchase of equipment. Simply put, we have emphasized delivering a strong, quick, and well-directed initial attack on wildland fires. The utilization of the Incident Command System is critical in these events.

Our brush engines are equipped with foam systems, can pump and roll, and have joystick controlled monitors that allow firefighters to accurately direct streams of water on wildfires from inside the cab as the fire engines are moving.

In the initial attack phase, our firefighters are able to quickly put on Nomex jumpsuits over their street clothing, slip into boots that have zippers instead of laces, and get right into the fire engines. Each firefighter has been issued two radios: one VHF radio, and one GPS radio that can send a firefighter's location to each other and to the Incident Commander.

Fires that escape initial attack or directly threaten structures require a quick shift to a different strategy. Using our preplan maps, our firefighters can select homes that are possible to save based on fire conditions and behavior.

## Training



*Hotchkiss firefighters examine preplan maps, summer 2004*

All but our newest firefighters have S-130/190 Basic Wildfire Training, and many firefighters have taken advanced wildfire training and certification at the Colorado Wildfire Academy, such as:

- *Sawyer*
- *S-290*
- *Mapping*
- *Incident Commander*
- *Helicopter Manager*
- *NIMS 100, 200, 700, 800*
- *Communications Section*
- *Liaison*
- *Tactical Decision-Making*
- *Fire Operations in the Wildland/Urban Interface*
- *Engine Boss*

The Hotchkiss Fire District's in-house training includes:

- *Strategy and tactics utilizing our mapping system*
- *Familiarization and use of our fire engines*
- *Incident Command System*
- *GPS training*
- *Structure Protection training*
- *Review of all fires*
- *Firefighter Safety*
- *Sand Table Exercises*
- *Developing water supply for large fires*
- *Working with aircraft*

## **Fire Suppression Goals for the Future**

The Hotchkiss Fire District will seek to improve its strategy, tactics, training and equipment across the board. Specifically, we will:

- Develop and improve our ICS skills.
- Commit to changing our radio system completely to 800 MHz DTR to enhance interoperability.
- Purchase a Heavy Brush Engine/Tender to replace our oldest truck, Engine 4
- Find a way to provide S130/190 training for new firefighters.
- Continue to send our firefighters to the Colorado Wildfire Academy and similar training opportunities.

## **SAFETY OF CITIZENS AND FIREFIGHTERS**

### **Evacuation**

Our mapping and data suggest that a “Protect in Place” (PIP) strategy is possible in the Hotchkiss Fire District, rather than a fully developed evacuation plan. The Protect in Place concept comes with certain risks and can only be implemented on a situation-by-situation basis. The Hotchkiss Fire District will obtain more information on Protect in Place strategies. By examining the pros and cons of this technique, firefighters and the public can get a basic understanding of how PIP could be applied on a wildfire in our Fire District.

#### **Pros:**

- Specifically in the HFD, safety zones exist near many of the residences, providing protection from wildfire for both firefighters and residents.
- At present, there are no large subdivisions in hazardous wildfire areas; instead, most lots are several acres or more in size, thus reducing the sheer number of people at risk in any one incident.
- Traffic on roads would be substantially reduced, allowing safer emergency vehicle traffic.
- Capable residents can assist with structure protection on low- risk (green dot) homes, freeing firefighters and equipment to work on other portions of the fire.

**Cons:**

- The Protect in Place concept is not widely accepted.
- Confusion may result if other officials order evacuation, particularly because the County Fire Plan includes plans and methods for evacuation
- The public and other organizations have come to expect evacuations as an integral part of wildfires. Not ordering evacuations has the potential to create a poor public perception of the Fire District’s management of a fire incident and the mistaken idea that risk is low.
- Risks from mistakes made in the use of PIP, particularly concerning evaluation of resident’s health and the suitability of the safe zone itself.

**Resolution:**

The Hotchkiss Fire District will create Public Service Announcements to explain to the public that we promise to use evacuations only when and where needed. We will include in the announcement the location of a Designated Evacuation Center, and advise any evacuated residents to check in, regardless of whether they plan to stay or seek other shelter.

**TASK SCHEDULE TABLE 2006, 2007, 2008**

Who	What	When	How	
Hotchkiss Fire District	Projects and Programs:	2007-2008	1. Conduct Biannual Building Surveys, obtain better mapping software.	COMPLETE
	1. update mapping system,		2. Continue current program of using matching grants to promote individual property owner’s fuel reduction projects.	IN PROGRESS
	2. fuel reduction programs,		3. Conduct large-scale large wildfire training exercises within a 2-year planning cycle.	TBD
	3. improve wildfire response through planning and training,		4. Continue advocacy through participation in the County’s plan review process. Obtain another type II tender.	ONGOING No purchase on tender in near future
	4. Improve water supplies,			

	<p>5. initiate a continuous public education program,</p> <p>6. conduct a biannual survey of residences,</p> <p>7. Administer the CWPP</p> <p>8. Develop web site with comprehensive info for homeowners</p> <p>9. develop plan to explain Evacuation to the District's citizens</p> <p>10. CWPP review</p>	<p>Fall, 07</p> <p>Nov. 08</p>	<p>5. Initiate an ongoing program of public presentations of Fire Wise type information emphasizing structure ignitability.</p> <p>6. hire mapping personnel</p> <p>7. Select committee, schedule meetings</p> <p>8. see <a href="http://www.hotchkissfire.org">www.hotchkissfire.org</a></p> <p>Organize review meeting</p>	<p>ONGOING</p> <p>COMPLETE FOR 2007</p> <p>in progress</p>
Delta County	<p>1. Continue to provide Emergency Management support of significant wildfires.</p> <p>2. Continue GIS support of the WUI mapping program.</p> <p>3. Continue incident communications support.</p> <p>4. Provide assistance in evacuation route planning and signage.</p> <p>5. County trucks to have unit markings, visible from ground or air</p> <p>County-wide EFF-type fund</p>	2007-2008	<p>Fire incidents in 2007 received great support</p> <p>GIS department effort to assist mapping, grants to pay for data collection, new addresses needing to be entered.</p> <p>Proceed with 800 DTR system, involve ARES-RACES at incidents</p> <p>NA</p> <p>Proposed</p> <p>Proposed</p>	<p>Ongoing</p> <p>Ongoing</p> <p>ongoing</p>
Colorado State Forest Service	<p>1. Provide expertise and materials for public education program, fuel reduction projects, and support of this CWPP.</p>	2007-2008	TBD	

	2. support on the leased CM2 fire engine, WERF funds, RFA/VFA admin, and GSA fire supplies			
BLM, FS, and other federal agencies	<p>1 Accomplish mosaic fuel reduction on federal lands on the drainages north of the Town of Hotchkiss and Big Gulch</p> <p>2. Provide technical support of the CWPP program.</p> <p>3. continue fire suppression assistance to the Fire District</p> <p>4.</p>	2007-2008	TBD	
Town of Hotchkiss	<p>1. Be a forum for public awareness of wildfire dangers</p> <p>2. Assist in emergency planning for large wildfires.</p> <p>3. Continue personnel and equipment support for fighting wildfires including the operation of an EOC for the Town.</p> <p>4. Sign CWPP</p> <p>5. Board of Trustee meeting in late winter of 08, to publicize CWPP, and assist on Structure Ignitability campaign.</p>	<p>2007-2008</p> <p>Fall 07</p> <p>February or March 08</p>	<p>Updates made to Board of Trustees, Trustee member of CWPP</p> <p>Operations Center activation when needed, supply water, Law Enforcement personnel</p> <p>Get copies to Trustees, Briscoe</p> <p>Develop presentation over the winter</p>	<p>Ongoing</p> <p>Ongoing</p>

## Review and Updating of the CWPP

The Hotchkiss Community Wildfire Protection Plan is meant to be a living document, and a guidebook for future efforts to protect our citizens from wildfires. It is critical to review the efforts from the past, and to develop strategies and programs for the future. The surest method is to schedule public meetings for the upcoming years, and to develop possible agendas or goals that could be discussed at these meetings.

It is also important to recognize that no plan can be effective very far into the future without revisions to accommodate not only the changes in our community, but also the innovations in Wildland/Urban Interface strategies being developed by dynamic fire service organizations throughout the world.

Therefore, each year on the second Wednesday in November, a review of the CWPP will take place at the Hotchkiss Fire Station at 7 p.m. The purpose of this meeting will be to:

- Review and evaluate the accomplishments and efficiency of the previous year's efforts.
- Decide upon strategies to implement for the upcoming year, particularly the upcoming fire season.
- Reviewing potential changes of land use that may require specific plans for fire protection, fuel mitigation, or mapping.
- Suggest any possible updates or changes that should be made to the CWPP.
- Every even year, beginning in 2008, provisions to update the maps in time for the following year's fire season must be made.

At the meeting in 2012, a committee consisting of Fire District Personnel, representatives from the Colorado State Forest Service, the Delta County Emergency Manager, and members of the Board of Trustees from the Town of Hotchkiss shall determine if the existing CWPP meets the current requirements for a Community Wildfire Protection Plan, and develop a suitable process for updating the plan.

## The Plan in Action



**A heavy air tanker drops slurry on the Southwest corner of the Wolf Park Fire. Teresa Pagone took from this photo within the city limits of the Town of Hotchkiss.**

On July 9 2007 at 3:30 p.m., Hotchkiss firefighters were paged to a fire on Coal Road. This fire, named the Wolf Park Fire, would ultimately test and validate every facet of the Community Wildfire Protection Plan.

Firefighters were able to respond immediately to the call because they had just returned from assisting at a car wreck. The dual-purpose clothing worn by firefighters at rescues is also used for wildland fire fighting. As units began to near the scene of the fire, they began to report conditions: heavy black smoke and 20-foot plus flame length visible from a distance.

All of the Hotchkiss firefighters were familiar with the area based on previous experience fighting fires in the vicinity, in addition to training scenarios developed from the North Hotchkiss Preplan. That Preplan identifies several risks that a wildfire presents in that area: the ability to grow into a large-scale fire endangering homes and lives, and the risk from flash floods to the Town of Hotchkiss from runoff of burned lands.

Based on this information, the Fire Chief requested heavy air tankers to combat the fire even before he arrived on scene. Two Hotchkiss fire engines engaged the fire using nozzles mounted on the truck but controlled from inside the cab, pumping water and moving alongside the fire at the same time. This action, taken at the area that the fire started, stopped the spread of fire to the South. Meanwhile, the Fire Chief realized fire was spreading to the East and ordered all remaining units to respond to Powell Mesa Road. A Command Post was established at the intersection of Powell Mesa Road and Wolf Park Road.

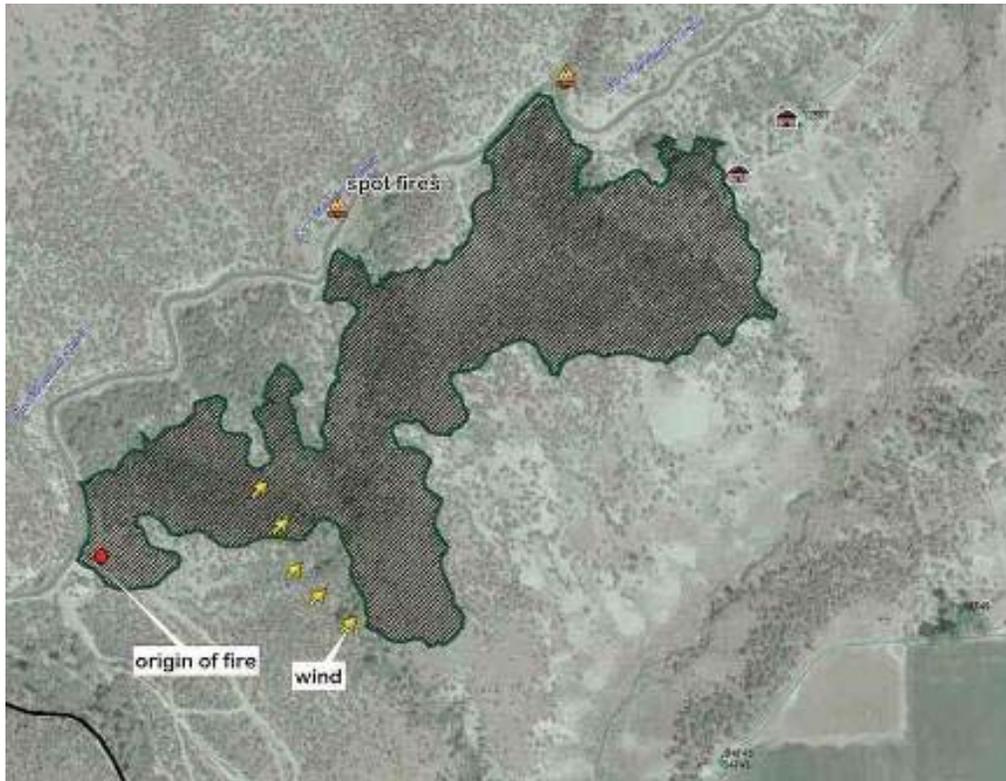
Two fire engines were assigned to protect the house at 12507 Wolf Park Road, which was in the direct path of the fire. Firefighters sprayed water on and near the structures and drove out just as a large wall of flame approached the home and garage. Fire slowed down right before it got to the homes and a large air tanker dropped slurry on the fire, saving the home and outbuildings. Fire engines were ordered back to the residence to support the airdrop, making sure the home was safe. The homeowner later reported that he had thinned junipers and other trees near the structures, because of the Fire Chief's encouragement at previous small lightning fires on that property.

Other fire engines were assigned to protect the other homes in the area, and to control the spot fires that had jumped the Fire Mountain Canal. Eventually, the perimeter of the fire was secured by use of further airdrops, a bulldozer line, and a wet line created by numerous fire engines. The fire was held to 43 acres, with about 70% on BLM lands, the remainder on private property.

Throughout the firefighting operation, the Hotchkiss Fire District worked closely with the Delta County Sheriff, the County Emergency Manager, Montrose

Interagency Fire, Air Attack Coordinator, and other responding fire districts, utilizing the Incident Command System

In the days following the fire, plans were made to prevent mudslides and flash floods originating from the burned areas. On the BLM property, burned trees were limbed, cut, and laid across the slope of the land. The homeowner, on some of the remaining parts of the fire, hired a machine to mulch burned trees down to the ground. Both actions were taken to prevent erosion from heavy rains



**The Wolf Park Fire**



***Looking east from the fire to the buildings at 1207 Wolf Park Road. Note the green roof of the outbuilding has nearly been completely “painted” by fire retardant.***



***This photo, taken from further west, illustrates both the slope and potential runoff problems due to damage of the soil from the fire.***

On Thursday, July 12 at the Hotchkiss Town Council meeting, Fire Chief Fritz addressed potential flooding issues that runoff from the fire could cause in Short Draw. The Community Wildfire Protection Plan was also discussed. On Friday,

July 13, a local newspaper reporter was given a tour of the fire, and an excellent in-depth article concerning Defensible Space and Community Wildfire Protection Plan was published in the Delta County Independent on the following Wednesday. Other newspaper and television reporters were given access to the fire scene and briefed on Fuel Reduction and Defensible Space issues as they related to the Wolf Park Fire.

The media coverage of this and other nearby fires generated much interest in Fuel Reduction and Defensible Space. On August 1, a roundtable discussion on those issues was broadcast on KVNF, the local public radio station. Members of the roundtable were Maggie McCaffrey of the Southwest Fire Center, Kamie Long of the Colorado State Forest Service, Rob Fiedler, Emergency Manager of the Delta County Sheriff's Office, and Fire Chief Doug Fritz. Numerous inquiries from homeowners regarding wildfires have been fielded by those organizations as a result of the media coverage of the fires.



***Radio interview/discussion of the CWPP, Defensible Space, and tips for homeowners. 8/1/2007 left to right: Kamie Long, CSFS, Maggie McCaffrey of the Southwest Fire Center (BLM), Doug Fritz, HFD, Daniel Costello, KVNF, Rob Fiedler, Emergency Manager of the Delta County Sheriff's Office.***

## **Summary:**

- Firefighters suppress the Wolf Park Fire using equipment designed to be successful in the Wildland/Urban Interface: pump and roll trucks, remote-controlled nozzles, foam units, wildland fire fighting suits designed for quick donning, GPS radios.
- Advanced training for Wildland firefighters made possible an accurate initial size-up of the fire and allowed for timely crucial decisions to be made very early in the incident.
- The North Hotchkiss Preplan maps allowed the Incident Commander to select strategies to suppress the fire, protect structures, and minimize evacuations.
- The use of the computer based preplan and the firefighters GPS radios allowed the Incident Commander to “see” the firefighters’ positions and helped in determining the fire’s size, shape, location and origin.
- Contact with the landowner at small lightning-caused fires on his property in previous years convinced him to do fuel reduction work near his home, which was an important factor in the successful outcome of the incident.
- Measures were taken to prevent problems with storm-water runoff from the fire, an important component of the Community Wildfire Protection Plan.
- An important member of the Community Wildfire Protection Plan, the Town of Hotchkiss Board of Trustees were briefed on the issues concerning wildfire in one of the County's most critical areas- North Hotchkiss.
- The media provided excellent coverage of the fire with a high profile front-page photograph in the regional newspaper, and numerous articles about Fuel Reduction and Defensible Space. Media outlets included television, newspapers and radio.
- The publicity generated large numbers of requests for information from homeowners.

## **Conclusion:**

After more than seven years of effort on Wildfire/Urban Interface issues, including obtaining grants, mapping, planning, training, Fuel Reduction projects and the writing of the Community Wildfire Protection Plan, the Hotchkiss Fire District has developed good working relationships and partnerships with other Agencies, fire districts, the media, and, most importantly, the public. This partnership was critical in the successful management of the incident, from suppression through to reclamation.

### **Our Partners in the Wolf Park Fire:**

**Colorado State Forest Service**

**Bureau of Land Management**

**Southwest Fire Center**

**Delta County Sheriff's Office**

**Delta County Emergency Manager  
Department**

**Delta County GIS**

**Delta County Road and Bridge Department**

**Town of Hotchkiss**

**Delta County Independent**

**The Cedaredge, Paonia, Crawford, and Delta Fire Districts**

**The American Red Cross  
Contractors**

**Fuel Reduction**

**KVNF**

**Local citizens, especially those who have undertaken Defensible Space and  
Fuel Reduction Projects**

## **Appendix A**

### **FUEL MAP**



## NORTH REDLANDS FIRE PLAN

In the next few weeks, the Hotchkiss Fire Department will be creating a "Fire Preplan" for the northern half of Redlands Mesa and surrounding area. Every home in the area will be included. Lots of information is available, including:

- pamphlets, applications for cost-sharing grants for creating Defensible Space and Fuel Reduction, and lists of contractors
- Experts are available to help you decide the best method to protect your home from Wildfire. Call 872-2145 for more information.

**What is a Fire Plan?** A fire plan consists of several elements:

- a computerized map showing homes, addresses and driveways, water resources for firefighting, and special risks our Firefighters may face.
- expected fire behavior in the plan area and a strategy to deal with that fire behavior.

**How is a Fire Plan Made?** Firefighters will use GIS tools to map the area. A computerized map will then be created. Wildfire experts will evaluate the data and decide upon a strategy. This Plan will be printed, along with the map, and will be carried on our Fire Engines. Hotchkiss Firefighters will review the Fire Plan and be trained to implement it in case of a fire.

**When will the Fire Plan be made?** The work has already started. We will be collecting additional data in the next few weeks. The Fire Plan will be ready for this year's Fire Season. The plan will be relatively easy to update because it's computerized.

### WHAT YOU CAN DO:

- **POST YOUR NEW 5 DIGIT ADDRESS NUMBER**
- Allow Firefighters to map your Driveway
- Create or improve the Defensible Space near your home and outbuildings.
- Be careful with fire. Don't burn trash. Do ag burning only when conditions are safe.
- Report all fires that seem out of control to 911. Give an accurate location and description of the fire, and say **"I'm on Redlands Mesa"**.

Improving your home's resistance to Wildfire is the single best thing you can do to protect your home, your family, and your neighborhood.

It's not necessary to cut all your trees down, just a little trimming and thinning will help.

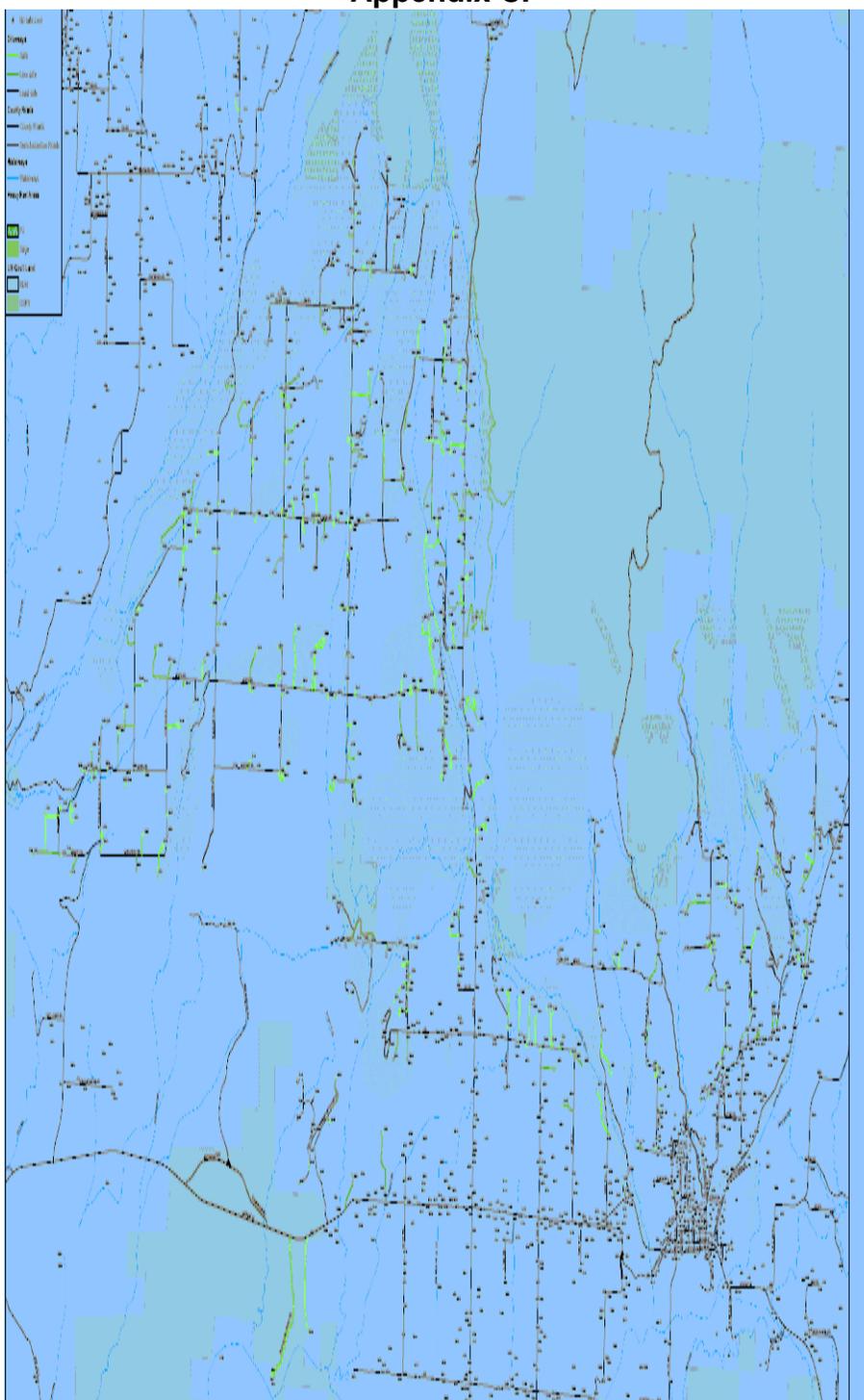
- Many landowners do this work over several years, improving the landscape little by little.
- These landowners consider the results a big improvement, feel safer, have peace of mind, and are helping to protect our beautiful area.



Hotchkiss engine #7, based on Redlands Mesa, containing a wildfire on the eastern side of Redlands Mesa. April 2002

Cooperators: Hotchkiss Fire District, Painted Sky RC&O, Delta Co. GIS Dept., Delta Co. Sheriff's Office, BLM, USFS, American Red Cross, Colorado State Forest Service, Delta Co. Commissioners

## Appendix C.



**The map showing all the rated structures in the Hotchkiss Fire District in the new format developed in the summer of 2007. The old Pre-Plan boundaries are not displayed in this version. For a searchable version of this map, go to [www.Hotchkissfire.org](http://www.Hotchkissfire.org)**

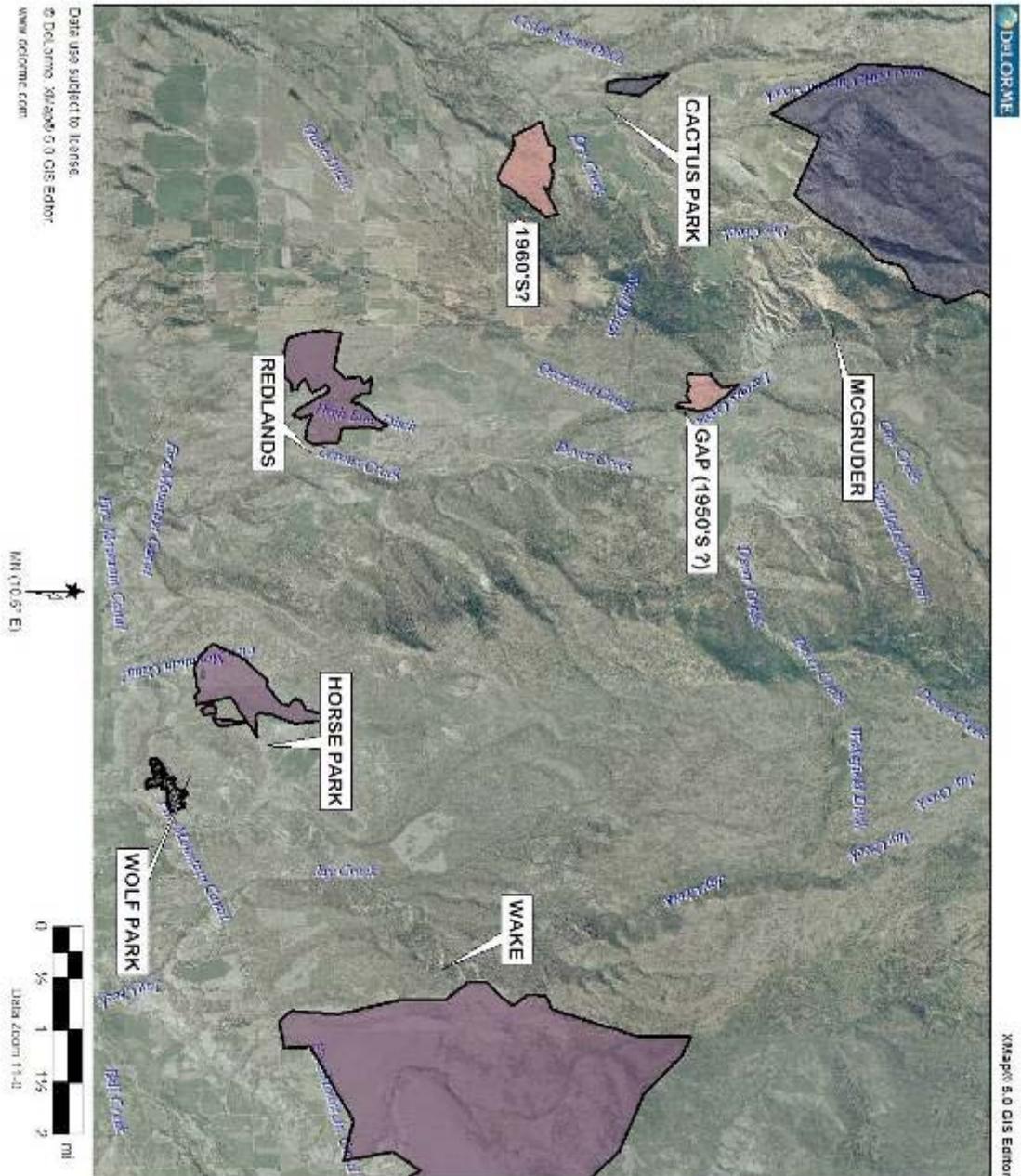
## Appendix D.

### Modified Residential Wildfire Resistance Score Sheet

Name	
Address 2	
City, St, Zip	
Phone	

Access: 2 or more roads = 0; 1 Rd with alternative = 3; 1 way in and out = 5	
Fire road width at least 24' = 0, under 24' = 3	
Smooth road under 5% grade = 0; rough or over 5% grade = 3; very rough, over 7% grade = 5	
Terminus: loop with radius over 45' = 0; loop under 45' = 2, dead end under 200' = 3, dead end over 200' = 5	
Street address sign present = 0; no sign = 5	
Fuels: grass, scattered trees/brush = 1; thinned conifers over 10' between = 3, sage/willow = 5 moderate dense conifers, oak = 7; dense continuous trees/brush = 10	
Defensibility: over 70% of sites defensible = 0; over 30% = 5, under 30% = 10	
Lot size over 10 acres = 0; 1-10 acres = 3; under 1 acre = 5	
Predominant slope under 8° = 0; 8-20° = 4; 20-30° = 7; over 30° = 10	
Response time under 15 minutes = 0; 15-30 = 5; over 30 = 10	
Lesser of: 500 g.p.m. hydrant under 1000' = 0; under 2 miles = 2; over 2 miles = 5 or: draft source under 20 minute round trip = 2; over 20 minutes = 5	
Safe zone for pumper and tender within 200' = 0' no safe zone = 5	
Materials: roof & siding non-wood = 0; wood siding w/nonflammable roof = 5; flammable roof = 10	
Utilities all buried = 0; 1 above ground = 3; 2 above ground = 5	
Outbuildings: none or fire resistant = 0; poor defensive space = 3; risk to house = 5; several need protection = 5-10	
Power line over access = 3	
Subjective: minus 5 – plus 5 (enter reason in notes)	

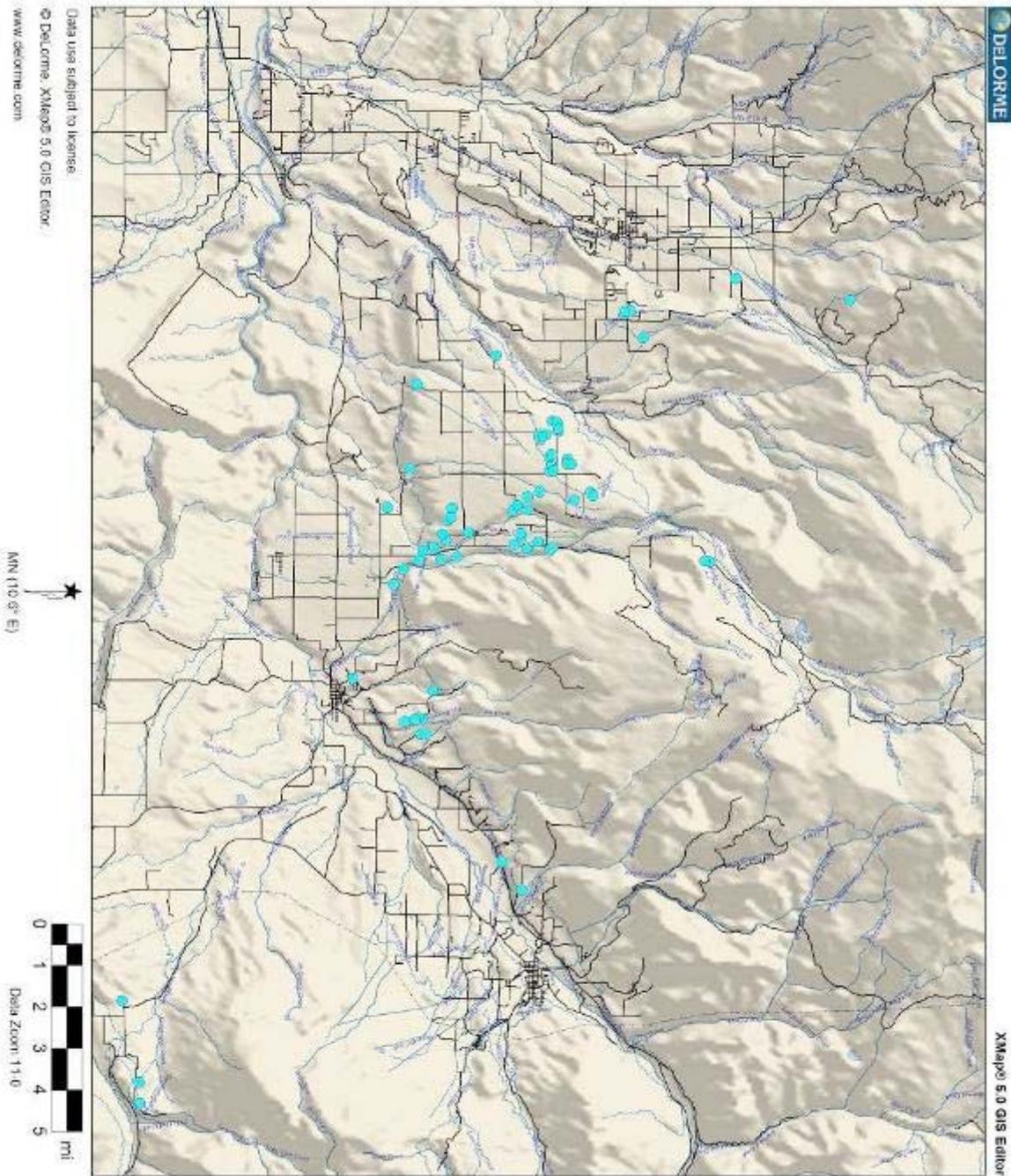
## Appendix E. Local large fires



*This map shows some of the large fires in Hotchkiss area for the past 20 years, several fires depicted with light red shading happened decades ago.*

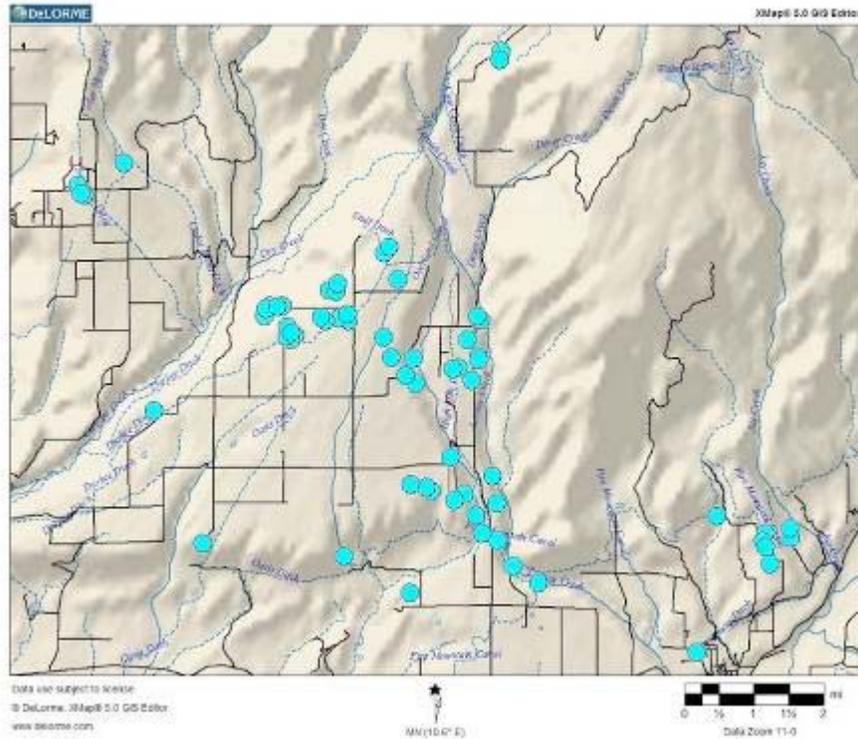
***All the fires are on the South side of the Grand Mesa and North of Hotchkiss.***

## **Appendix F**



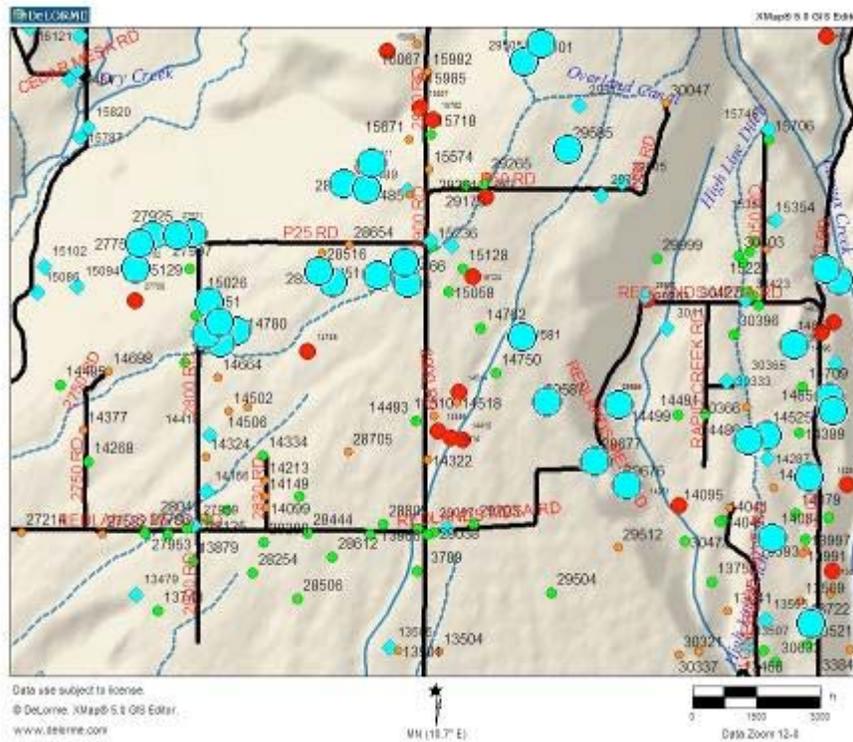
***Known Fuel Reduction Projects in the Hotchkiss Fire District area, 2001 to 2007***

**Appendix G**



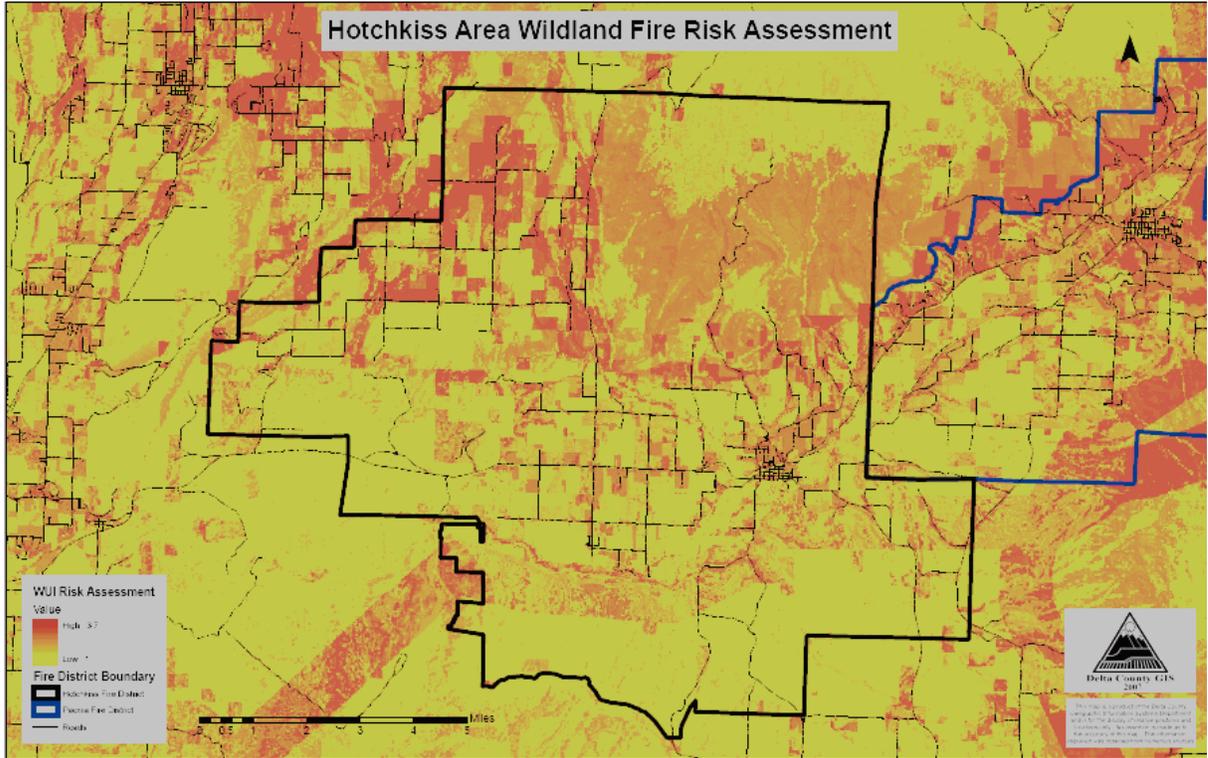
**Fuel Reduction Projects, Hotchkiss, Leroux Creek, Redlands Mesa**

**Appendix H.**

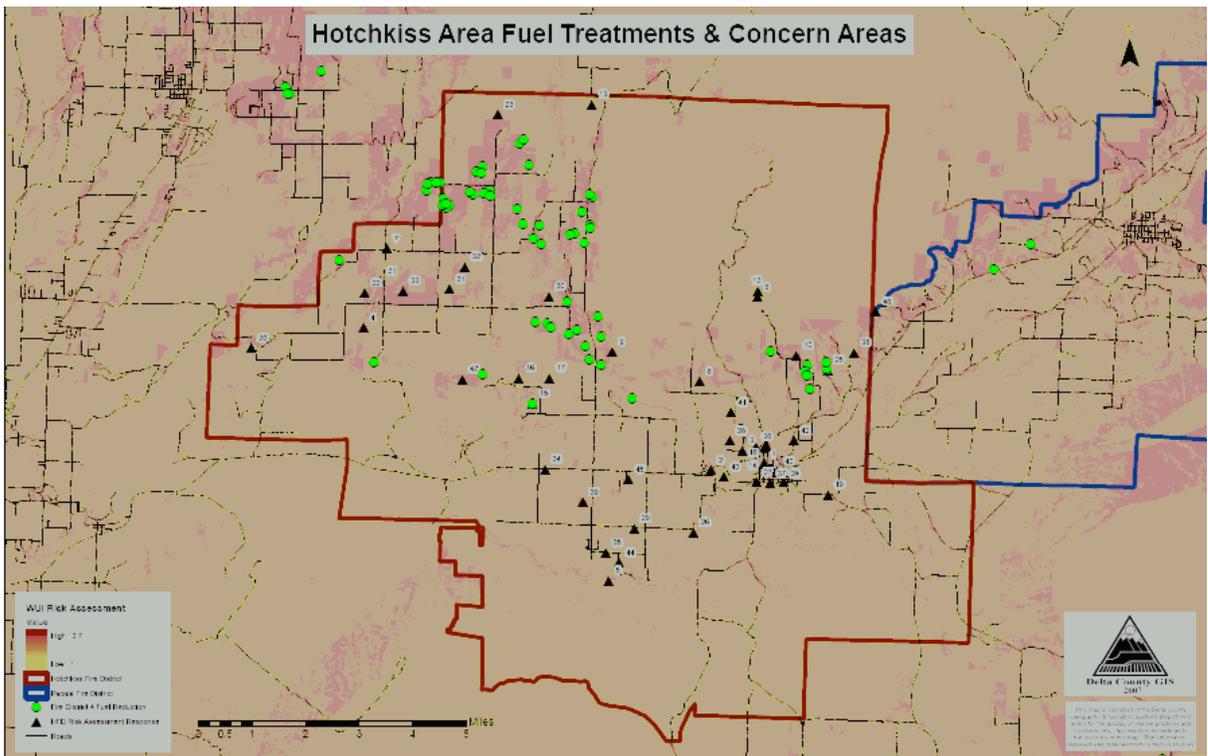


**Fuel reduction projects North Redlands Mesa, Leroux Creek.**

## Appendix I.



## Appendix J.



## **Appendix K.**

### **Summary of Site Visit to BLM Lands** **within Priority Areas as Identified by the** **Hotchkiss Fire Department**

Wednesday, August 17, 2005

By Dan Huisjen, Fire Ecologist

Bruce Krickbaum, Maggie McCaffrey, Jim Cunio, Dan Huisjen, and Kurt Kubik met with Doug Fritz, Chief of the Hotchkiss Fire Department, and Steve Schroder, Hothckiss Firefighter and Red Cross Volunteer, to visit BLM lands within their Fire Protection District that have been identified as high priority areas for wildfire mitigation work. We specifically were looking at BLM lands to determine if treatments needed to occur or where treatments might be possible and, if so, what types of treatments might be beneficial to reduce wildfire risk to communities in the Hotchkiss area. Initially we met at the fire station in Hotchkiss and had some good discussions of mapped areas and identified priority areas to look at. We then went to the field for the rest of the day.

The first area we visited was on the east end of the District just to the southwest and west of the Wake Fire. The majority of the Wake Fire is in the Paonia Fire Protection District with only the extreme west end in the Hotchkiss Fire Protection District. The Wake Fire is very open grassland with a mix of natives grasses and cheatgrass. Resistance to control is lower on the Wake Fire but rate of spread in the grasses could be very rapid under typical June and July conditions. Fuels west and southwest of the Wake Fire are dominated by pinyon/juniper with some sage and cheatgrass (highly volatile). To the south across the Fire Mountain Canal, fuels transition to open fields/pastures with scattered structures in the transition area. Two old chainings (with significant PJ regeneration and some cheatgrass) are located west of the Wake Fire and just north of the Fire Mountain Canal. We believe the best fuels treatment in this area would to retreat the chainings in a mosaic pattern to remove woody debris and encroaching trees, and re-seed them with native species to maintain open meadows and to compete with existing cheatgrass. In addition, two corridors across drainages (one between the two chainings and the other between the east chaining and the Wake Fire) need to be looked at to determine if fuel reduction would help create a 'connection' between the chainings and the Wake Fire. Slope may be an issue with these connection treatments (an excavator-mounted flail or chainsaw/piling might be a possibility). To the west of the west chaining is an approximately 50 acre flat area consisting of both BLM and private lands. The flat drops off to the west and southwest in broken, bare Mancos Shale slopes to Jay Creek. Ideally fuels work would continue west across this flat on BLM/private to the top of the

bare slopes. A hydroaxe or rollerchopper would be the optimum tools in this area. Obviously this would need to be collaborative effort involving the BLM, the landowner, the Fire Department, and State Forestry to coordinate this portion of the project.

To the south, and straddling the Fire Mountain Canal, is an isolated 40 acres of BLM that warrants another look, particularly on the northeast corner. There are numerous parcels/structures around this 40 acres and treatment of a portion of it may be desirable, although slopes may be prohibitive and, due to the small size of the treatable area, treatment may have minimal positive impact.

The second area we looked at was immediately west of Jay Creek, then west across Short Draw, and further west still toward Horse Park. The Wolf Park Fire, in and around Horse Park (1981), has maintained the Horse Park area in an early seral state for nearly 25 years. Concerns in the area include potential flooding and mud slides moving down Short Draw from Wolf Park and into Hotchkiss. Hotchkiss has been flooded previously from this drainage and a major fire in the Wolf Park area would create very unstable, erodible exposures of Mancos Shale which could easily create flooding in Hotchkiss. We believe that ideally, starting above and west of Jay Creek, approximately 50-60 acres of BLM/private should be treated with a hydroaxe/rollerchopper to reduce fuels between Jay Creek and the Short Draw area. Again, this would need to be a cooperative effort involving the landowner, the BLM, the Fire Department, and State Forestry. To the west of this treatment a chainsaw/piling treatment would probably be needed to work across both the Fire Mountain Canal (twice) and Short Draw on steeper slopes. West of Short Draw, on 5 isolated flat areas totally approximately 60 acres, a rollerchopper or hydroaxe could be used to create openings in the denser pinyon/juniper. These treatments would reasonably reduce the fuels all the way to the Wolf Park Fire. Additionally, a possible hand thinning/piling project could occur on about 7 acres of steep ground in a drainage south of the Wolf Park Fire to help keep fire from moving southeast down the drainage. This may be a marginal treatment due to limited potential for fires to move down the drainage from above.

To the north of this area is some slightly more remote BLM land known as the Wolf Park Area, which consists primarily of pinyon/juniper dominated woodlands with approximately 600 acres of private ranch land near the Short Draw drainage. The BLM has implemented several hydroaxe treatments on the flatter areas here, however, it is not possible to treat significant acres mechanically due to the steep slopes and the presence of large basalt rocks on the surface of the Mancos Shale. A proposal was brought forward to utilize prescribed fire on the BLM portion across much of this drainage to create numerous openings 5 to 50 acres in size. The burn could be carried out on the shoulder seasons under moderate conditions over several years until the appropriate mosaic of openings and dense woodland is created. This would greatly reduce the chance of a catastrophic fire burning the entire drainage at once, which could create tremendous potential for flooding in Hotchkiss. It does carry some risk, however, if the prescribed burn creates too many openings with bare soil and subsequently releases soil and debris down the drainage during a rainstorm. If there is interest in this proposal it can be developed further.

The final area we looked at on this trip was the Big Gulch area to the west about 4 miles. This is a 240 acre parcel of BLM land surrounded by private with several homes located directly adjacent on the south side. The parcel contains primarily pinyon/juniper on moderate to steep slopes with the flattest slopes (15-20%) on the southern side having more scattered trees with native and non-native grasses in the understory. This area has the potential to be very volatile; the Fire Department has responded to fires with significant intensity in nearby areas. The southern portion of the Big Gulch area may be treatable with a hydroaxe to further thin the trees. In addition, seeding would need to take place with any treatment to help out-compete the cheatgrass in the area.

There are several more areas that need to be looked at in the Hotchkiss Fire Protection District as identified below. These areas will require another preliminary visit to get an idea of both the need and feasibility of treatments.

- 1)BLM lands to the west of Leroux Creek and northwest of the Wolf Park Fire.
- 2)The old BLM chainings at the extreme north end of Redlands Mesa.
- 3)BLM lands near the Landroth Mine north of Redlands Mesa.
- 4)BLM lands near the Newman and Farmers Mine.
- 5)Antenna Hill area north and east of bend in Stingley Gulch