

## Community Wildfire Protection Plan

Diamond Creek  
Larimer County, Colorado

send to Jesse a  
map of PRR

### **Introduction**

This *Community Wildfire Protection Plan* (CWPP) was developed by Diamond Creek with guidance and support from United States Forest Service, Colorado State Forest Service, Livermore Fire Protection District and Larimer County. This CWPP supplements several Larimer County documents referenced in Appendix A. Information in this plan will be provided at a level of specificity determined by the community and appropriate agencies.

### **I. Community / Agencies / Interested Parties Involved**

Representatives involved in the development of the Diamond Creek CWPP are included in the following table. Their name, organization, and roles and responsibilities are indicated below:

#### **CWPP Development Team**

<b>Name</b>	<b>Organization</b>	<b>Roles / Responsibilities</b>
<u>Dave Miller</u> <u>Bill Rexford</u> <u>Lance Emrick</u> <u>Denny Parker</u>	Diamond Creek Road Association CWPP Working Group	Primary development of CWPP and decision making – community risk and value assessment, development of community protection priorities, and establishment of fuels treatment project areas and methods
<u>Deb Payne</u> <u>Jim Harrington</u>	Livermore Fire Protection District	Primary development of CWPP and decision making – community risk and value assessment, development of community protection action steps and establishment of fuels treatment project areas and methods
<u>Greg Zausen</u>	Colorado State Forest Service	Facilitation of planning process and approval of CWPP process and minimum standards. Provides input and expertise on forestry, fire and fuels, and FireWise concepts.
<u>Tony Simons</u>	Larimer County Wildfire Safety Program	Provides input and expertise on hazard assessment, defensible space, and FireWise concepts.
<u>??</u>	United States Forest Service	Provides input and expertise on federal lands forestry, fire and fuels, and FireWise concepts.
<u>Diamond Peak Ranch,</u> <u>Trail Creek</u> <u>Poudre River Ranch</u> <u>Hidden Pines</u> <u>Etc.</u>	Surrounding Landowners	Provides input. This could include community risk and value assessment, development of community protection priorities, and establishment of fuels treatment project areas and methods.

## **II. Identification of Values at Risk**

Using technology and local expertise, Diamond Creek has developed a base map of the community and adjacent landscapes of interest. This map will act as a visual aid from which community members can assess and make recommendations. The base map includes the following:

Areas containing critical human infrastructure—such as access roads/evacuation routes, private structures, etc.— that are at risk from wildfire (Layer One Base Map)

Areas to be modified according to CWPP Action Plan (Layer Two Base Map)

Wildfire Hazard Risk Assessment (CSFS Supplied Map)

A preliminary designation of the community's Wildland Urban Interface zone. (County WUI Map)

### **Diamond Creek Values At-Risk**

The Road Association members have listed the following community values that are at-risk from wildfire, and prioritized these values as high, medium, or low. Identifying values at-risk provided this group with a basis for determining action items, as action items specifically address values at-risk. Prioritizing these values assists the community in prioritizing mitigation projects for implementation.

Table 1. Community values at risk of wildfire, prioritized on a scale of Low-Medium-High.

<u>VALUE</u>	<u>PRIORITY</u>
Life / Safety	High
Forest Health / Trees	High
Peacefulness / Tranquility	High
Access / Roads	High
Investments / Homes / Property	High
Aesthetics / Views	Med
Recreational Opportunities e.g. ATVs, hiking	Med
Water Resources e.g. wells, creeks, pond	Med
Hunting Opportunities	Med
Wildlife / Wildlife Habitat	Med
Home Heating Fuel / Propane Tanks	Low

### **III. Community Risk Assessment**

The purpose of the community risk assessment is to help to prioritize areas for treatment and identify the highest priority uses for available financial and human resources. This section is divided into five areas of concern:

**Fuel Hazards** – An evaluation of vegetation conditions within the community and on adjacent lands.

References to be included:

- Larimer County Wildfire Safety Program – Subdivision Wildfire Hazard Review
- Larimer County Fuel Hazard Map
- Colo. State Forest Service Fuel Hazard Map

**Risk of Wildfire Occurrence** – An evaluation of the probability of fire ignition within the community and surrounding lands.

Reference: Fire Hazard Map from CSFS

**Risk to homes and essential infrastructure** – An evaluation of the vulnerability of structures within the community to ignition from firebrands, radiation, and convection. Also includes an evaluation of risks to essential infrastructure such as evacuation routes.

Will include:

Structure Assessment (construction materials, structure access, defensible space, etc.) in accordance with FIREWISE program and recommendations from Livermore FPD / Larimer County Infrastructure Assessment (Community roads, fences and gates)

**Risk to Other Community Values** – An evaluation of risk to other community values such as wildlife habitat, recreation and scenic areas.

**Local Preparedness and Firefighting Capability** - Initial response to all fire, medical and associated emergencies is the responsibility of Livermore Fire Protection District. Wildland fire responsibilities of Larimer County, Colorado State Forest Service, United States Forest Service, Bureau of Land Management and the National Park Service are described in the current *Larimer County Annual Operating Plan*. All mutual aid agreements, training, equipment, and response are the responsibility of the local fire department and the agencies listed above.

### **IV. Hazard Reduction Priorities**

**Community needs regarding fuel reduction treatments within the WUI zone.**

- Removal of dead/hazardous trees along access/evacuation routes
- Removal/thinning of hazardous fuels in surrounding communities and on adjacent USFS lands

**Fuel reduction needs**

- Remove dead/hazardous trees along community roads
- FireWise treatment in areas surrounding individual structures/driveways/high value areas
- Base Map to identify treatment types and waste disposal methods by area within Diamond Creek.

**Fire response needs**

- Improve access for firefighting crews including:
  - road improvements (surface, width, turnouts, dead tree removal)
  - familiarity with area (site visits, structure assessments, gate access)
- Identify properties on Fire District maps and with signage
- Provide water supply for firefighting crews (e.g. dry hydrant at pond)
- Develop staging/safety area for firefighting crews
- Develop community evacuation plan, including communication methods

## **V. Action Plan**

Diamond Creek has developed and attached an action plan which identifies roles and responsibilities, funding needs and timetables listed in Hazard Reduction Priorities. The core team will meet annually to evaluate progress and mutually agree on treatment priorities.

The community members referred to their list of values at-risk to create the following action items. The action items are presented in a general list according to priority level, which allows the community to implement projects in whatever order is the most efficient and effective.

Table 2: Action items to protect values at risk of wildfire, and then prioritized on a scale of low-medium-high.

<u>ACTION ITEM</u>	<u>PRIORITY</u>
<i>ADMINISTRATIVE ACTIONS:</i>	
1) Review covenants to address compatibility with the CWPP [Who: Assoc. Board; When: 2011 Annual Mtg]	Medium
2) Institutionalize an annual review of the CWPP including: wildfire and mountain pine beetle mitigation and infrastructure improvements [Who: Assoc. Board; When: 2011 Annual Mtg and continuing]	High
<i>WUI ACTIONS:</i>	
3) Maintain external access roads: contact DP Ranch and USFS to ensure minimum maintenance on Diamond Peak Road and Forest Road 182 [Who: Assoc Board; USFS has improved Road 182 and removed trees]	Medium
<i>FUEL REDUCTION ACTIONS:</i>	
4) Provide information to landowners (e.g. FireWise, pine beetle); identify sources for written information, on-line publications and presentations [Who: CWPP Group; When: 2011]	High
5) Encourage individual property assessments pertaining to wildfire issues; provide landowner appropriate contacts (e.g. CSFS site visits) [Who: CWPP Group; When: by end of 2011]	Medium
6) Investigate mountain pine beetle mitigation as a community: identify organizations for assistance (i.e. BeetleBusters) and/or develop treatment prescriptions with CSFS [Who: CWPP Group When: by end of 2011]	Medium
7) Investigate development of a community log and slash disposal site(s): Work with local Fire District to identify sites for community slash piles and develop approved methods for burning [When: winter 2010/11]	High
8) Identify sources of information for recovery / improving wildlife habitat after fuels treatment is conducted; contact State Wildlife Division [Who: CWPP Group, interested Association hunters]	Low
<i>FIRE RESPONSE / SAFETY ACTIONS:</i>	
9) Conduct site visits with emergency responders; identify access and other issues to be addressed in next action plan [Who: CWPP Group/Livermore FPD; When: Done 2010, and continuing]	Medium

## **V. Action Plan (continued)**

- |   |        |
|---|--------|
| 10) Improve interior roads: widening, thinning trees, constructing turnouts per Fire District recommendations, improving gates<br>[In progress; review by landowners at 2011 Mtg]                     | High   |
| 11) Identify and develop staging/safety areas for fire crews within Diamond Creek property [When: Summer 2011]  | Low    |
| 12) Identify property addresses clearly: get assigned addresses from County as needed [Who: CWPP Group]   | Medium |
| 13) Install signs at gates and/or boundaries identifying "Diamond Creek" and providing maps and emergency contact information;  | Low    |
| 14) Install Fire District locks at gates [Who: LFPD; When: Fall 2010]   | Medium |
| 15) Research sources of water that could be used in an emergency, such as a dry hydrant or cistern, or improved access to the creeks. Post signage at water supply locations and indicate on Base Map | Medium |
| 16) Develop a community evacuation plan, including marking alternative evacuation routes and determining methods for emergency communication  | Low    |

In cooperation with the Larimer County Fire Education Group, the Larimer Fire Council, and the Livermore Fire Protection District the Diamond Creek Road Association supports and promotes Firewise activities as outlined in the Larimer County Fire Plan. Diamond Creek supports and educates its citizens in ways to reduce structure ignitibility through meeting Larimer County Building Code Requirements and utilizing Colorado State Forest Service FireWise Construction Fact Sheets.

The following community representatives / agencies have reviewed and support this *Community Wildfire Protection Plan*.

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Diamond Creek Road Association

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Livermore Fire Protection District

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Fort Collins District, CSFS

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United States Forest Service

## **Appendix A**

Larimer County Fire Plan a Community Wildfire Protection Plan (Larimer County 2004)

Larimer County Wildfire Mitigation Plan (CSFS 1998)

Recommendations for Improving Wildfire Safety in Larimer County (CSFS 1997)

Larimer County Subdivision Wildfire Hazard Review (Larimer County/CSFS 2002)

Larimer County Annual Operating Plan (updated annually)

FEMA—Northern Colorado Natural Hazard Mitigation Plan (2004)



# Diamond Creek - Current Projects

To CR 59  
2 Miles

## Legend

Roads

Driveways

100'  
Contours

Creek /  
Pond

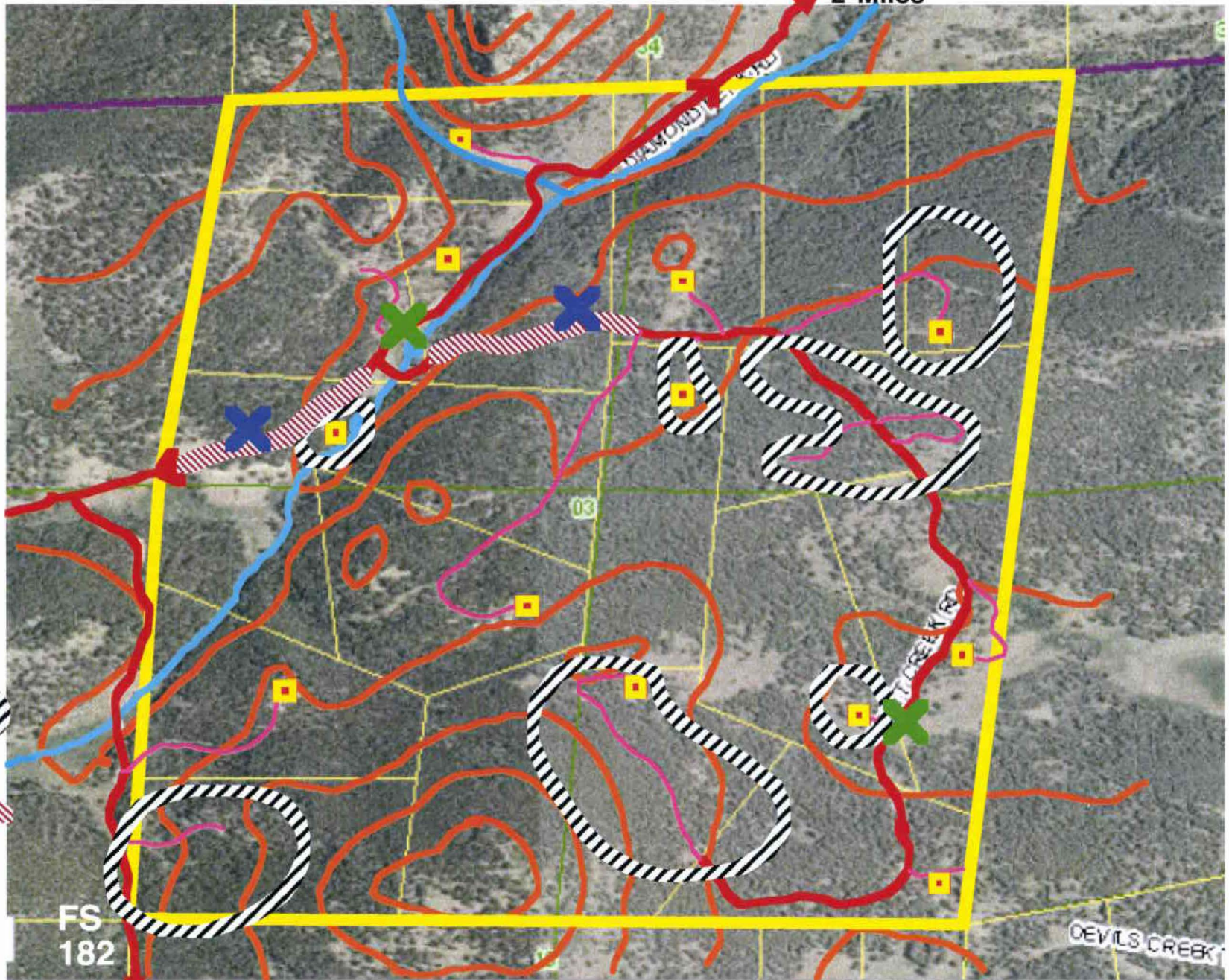
Structures

Community  
Slash

Fire Staging  
Water

Private Fuel  
Treatment

Community  
Fuel  
Treatment



To CR 80C  
1 Mile



# Colorado State Forest Service

## Emergency Supplemental

### 2010 Grant Application

DISTRICT'S: Please Complete	
District Submitting Project:	
Forester Submitting Project:	
District Priority Number:	
Date Submitted:	
FOR REVIEWER'S USE ONLY:	
Rating:	

Applicant Information	
1	<b>Applicant:</b> Robert J. & Nicholas B. Fetsch, Jesse Brungardt, and Paul Mason
	<b>Contact Person:</b> Robert J. Fetsch
	<b>Address:</b> 3320 Rawhide Dr
	<b>City/Zip Code:</b> LaPorte, CO 80535
	<b>Phone (Work/Cell):</b> Fetsch 970-491-5648; Brungardt 970-690-3795; Mason 303-250-8462
	<b>Email:</b> fetschr@yahoo.com; jrmb3@comcast.net; p-dmason@comcast.net
	<b>Fax:</b>

Community At Risk Information			
2	<b>Name of Project:</b> Wildfire Mitigation Fetsch Brungardt Mason		
	<b>Community Name(s):</b> Fetsch, Brungardt, & Mason		
	<b>County:</b> Larimer	<b>Congressional</b>	
	<b>Latitude (decimal degrees):</b> 40°56.182' & 54°40.21"	<b>Longitude (decimal)</b>	105°33.250' & 30°17.3
	Threat Description (check all that apply)		
	<b>Homes:</b> <input checked="" type="checkbox"/>	Number of: 1	<b>Infrastructure:</b> <input checked="" type="checkbox"/> Estimated value of: \$10,000
	<b>Businesses:</b> <input type="checkbox"/>	Number of:	<b>Economic Viability:</b> <input type="checkbox"/> Estimated value of:
<b>Watersheds:</b> <input checked="" type="checkbox"/>	Number of: 1	<b>Historic Structures:</b> <input type="checkbox"/> Number of:	
<b>Other (Describe):</b> Shed @ \$5,000; Garage @ \$15,000; & Cabin @ \$10,000			

Requested Grant Amount / Project Description	
All information for the project must fit into the space provided below. The review committee will not consider attachments.	
<b>Dollar Amount Requested May Not Exceed \$470 x Number of Acres Proposed For Treatment</b>	
3	<b>Dollar Amount Requested</b> \$25,850
	<b>Will this Project be conducted as a Pass-Through Grant?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Bob's cell: (970) 217-8162

N on 287 past Livermore to Cherokee Park Rd.  
 Take 80C West for 21.5 miles (stay on 80C)  
 Green gate on right w/ Poudre River Ranch sign  
 gate combo: 5959  
 \* IF cross a cattle guard it's too far.



Provide a brief overview of the project and the project area. *(If applying for a fuels reduction project, identify vegetation types)*

40 miles west and north of Fort Collins is an area with approximately 88 35-40 acre parcels of privately owned land. There are alternating checkerboard sections of privately owned and National Forest Service Land. The area is mountainous with elevations ranging from 7,000 to 9,000'. The over story consists of Ponderosa, juniper, and sage on south-facing slopes and limber and lodgepole pine, Douglas fir, blue spruce, and aspen on north-facing slopes. Under story composition consists of common juniper and various grasses and forbs. Needle bed varies from 1 to 4 inches. Dead and downed hazardous fuels material is scattered and heavy in areas. In 2010 & 2011 three Poudre River Ranch (PRR) landowners (Fetsch, Brungardt, & Mason) will treat a total of 55 acres (35 Fetsch + 15 Brungardt + 5 Mason) of their land to thin their forests, reduce fuel loading, and mitigate fire danger.

### Scope of Work / Project Timeline

All information for the project must fit into the space provided below. Attachments will not be considered by the review committee.

Provide a brief scope of work that clearly describes how grant funds will be spent. *(This should be more specific than the project description)*

- 4 In 2010 & 2011 three PRR landowners (Brungardt, Mason, & Fetsch) will treat a total of 55 acres of their land to reduce fuels, create a defensible space, create fire breaks, thin their forests, and mitigate danger of wildfires. Mountain pine beetle infested trees will be removed or shredded into mulch materials by a contractor with mechanized equipment to masticate smaller trees and leave the materials on the ground. Landowners too will be involved in tree cutting and removal. Larger trees will be fully utilized as lumber as is economically feasible. Ultimate tree spacing and approach will vary based upon amount of deadfall, number of beetle killed or attacked trees, and the steepness of hills or the ruggedness of the topography. Clusters of retained trees will include all sizes and ages. Leave species are as follows: Blue Spruce, Engelmann Spruce, Douglas Fir, Limber, Ponderosa, and Lodgepole Pine. Landowners will create and maintain a defensible space around structures; establish fuel breaks; thin woody vegetation to reduce risk of wildfire to structures; and provide secondary treatment of woody fuels by removing, piling, shredding, and scattering woody fuels. These wildfire mitigation efforts will affect 11 plus adjacent land owners and watersheds inside and outside PRR HOA.

**Describe all planned long-term maintenance (grant funded or other).**

Fetsch, Brungardt, & Mason plan to continue to thin their forests, reduce fuels, and mitigate wildfire danger annually to the extent that their resources allow.

**What is the duration of this project? (check one)** ☐ 1 Year ☒ 2 Years ☐ 3 Years ☐ 4 Years

**Is this a continuing project from previous year/s? (check one)** ☐ Yes ☒ No

**Provide a timeline for the project**

Landowners will begin work as soon as weather conditions permit Spring 2010 and will complete the treatment by 12/31/2011.

5	<b>Interagency Collaboration</b>	
	Specify the private, local, tribal, county, state, federal and/or non-governmental (501c3) organizations that will contribute to or participate in the completion of this project. Describe briefly the contributions each partner will make (i.e. – donating time/equipment, funding, etc.).	
	If this grant request is funded via ESF Program Advice-Fort Collins, the federal government will provide up to $\$470/A \times 55A = \$25,850$ (\$16,450 Fetsch + \$7,050 Brungardt + \$2,350 Mason) and the private landowners will provide up to $\$530/A \times 55A = \$29,150$ (\$18,550 Fetsch + \$7,950 Brungardt + \$2,650 Mason) + 100's of hours of personal time and equipment use to complete this project. (Dollar amounts will be paid directly to contractors.)	
	<b>Community Wildfire Protection Plan (CWPP)</b>	
	Does this community have a wildfire protection plan that follows the Healthy Forest Restoration Act CWPP guidelines? (check one) <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	
	Is this project part of the plan? (check one) <input type="checkbox"/> yes <input type="checkbox"/> no	

6	<b>Project Category (check all that apply and answer related questions)</b>			
	Hazard Fuels Reduction X Other Forest Management Treatment X			
	Number of acres to be treated:	55	Estimated cost per acre:	\$1,000
	<b>Project Type (check all that apply)</b>			
	Defensible Space	X	Thinning w/o Product	<input type="checkbox"/>
	Fuelbreak	X	Mastication	X
	Thinning w/ Product	X	Other	<input type="checkbox"/>

7	<b>Total Project Expense (Pass Through)</b>		
	<i>Please fill all fields</i>	<b>Grant Share</b> (\$ Amount Requested)	<b>TOTAL</b>
	Contractual Services:	\$25,850	\$25,850
	<b>TOTAL:</b>	<b>\$25,850</b>	<b>\$25,850</b>

Grant funding may only be used for Contractual Service.

8	<b>Total Project Expense (Non-Pass Through)</b>		
	<i>Please fill all fields</i>	<b>Grant Share</b> (\$ Amount Requested)	<b>TOTAL</b>
	Contractual Services:		\$ 0



	<b>Indirect Costs:</b>		<b>\$ 0</b>
	<b>TOTAL:</b>	<b>\$0</b>	<b>\$ 0</b>

Grant funding may only be used for Contractual Service and Indirect.

### ***Additional Justification for This Project***

The purpose of this thinning project is to increase forest health and to decrease the chance of fire. By doing this the treated area will be improved as well as the surrounding and adjacent areas.

Forest health has decreased over the years from drought, and by overpopulation of trees from removing fire from the ecosystem for so many years. With drought, there is a shortage of available moisture for trees in an area that already has very little rainfall and snowpack. An overpopulated stand of trees means that the available nutrients must be shared by all trees thus meaning all trees get starved and can't get the nutrients they need. Thinning the lodgepole to more historic levels will create an abundance of nutrients for remaining trees that have previously been nutrient-starved. Removing fire from an ecosystem that requires fire to thrive has also been detrimental to the lodgepole stand. Lodgepole pines require fire to take out the more mature trees, making room for the younger trees to come in. Fire also is required to release the nutrients of the older trees into the air and into the ground, making it useable for the next generation. The serotinous cones of the lodgepole also require the heat of fire to open and release their seeds. It has been found that cones in an open area with direct sunlight and hot summer temperatures have been able to open and release their seeds. Lodgepole pine need openings in their canopy to regenerate and get the sunlight needed for photosynthesis. Without thinning or fire, the trees become too dense, sometimes even creating what is called a dog hair stand, which includes lodgepole trees no more than 6 inches in diameter only a few feet from each other. This type of forest is susceptible to stand-replacing crown fire. Stand-replacing crown fires do not stop for homes and structures and are very difficult to control.

As far as fire, thinning the canopy will decrease the chances of a stand-replacing crown fire. Chipping and removing the downed material and slash will decrease the chances of a surface fire. The most effective way to thin a stand of lodgepole is to remove enough trees to create patch cuts within the stand. These serve three purposes. They create a fuel break which means a crown fire traveling through the stand would be forced to drop down to the surface fuels as it runs out of fuel in the canopy. Patch cuts create space, nutrients and sunlight for new trees to come in. Lastly, patch cuts create an uneven aged stand of trees so when one section of trees begins to die, another patch cut will have younger trees which will grow up to replace them. There will always be more trees coming in as opposed to a large-scale clear cut that will take decades to fully recover. If all trees die or are removed from a large area, this increases the dangers of blow down and erosion.

Removing the slash and downed logs will decrease the chances and severity of a surface fire. Surface fires can also endanger homes and structures and are often the cause of homes being lost to wild land fire. This can be prevented by changing the consistency of the fuel by chipping it or by changing the continuity of the fuel by removing it from the site. Removed fuel can be used as firewood, lumber, wood chips for mulch and as fence materials. Burning firewood in a woodstove still releases nutrients for other trees to use and does so in a much safer and less catastrophic way.

### ***Attach Project Map Showing Specific Treatment Areas***

Two maps are attached. If this grant proposal is funded, we propose to treat Fetsch's 35 Acres (Parcel #142) and 5 Acres of Mason's property (Parcel #152) adjacent to Fetsch's east line which is Mason's west line. Mason's 5 Acres along his west line will be in the shape roughly of a right triangle standing on its point at Mason's southwest corner. The base of the triangle is along Mason's north line from his northwest corner east to the drainage, and the hypotenuse stretches from the drainage south and east back to the point as seen by the contours of Parcel #152. Brungardt's 15 Acres are roughly two triangular patches on the attached photograph of Parcel #331. (GrWildfireMitigationFBM30510, Rev. 30410)



the mitigation roughly in 2 triangular pattern  
Better seen when printed





**Poudre River Ranch Landowners Association, Inc.**  
**PO Box 1121**  
**Fort Collins, CO 80522-1121**

