

Poudre Canyon Fire Protection District

Larimer County, Colorado

Community Wildfire Protection Plan

Manhattan Creek



Introduction

This Community Wildfire Protection Plan (CWPP) was developed by The Manhattan Creek Community with guidance and support from the Poudre Canyon Fire Protection District, Larimer County Emergency Services, Colorado State Forest Service, and US Forest Service. This CWPP was created according to the guidelines of *Preparing a Community Wildfire Protection Plan, A Handbook for Wildland-Urban Interface Communities*, March 2004. 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.

The process of developing a CWPP can help a community clarify and define its priorities for the protection of life, property, and critical infrastructure in the wildland-urban interface. It can also lead community members through valuable discussions regarding management options and implications for the surrounding watershed.

Community / Agencies / Interested Parties Involved

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

CWPP Development Team

Name	Organization	Roles / Responsibilities
John Ohm, Dawn Garrett, David Young, Nick Profaizek	Community members who live within the Manhattan Creek Area	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
Laura Stahl Bette Blinde Buzz Stith	Poudre Canyon Fire Protection District	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
Boyd Lebeda Forester, Fort Collins District	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.
Tony Simons Services Specialist	Larimer County Wildfire Safety Program	Provides input and expertise on hazard assessment, defensible space, and FireWise concepts.
Richard Edwards and Dyce Gayton, USFS	Relevant federal land management agencies (USFS, BLM, etc.)	Provides input and expertise on federal lands forestry, fire and fuels, and FireWise concepts.

Community Description

It is the goal of the Poudre Canyon Fire Protection District to create a CWPP for all areas of the district. Due to the size and layout of the inhabited areas we will split the CWPP into four Wildland-Urban Interface (WUI) Communities. Each community will encompass one of the four fire stations.

The communities will be defined as:

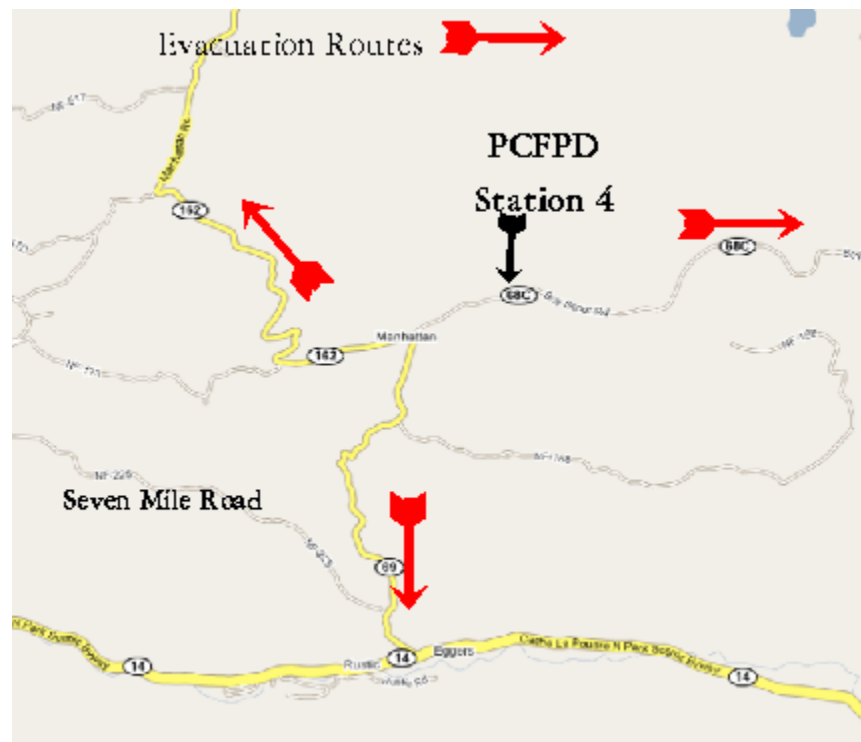
Poudre Park – Station 1

Rustic - Station 2

Spencer Heights – Station 3

Manhattan Creek – Station 4

This CWPP covers The Manhattan Creek Area and is considered phase II.



The Manhattan Creek community is defined by the natural breaks between inhabited areas. The community borders are defined as:

- East Border –Boy Scout Camp property line on county road 68C.
- West Border –Seven Mile Road (171)
- North Border – Elk Horn Creek
- South Borders – Intersection where seven mile road departs county road 69.
- The WUI includes both private and federal owned land. The Manhattan Creek area WUI is located in the Township 9 North, Range 73 West.

Community Access

The main access through the Manhattan Creek Community is via County roads 69 and 68C, which runs through the full length of the community. All roads in this community are gravel or dirt. County roads 69 and 68C are maintained by Larimer County Road and Bridge Department. County roads 69 and 68C are accessed via Highway 14 (mile marker 91) from the south, Highway 74C from the north and county road 162 from the west where highway 69 and 68C intersect

Most residences and businesses are accessed directly off county road 68c. However, there are some homes which must be accessed from a side road that is also named 68c. Access for the first ¼ mile up to address 6468 County road 68C can be easily accessed in the summer, but beyond that it would require a four-wheel drive truck and caution must be used as there is no adequate space to turn a large truck around.

County road 69 is a level three road and has steep, tight switch backs. Its a 3 mile stretch from highway 14 to Goodell Corner, where county road 69 and 68C intersect, the elevation rises from 7200 to over 8300 feet.

Level Three roads are the remaining mainline county roads, which, will be plowed and/or sanded after the resource requirements for Level One and Level Two roads are met. Plowing and sanding operations on Level Three roads will normally be completed by 5:00 P.M.

County road 68C is a level one road. It is a level one road because it is a mail and school bus route. A level one road are the highest priority to be plowed and/or sanded. The elevation hovers around 8000 feet for most of this section of road.

Access via county road 162 can be difficult during the winter months. It is a level 5 road, which means it is plowed and sanded only after all other roads.

Vegetation Type

The elevation in the Manhattan Creek area ranges between 7,200 and 8,300 feet. This consists mostly of ponderosa pine. Interspersed amongst the pine are fire-flashy Rocky Mountain juniper trees. Other trees in the area consist of blue spruce, Engelmann spruce, aspen. The rivers edges are predominately populated with cottonwood and willows, with interspersed dogwood. At this elevation there is still a fair amount of highly combustible sage brush, chokecherry, and current bushes. Tall prairie grasses reside along most of the roadways. During dry seasons of the year, this material would ignite quickly, carrying wildfire throughout the community

Fire History

Over the past twenty years, approximately 161 wildfires burn on average over 2200 acres each year in Larimer County. In “slow” years, such as 1996, wildfires are relatively small. During the summer of 1996, several fires ranging in size from one acre to 180 acres, threatened 50 to 60 homes throughout Larimer County. However, although threatened, no homes burned.

At the other extreme is a year like 1994 when 340 fires, including the Hourglass Fire which destroyed 13 buildings at Pingree Park, burned through Larimer County. In addition to destroying 13 buildings at Pingree Park, the Hourglass Fire threatened 12 homes in the Poudre Springs area.

Other recent fires include:

- The Snowtop Fire, in July 1993, which threatened at least 5 homes in Cedar Park.
- In 1995, the Bonner Peaks Fire threatened 8 homes west of Highway 287.
- In 2000, the Bobcat Fire burned 10,599 acres and destroyed 18 homes.
- Tragically in 2002 the Big Elk Fire burned 4413 acres and claimed 3 lives.
- In 2004, a home owner burning trash started the Picnic Rock Fire, which burned 8,908 acres and destroyed 1 home.

The Poudre Canyon Fire Protection District responds to an average of seven fire calls each year and many vehicle accidents that have potential for starting a fire. Many of these calls turn out to be minor fires, however if the volunteer department was not in the area to respond, many could have turned into a large fire quickly. One example is the night the Glen Echo Resort burnt to the ground. Due to the quick action from the Poudre Canyon Fire Protection District and their surrounding mutual aid partners, the fire was contained to the building. Had the fire moved into the surrounding ponderosa pines it had the potential to spread rapidly through the Upper Poudre Canyon.

Current Fire Risks

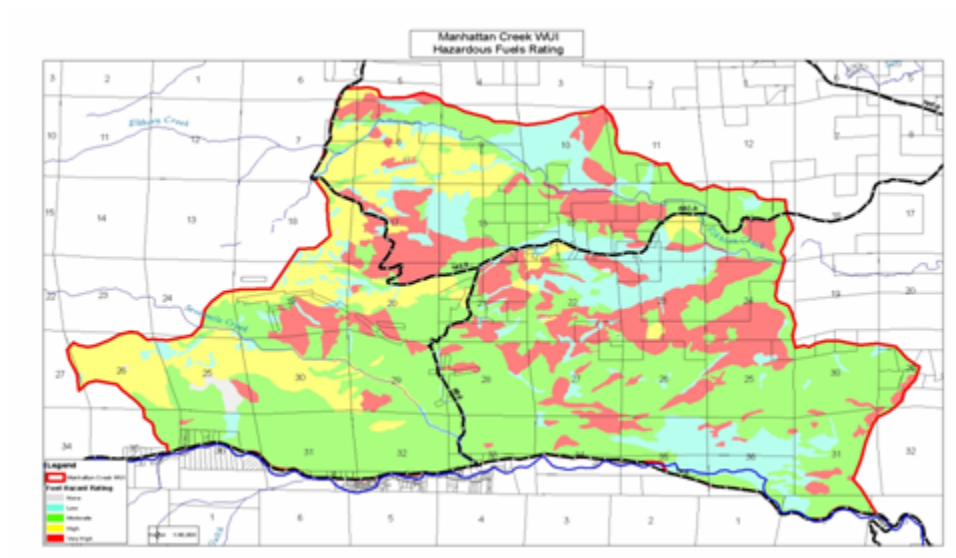
Colorado as well as other western states is experiencing some of the largest fires in recent memory, in part, because we are experiencing some of the most severe drought conditions in history. Fire ecology reveals that you get big fires with extreme drought. There is little one can do to control drought. Under severe drought, especially if coupled with winds, normal fire behavior is thrown out the window.

History shows the West has always experienced periodic drought, and large fires are not just a recent phenomenon. During the 1930s Dust Bowl era more than 39 million acres burned on average across the United States.

The drought condition is also a major factor in the recent pine beetle epidemic. The pine beetle has not yet hit the Manhattan Creek community in epidemic proportion as it has in many other parts of the state, but many trees have been lost to the pine beetle. However, it is predicted to crest over Cameron Pass into Larimer County in large numbers within the next few years.

Red and dead trees in large numbers will add to the vulnerability of the area to experience a large scale fire. Couple that with the overgrown forest, which are in part a result of an old philosophy to suppress all fire and we have a forest vulnerable to fire. Without natural intervention via fire or human activity such as mechanical thinning, stands have stagnated. Fire crowning into these stands would ignite quickly, carrying wildfire throughout the community.

Fuel Hazard Level



Blue=Low Green = Moderate Yellow = High Red = Very High

The above fuel hazard map of the Manhattan Creek WUI shows that the current fuel hazard for most of the area is at the moderate level. However, there are many areas of high hazard dispersed throughout the community. Prevailing winds are from the west and northwest. Areas to the east are considered to be low risk fuel hazard at the present time.

Fire mitigation projects completed by individuals can lend protection to individual homes and neighborhoods as well as lessen the chances of a wildfire starting from within the community. Many community residents have completed fire mitigation projects on their property. Recognizing that people cannot be forced to complete fire mitigation projects on their property, all Manhattan Creek Area landowners are encouraged to create defensible space and reduce other fire hazards on their personal property.

Currently both the Shambhala Mountain Center and the Boy Scout Camp have received mitigation grants and have been active in fire mitigation as a result. The Shambhala Mountain center covers 600 acres within the Manhattan Creek WUI area. Two buildings (Shambhala Lodge and Rigden Lodge) at the center are equipped with sprinkler systems and the grounds have water access through a hydrant system. The Boy Scout camp covers 3500 acres that sits on the east border of the Manhattan Creek WUI area. Both of these projects are a huge asset to wildfire preparedness.

Community Risk Assessment

Representatives from the core team for the Manhattan Creek Community of the Poudre Canyon Fire Protection District (PCFPD) CWPP met on July 20, 2007 to discuss community values that are potentially at risk from wildfire, as well as to create action items for mitigating wildfire risk to these values. Participants at this meeting included community members, members from the local volunteer fire department, the district forester from the Colorado State

Forest Service (CSFS), a representative from the USDA Forest Service, and a privately-contracted facilitator. The community members played a critical role in identifying values at-risk and creating action items, while the role of the district forester and the USFS representative was to provide technical support and scientific information. It is important to note that the community members held the decision-making authority. 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.

The community members and PCFPD representatives 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 and PCFPD in prioritizing mitigation projects for implementation.

High Priority

- Human life/safety
- Homes/Structures
- Water supply/Quality (ElkHorn , Manhattan, and Rio RMDC creeks)
- Trails/Open Space/Landscape/Environment
- The Stupa
- Wildlife – Critical Habitat
- Live Stock/grazing
- Economics – business and tourism

No Medium Priorities Identified

Low Priority

- Power lines (Goodell Corner)
 - Transmission lines
- Telephone lines (CenturyTel Terminal Box)

Homes, Businesses, and Essential Infrastructure at Risk

5 Businesses exist in the WUI

- Red Feather Bed and Breakfast
- Beck's Automotive
- Elk Horn Excavating
- Elk Horn Lumber
- Shambhala Mountain Center
- Many people have home offices and work from their homes.

43 Homes exist in the WUI.

The roof coverings are about 50% metal & 50% composition shingles. Most structures are wood sided; some mobile homes are all metal covered outside. Some properties have slash piles that need burning or chipping, plus future mitigation.

The Shambhala Center has structures from, Tents, Tee Pees, trailers, modular homes, large wood framed buildings. While most occupied structures have propane tanks, (1000G & 500G, see

appendix C) several utilize electricity for heating purposes. The maintenance area has additional storage for Gas, 2- 500 gal tanks above ground. However, neither have containment structures.

Bridges and Gates

There are no bridges in Community, but there are several locked gates. This can cause access issues during a wildfire.

Utilities

- The Rural Electric Administration (REA) has various electric lines situated in the WUI
- There is a main power supply terminal in the seven mile creek area that is essential to the power supply in the Manhattan Creek area. N 40*42 .320, W 105*35.267
- REA Manhattan Sub Station at Goodell Corner N 40* 44.118, W105* 34.937.
- Some utilities are underground, including some of REA & CenturyTel lines.
- Propane tanks are above ground and are placed at a safe distance from structures.
- There are no natural gas lines in the Manhattan Creek WUI.

Water

- Most homes have wells as a primary water source and a few have cisterns.

Critical Infrastructure and Values at Risk

- The Great Stupa – located at the Shambhala Mountain Center
- 100 year old log home, located at Monroeville (.going east on 68C toward Shambhala)

Local Preparedness and Firefighting Capability

Initial response to all fire, medical and associated emergencies is the responsibility of the Poudre Canyon FPD. 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.

The Shambhala Mountain Center also has their own type 6 response engine and very good water access. PCFPD and the Shambhala Center have developed a close working relationship through shared response and training.

Water access for the fire department

- 4 Hydrants at the Shambhala Mountain Center (N 40 44. 098: W 105 32.543)
- Lake at the Shambhala Mountain Center (N 40 44.074 : W 105 32.209)
- Manhattan Creek (several locations)
- Evans Pond at 6506 CR68C (N 40* 44.427: W 105* 34. 215)
- Lake near school lease ground

The Shambhala Center has a 100,000 gallon storage tank for their fire hydrant and water supply system. There is a pond (Lake Sunyata) for water storage, approximate size is 1/4 acre. Lake Sunyata has a dry hydrant, can be drafted, or use a floating pump for direct attack. The dry hydrant is located at the east end of pond, next to the road (use caution as the road narrows at

that point). The pond is located 1/4 mile in to the left of main buildings. For hydrant locations see the map included as appendix B.

The pond has a "dry hydrant" located at East end of pond, next to the road (road narrows at that point, this may be a concern).

Evans Pond at 6506 CR68C on the North side of road at gate to Jerry Franklin property. PCFPD will need a note for permission to use from Teresa Evans 6506 CR 68C Red Feather Lakes, Co 80545.

Franklin Pond just west of the Evans pond has a locked gate and Jerry Franklin has use rights for the water. Both Evans and Franklin ponds use water from the Elk Horn Creek system.

Additional Community Assessment Comments

The WUI east boundary ends at the Boy Scout property line. Because of the closeness of this 3500 acre property and the 2000 scout campers in the summer months we should be aware of the risks and resources. They have Weaver Lake that could be used for a water supply for fire fighting. Weaver Lake is on Elkhorn Creek. There are hazards of fuel storage tanks above ground and propane tanks located at the maintenance building at N 40* 44.576: W 105* 30. 573. Future water use includes a dry well at Weaver Lake for year round access. The Boy Scout camp is engaged in mitigation projects as a joint effort with the Colorado State Forestry Service. The main gate is on CR 68C (N40* 44.570, W 105* 30.478).

Contact property manager Joe DeFranco Camp Ranger 2331 CR 68C 970-881-2144

Landing Zones that can be used for Helicopter support

The Shambhala Mountain Center is the main area to safely land a helicopter.

Generally speaking, the Manhattan Creek Area has good fire fighting and emergency services capability. The PCFPD is always working on enhancements in training and equipment. The biggest challenge for the Station #4 PCFPD currently is the need for additional volunteers. With limited full time residence, it creates the challenge of having enough staffing resources.

There is a need to design pre-planned evacuation routes, which would facilitate smoother traffic flow in an emergency.

Hazard Reduction Priorities

- Some thinning should occur on a number of properties, especially those properties that abut National Forest land and those that could cause access fire risk to others homes and structures. When properties are thinned, it is recommended that property owners retain the larger trees as well as, aspen, mountain maple and other deciduous varieties. This will allow the property to retain its forest-like quality even as wildfire protection levels are increased.
- The homes that have shake/shingle roofs are the most likely not to survive a wildfire. Flammable roofs should be replaced with non-flammable alternatives.
- Homeowners should store firewood away from homes and propane tanks.
- Should a wildfire occur, deck furniture and hemp door mats should be pulled inside the house before the fire arrives.

- Roofs and gutters should be cleaned of pine needles, leaves and other debris. Needles, leaves and other dead materials must be continually removed from the roof, decks and walkways.
- Little things are important. Any items adjacent to a house are considered “attached” to the house by a fire. This includes wood decks, fences and walkways. Metal flashing can be inserted between the house and its “attachment” it could stop the progress of a fire. For decks, residents should consider using HardiPlank or fiber cement on the side wall adjacent to the wood decking material.
- Pruning and clipping slash are occasionally disposed of into a remote area of a homeowner’s property. Slash should be removed from the area, as it creates a substantial fuel bed. If removing the slash is not practical, it should be piled in an area that is safe to burn and burned during the winter or spring when snow level allows for safe burning. Remember a burn permit is required for slash burns. If the slash is too much for the homeowner to burn in a safe manner, please work with PCFPD.

Action Plan

The community and PCFPD members have 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.

In cooperation with the Larimer County Fire Education Group, the Larimer Fire Council, and the Poudre Canyon FPD, the community supports and promotes Firewise activities as outlined in the Larimer County Fire Plan. The community 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.

Poudre Canyon FPD CWPP: Action Items

The community members and PCFPD representatives 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.

Action Items: High Priority (The items marked “*” are especially high priority)

Action Item	Owner
Collaborate with the USFS to address mitigation along shared boundaries, as well as to address other wildfire-related issues (including removing downed timber and dead trees)	Richard Edwards will address this with the USFS and report back to the community about what homeowners can do in the way of mitigation along their property lines and also what the USFS is doing to address the issue.

Create partnerships between the community, Larimer County, the CSFS, and the PCFPD to address wildfire mitigation and other related issues *	Since most of the forest land surrounding the Manhattan Creek WUI is USFS, the community will work mostly with Canyon Lakes District. Richard Edwards will find out current USFS projects in the area and report back to the group.
Specific areas in which residence would like to see fuel hazard reduction: <ul style="list-style-type: none"> • Elk Horn Creek Trail • 7 mile creek area • Along county roads • Gueswel Gulch 	Most of the areas of concern are located in USFS area. Richard Edwards will find out current USFS projects in the area and report back to the group.
Continue to pursue grants to mitigate common areas and around historic structures	PCFPD – will continue to apply for grants and add the community mitigation efforts.
Create a formal evacuation plan and phone tree, which also addresses evacuating pets and livestock	PCFPD – will identify a team consisting of homeowners and PCFPD members in the area to develop an evacuation plan.
Continue to create defensible space around homes and businesses	Homeowners – must take this action. PCFPD will assist as needed.
Continue the slash program with the PCFPD	PCFPD – will continue to assist homeowners with slash burning when it is unsafe for the homeowner to burn.
Continue efforts at community outreach and public education regarding wildfire risk and mitigation	PCFPD – to hold a meeting at least once a year with the intention to educate homeowners about firewise ways.
Mitigate along the road easements	Homeowners
Ensure access into communities for fire response vehicles and equipment, as well as for evacuation	Homeowners
Obtain use rights for Evans & Franklin Ponds water supplies.	PCFPD
<u>Action Items: Low Priority</u>	
Mitigation equipment available for homeowner use.	PCFPD – will continue to purchase such equipment as chippers, brush mowers, trimmers, etc as allowed by available grant money.

Annual updates and revision to CWPP	The PCFPD agreed to take the lead in annually updating/revising the CWPP. The group suggested that this annual task could be incorporated into the Upper Poudre Canyon Association meetings
A survey of the Shambhala Mountain Center access.	Richard Swaback/PCFPD. A survey would identify existing sufficient turning radius for vehicular fire and evacuation equipment, and identify where improvement needs to be made and maintained
Create a database of property information.	PCFPD will create a database using information from homeowner surveys. The data base will be used in emergency response to homes to reduce risk to firefighters and property.

- A high priority is the need for a formal evacuation plan that ensures the appropriate agencies have emergency notification procedures and evacuation plans in place and clearly understood by residents.
 - Encourage residents to put together individual evacuation plans including addressing any existing pet and livestock issues.
 - Identify a pre-established evacuation destination.
 - Identify community members to serve as key communicators in the event of a fire requiring evacuation and help monitor a check off list of residents as they leave.
 - Identify any residents that will need assistance with evacuation.
 - Distribute information about what to do when an evacuation has been ordered. This should include a map of evacuation routes.
 - Ensure Business owners have identified how they will notify and assist guests.
 - Identify a radio that homeowners can purchase and program “Poudre Tac” to use as an information source during emergency evacuation.

Other Priorities

- Support the Poudre Canyon Fire and EMS and encourage full-time residents to become volunteers. All volunteers do not need to be emergency responders. There is a need for a support team that could run supplies and/or help with logistics in an emergency.
- Assist the fire department by following FireWise homeowner guidelines and create defensible space around homes and structures.
- Each home owner is asked to evaluate his or her property and determine if a water source is accessible to fire engines. If a home owner believes water can be accessed from their property, they are encouraged to allow access to the Poudre Canyon Fire Department.

- The PCFPD currently manages a slash pile burn program in the winter and early spring. They utilize the snow cover and equipment to burn slash that is not safe for the homeowner to burn without assistance. Continuing this program is a priority.
- The PCFPD applies for mitigation grants each year. When they are successful they use the grants to encourage home owners to do mitigation. Past programs have included providing a dumpster to haul slash, selling fire extinguishers at a reduced rate, paying portions of hazard tree removal, and thinning and tree removal in common areas. Continuing this program is a priority.

Finalizing the Community Wildfire Protection Plan

- The Manhattan Creek Area Community Wildfire Protection Plan:
- Was collaboratively developed. Interested parties and federal land management agencies managing land in the vicinity of Manhattan Creek have been invited to participate and provide input to the process by mail, e-mail, telephone, and face to face during CWPP meetings and homeowner visits. There are no homeowners associations.
- Identified and prioritized areas for hazardous fuel reduction treatments and recommends the types and methods of treatment that will protect the Manhattan Creek Area.
- Recommends measures to reduce the ignitability of structures throughout the area addressed by the plan.

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

Bette Blinde

Poudre Canyon Fire Protection District

Boyd Lebeda

Fort Collins District
Colorado State Forest Service

Ellen Hodges

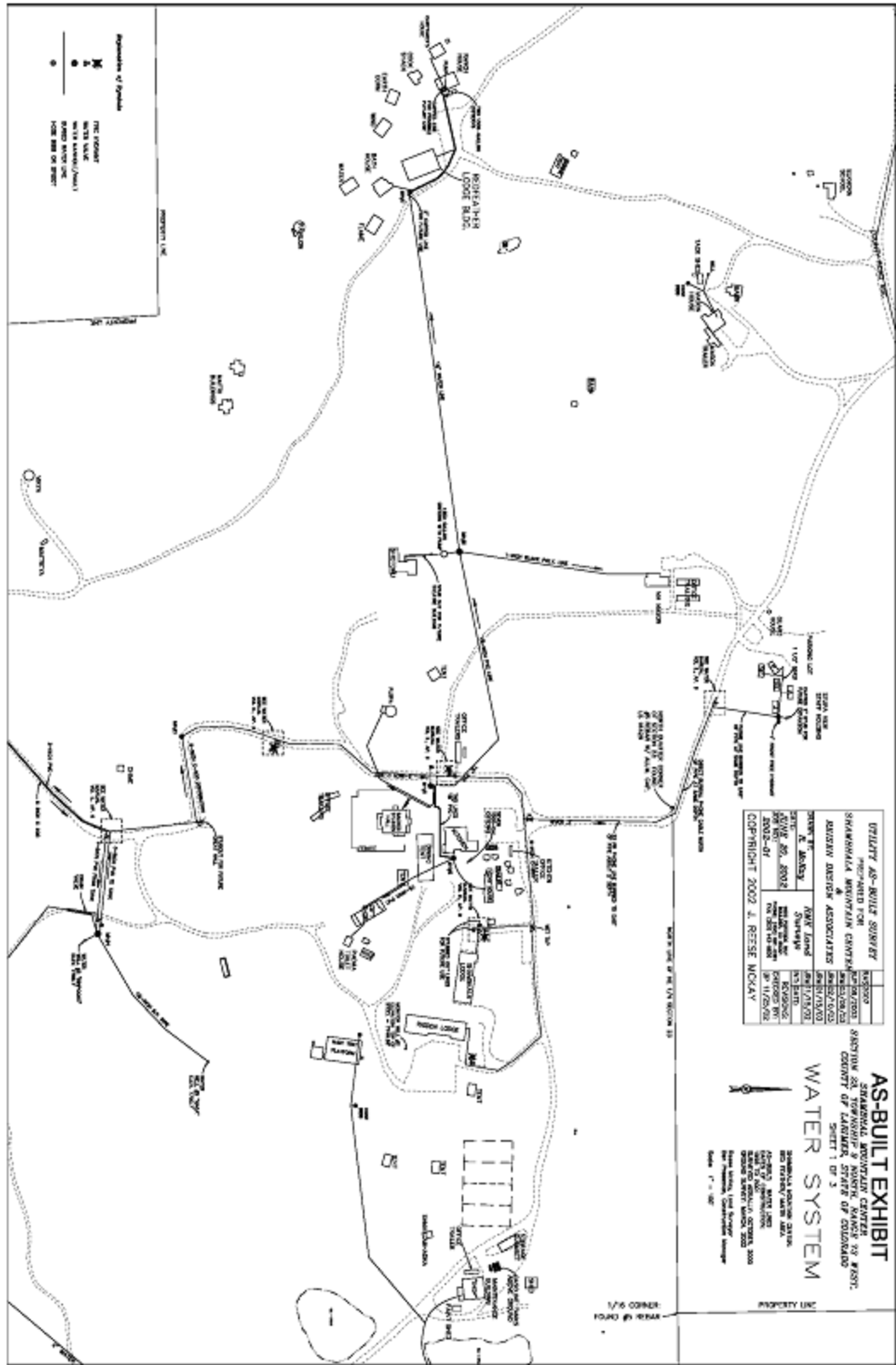
Canyon Lakes Ranger District
USDA Forest Service

Appendix A

The documents referred to below can be found at <http://www.co.larimer.co.us/wildfire/>

- ★ 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)

Appendix B
Shambhala Mountain Center Water Hydrants



Appendix C

Shambhala Mountain Center Propane Tanks

