Community Wildfire Protection Plan

Allenspark, Colorado

2009

COMMUNITY WILDFIRE PROTECTION PLAN

ALLENSPARK, COLORADO

APPROVED BY:

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FOREWORD

FIRE IS CAPRICIOUS. It can find the weak link in your home's fire protection scheme and gain the upper hand because of a small, overlooked, or seemingly inconsequential factor. Start with the easiest and least expensive actions. Begin your work closest to your house and move outward. Colorado State Forest Service

This Community Wildfire Protection Plan (CWPP) will help landowners make good decisions to protect themselves from wildfire.

The committee of volunteers produced the plan primarily to share important information and thereby empower all people of the Allenspark Fire District who read the plan. The Community Plan provides information tools and resources. People are encouraged to be proactive and take free-will fire-safe actions, before a fire event.

Community planning is only a beginning. Additional on-site planning is needed for neighborhoods and individual ownerships. Follow-up is the responsibility of those who, after reading the plan, decide to take recommended action. Some people have already decided or started, and their projects are this community's identified priorities.

We hope you find reading the plan educational, motivational, and appropriate for your use. Only private contributions were used to produce the Allenspark CWPP.

THE ALLENSPARK CWPP COMMITTEE
OCTOBER 2008

ICON KEY: Keep on the lookout for these icons throughout the booklet

COMMUNITY PRIORITY PROJECTS chosen for action and/or information related to community projects.

ADDITIONAL INFORMATION AVAILABLE for those who seek it in the Resource Section of the Allenspark CWPP website.

MAPS included in the CWPP to help locate, identify, and learn about your property, fire management unit(s), vegetation cover types, and Crown Fire Run Models.

INTRODUCTION

The community served by the Allenspark Fire Protection District has taken **A BIG STEP TO PROTECT ITSELF FROM WILDFIRE.** Over the span of a year, more than fifty volunteer citizens compiled a comprehensive set of recommendations and supportive reasoning: this Community Wildfire Protection Plan (CWPP).

Effective wildfire protection action must be done BEFORE a wildfire. During a wildfire event, it is too late and in many cases one could make safety matters worse. The Allenspark CWPP will help people prepare for fire safety by making appropriate, informed, and timely decisions.

Recommended fire-protection actions include managing vegetation so that wildfire will burn less intensely and be safer to fight, creating fuel breaks and defensible space around homes, providing real time fire-weather and fire-prevention information, improving emergency access and egress, and locating and improving emergency water sources.

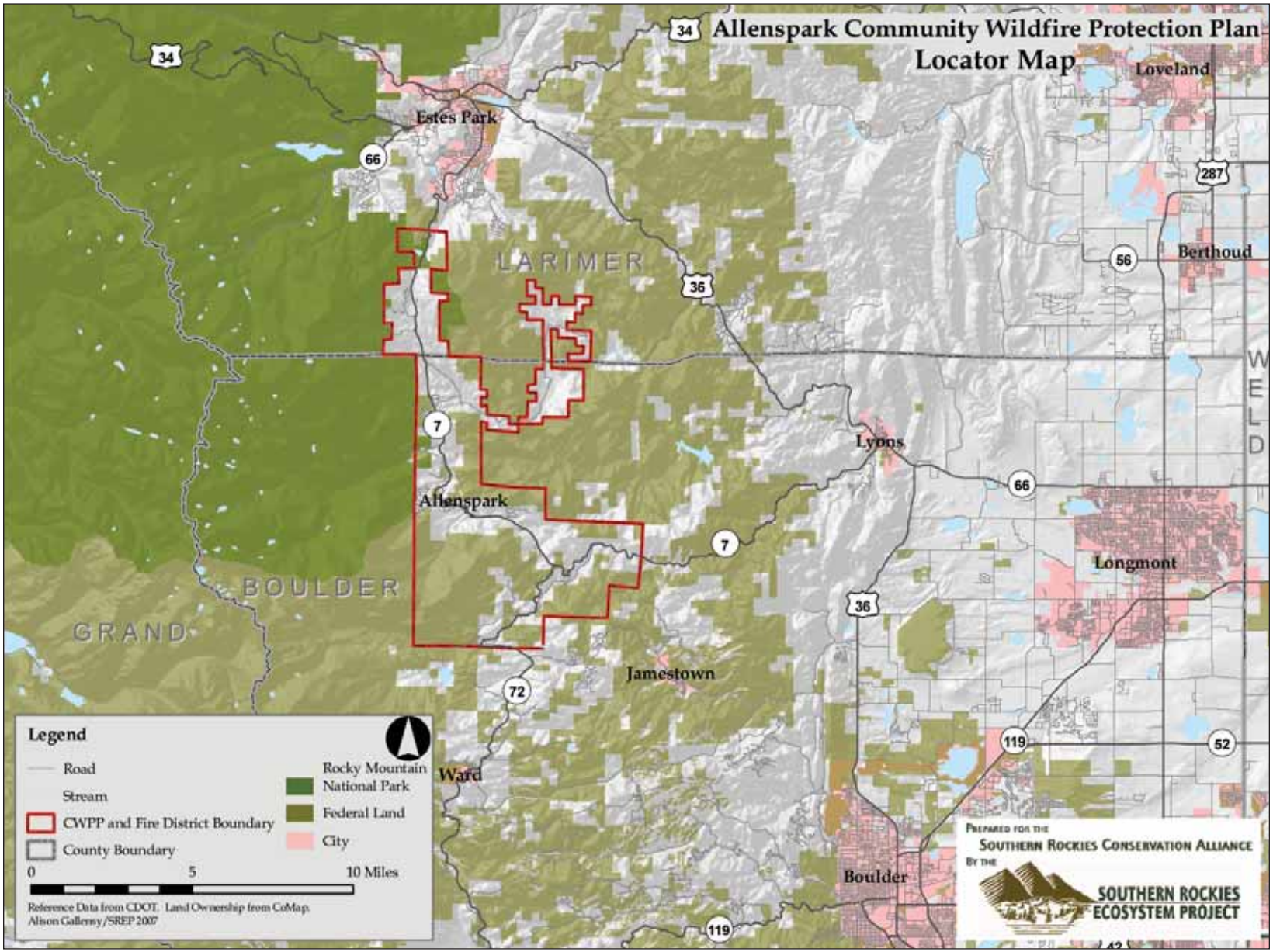
In many cases, the first step for people to take, once they decide that they will take action, is to plan a specific project. In some cases this may involve whole neighborhoods. Wildfire protection project design can be assisted with the information tools in the plan. And a neighborhood approach is very beneficial and preferred because then, each individual owner's action helps not only themselves, but their neighbors.

That kind of cooperation already exists in the form of Allenspark Beetle Control (ABC). Pine beetle suppression is a recommended project of the plan. Beetle control helps remove dangerous dead and dying timber (fuel) from the forest. The CWPP goes much further, however, and presents a path toward responsible forest stewardship and more.

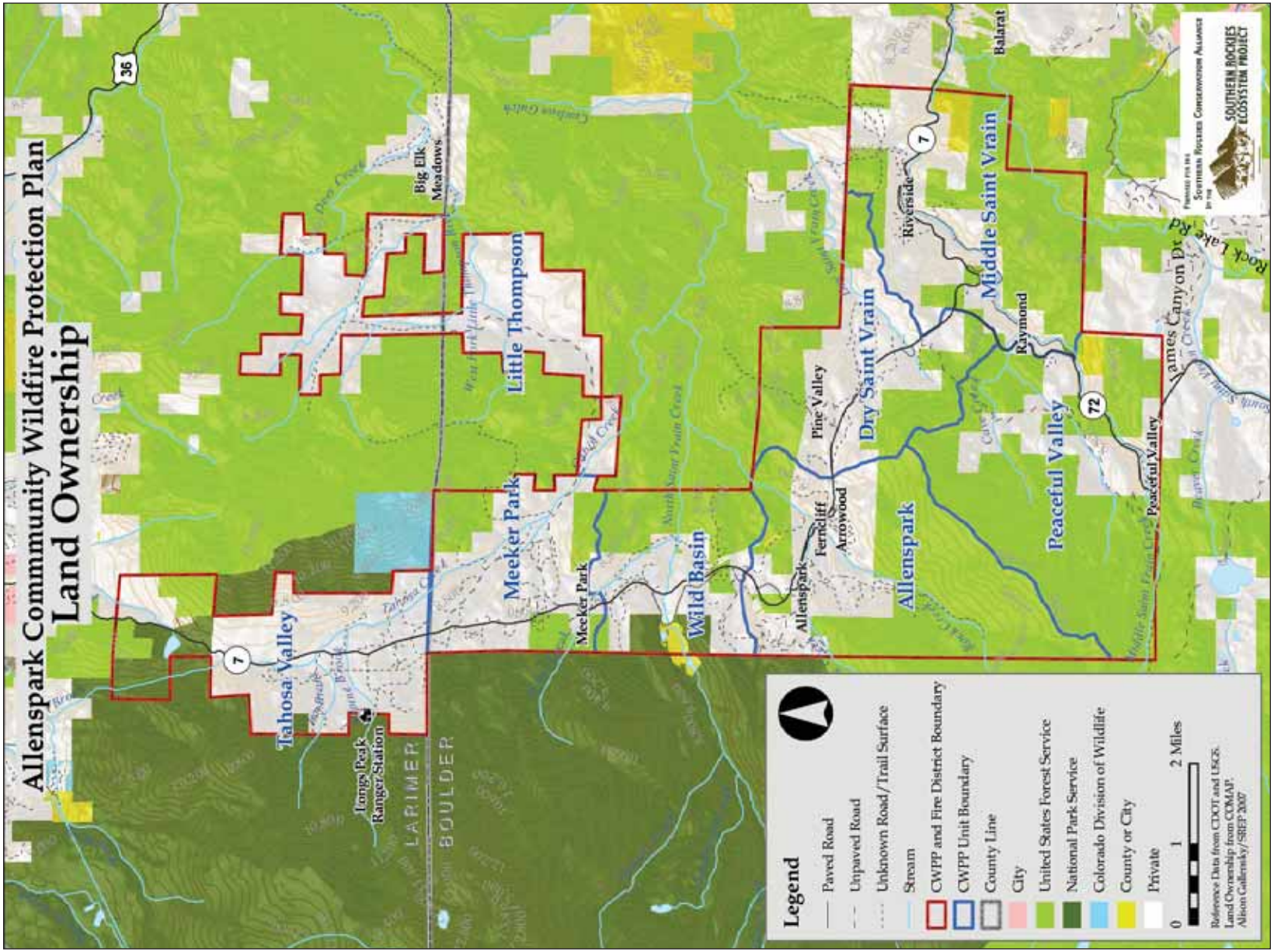
The approval of this plan makes the Allenspark area eligible for grant assistance for priority projects (individual or neighborhood), and individuals may be eligible to receive tax benefits for their wildfire mitigation expenses. Allenspark's local forestry non-profit organization, FMI or Forestry Management, Inc., which was formed in the 1970's will be the umbrella organization for grant applications, such as a 2008 community assistance grant from Rocky Mountain National Park.

This CWPP encourages appropriate, informed, and timely decisions for community and individual wildfire protection. It is for and by the people of Allenspark to educate property owners and residents about escape plans from a forest fire, easy ways to slow down a fire around your house, and what people should know and do to be prepared for a fire in our area. It will help our firefighters by mapping water resources, vegetation types, and important features that should be saved. The end result will provide a comprehensive fire protection plan for our area and open the doors for grants and other moneys for fire mitigation and defense.

SEE Locator and Land Ownership maps on the following pages.


Allenspark Community Wildfire Protection Plan
Locator Map
Estes Park
Loveland
Berthoud
LARIMER
Lyons
Allenspark
Longmont
BOULDER
GRAND
WELD
Jamestown
Ward
Boulder
34
66
287
56
36
7
72
119
52
Legend
Road
Stream
CWPP and Fire District Boundary
County Boundary
Rocky Mountain National Park
Federal Land
City
0
5
10 Miles
Reference Data from CDOT. Land Ownership from CoMap.
Alison Gallenny/SREP 2007
Prepared for the
Southern Rockies Conservation Alliance
By the
Southern Rockies Ecosystem Project

ALLENSPARK AREA LAND OWNERSHIP MAP



A COMMUNITY WILDFIRE PROTECTION PLAN (CWPP) helps a community plan how it will reduce the risk of wildfire. It identifies specific wildland fire hazards facing communities and neighborhoods and provides prioritized mitigation recommendations that are designed to reduce those risks. Communities with CWPPs in place are given priority for funding of wildfire mitigation projects.

GOALS

1. To build awareness and bring members of the community together to improve safety from wildfire.
2. To build understanding about wildfire dangers, past and future expected wildfire behavior, and the science involved.
3. To give reasonable, practical and effective ways in which landowners can influence fire behavior to reduce danger before fires occur.
4. To present information in ways that give private property owners encouragement to take reasoned, effective, and free-will actions with their own forest properties and structures, to protect themselves from fire.
5. To make a general assessment of present wildfire risks and set priorities for community action.
6. To offer sources of additional information, sources of help, and sources of funding to accomplish community priorities.
7. To provide the community a permanent record of the citizen planning process, results and accomplishments, and a document which can be updated as circumstances and priorities change.

GUIDING PRINCIPLES

These principles were adopted to prepare this plan.

1. **Citizen Volunteer Effort.** This is to be a citizen initiative. Conduct of planning activities will be by local residents and landowners who organize a planning team and welcome available professional assistance.
2. **Education/Information Based.** The Plan will help people understand about wildfire risks and provide suggestions that people can take to protect themselves, their property, and natural resources from wildfire.
3. **Non-Obtrusive.** There will be no obligations implied in the plan and landowners will not be asked to provide the planning team with information about individual private property ownership.
4. **Open Participation.** The planning process will be open to any and all landowners within the fire district. Methods of communication will include a number of ways that people can learn about progress, provide input to the process, and engage in planning activities.
5. **Conform to National CWPP Standard.** The planning process will follow national guidelines prepared by State Foresters and others for Wildland/Urban Interface communities. The plan will be complete when approved by the Allenspark Fire Department, Boulder County, and the Colorado State Forest Service.

COMMUNITY ACKNOWLEDGEMENTS

This plan is dedicated to individuals of the Allenspark community, who took action in the 1970's and 80's to control a pine beetle epidemic and who carefully thinned and harvested excess trees to protect the forest. This was a cooperative effort with a necessary federal and state agency partnership. The combined efforts proved beneficial for 30 years.

COMMUNITY WILDFIRE PROTECTION PLAN (CWPP) TEAM MEMBERS

Long-time resident Keith Dever called for renewed community forestry action early in 2007. Allenspark Beetle Control (ABC) was organized with Edie DeWeese Chair, Karen Weaver Fuerst Secretary, Carol Halsey Treasurer, 27 Neighborhood Coordinators, and more than 200 interested area landowners and contractors dedicated to reducing pine beetle impacts. A second organization, CWPP, followed to address wildfire protection.

A CWPP planning team, lead by Ron Gosnell, set out to produce a community supported and approved wildfire protection plan. Contributors to this CWPP include: Ron Gosnell Coordinator, Carol Halsey Secretary, Stan Huntting Webmaster, Gene Mackey Fire District Liason, Edie DeWeese Editor, Peter Staddler Publisher, Design by Steelcoast Creative, Alison Gallensky GIS, John and Ann Baker, Barb Baring, Stu and Diana Boulter, Bill and Paula Browning, Linnea Carter, Candace Chapin, John Chapman, Don Cheley, Steve Coles, Jeff Davis, Keith Dever, Laura Dever, Sarah Dickenson, Peggy Donahue, Michael and Marta Dowell, Bill and Jeanine Ellis, Bruce and Linda Eller, Vicky Foster, Ted Fritschel, Karen and Jon Fuerst, Tim Gallaher, Tom Gramowski, Doug Grundl, Jerry Halsey, Howard and Gayle Harms, Bill and Wilma Hahn, Ervin Hesterberg, Keith Hewitt, Barb and Herb Hoover, Margaret Huntting, Janet Intrieri, Candice and Tim Johnson, Maggi Johnson, Robert Kerr and Emily Calhoun, Sam Kiteley, Barb Kostohryz, Rob Lewis, Tony Mahon, Gary McCorkhill, Bob and Colette McDonald, Paul and Mary McKay, Dr. and Mrs. Roger McNeill, Don Metzner, Pete Morton, Dave and Alice Osborne, Mike Osmun, Glenn and Margie Patterson, Dave Pinkow, Will Rense, Jan and Dave Robertson, Barb and Nelson Smith, Phil and Mary Stern, Molly Stephens, Kathleen Sullivan, Joe Turner, Patsy Walz, Wally Wedel, Jane and Jeremy Wilson, Adrian Wolfe, and Jack and Phyllis Zumwinkel.

CWPP team membership includes Forest Management (FMI). FMI is a community non-profit organization dedicated to service, forestry information and education. FMI financially supports the ABC and CWPP organizations. FMI board members are Gary McCorkhill Chair, Ron Gosnell Vice-Chair, Carol Halsey Secretary, Jerry Halsey Treasurer, and member Gary Williams.

TECHNICAL ADVISORS

Agency employees contributing include:
Bob Bundy, John Chapman, Jeff Connor, Matt Dutton, Alison Gallensky, Matt Jedra, Mike Lewelling, Mark Martin, Eric Philips, Tony Simons, Nathan Williamson, and Kevin Zimlinghaus.

Approving Authorities
Allenspark Fire Protection District
Boulder County
Colorado State Forest Service

A (SCANT) HISTORY OF FIRE IN THE ALLENSPARK AREA

BY JANET ROBERTSON

THE TOWN OF ALLENSPARK, originally called "Allen's Park", has led a charmed life as far as forest fires go.

Its origins date back to 1859, when Alonzo Allen first ran cattle at the foot of Taylor Mountain, in a meadow two miles east of the present-day town that bears his name. In 1864 he built a cabin, although he never actually filed on a homestead. He soon left, and 30 years later the cabin burned to the ground; today a chimney and a monument honoring Allen mark the site. At some undetermined time, the very small community that had existed near his cabin site moved to its present location, which is close to an excellent water source.

In 1903, the Clara Belle Mining and Reduction Company was formed north of town. However, the operation contained more hype than gold and eventually failed.

In 1919—perhaps earlier—several ski jumps opened for competitions on the edge of Allenspark proper. After World War II, a ski area was developed south of Allenspark at the base of St. Vrain Mountain. It was a popular area with excellent snow on its north-facing slopes. Due to the lack of capital and the extreme difficulty of keeping the 3-mile Ski Road open, the Rock Creek Ski Area closed in 1952.

Although logging, ranching, and some small businesses have sustained local residents through the years, it is tourism that has been a mainstay. Since Rocky Mountain National Park was created in 1915, more and more people have wanted to spend time in the Allenspark area, especially in summer.

Today, with modern technology making mountain living much easier than it used to be, many people live year-round in the Allenspark area. In 2000, 500 residences were listed in the phone book.

Fire danger and the potential epidemic of pine beetles, which may destroy tens of thousands of pines in the nearby national forest and national park, are grave concerns these residents must live with.

The most striking evidence of changing forests in the Allenspark area that this writer could locate are two photographs of the identical scene, taken from east of Allenspark at mile 16.8: one, taken in 1910, and the other, in 1986. A third, taken in 2008, is offered for comparison. The first two, appear in a book by Thomas T. Veblen and Diane C. Lorenz titled The Colorado Front Range: A Century of Ecological Change. Viewing these photographs with the eye of an experienced forester, Ron Gosnell has interpreted the vegetative changes that have occurred over the intervening 100 years.

It has been frustrating to try to find specific information regarding forest fires in the Allenspark area. Were it not for residents of Allenspark who have compiled histories and/or who have interviewed old timers for articles The Allenspark Wind there would be little to report.

For example, in the accounts that follow, one by Crete Dever and one by Joe Mills, there are tantalizing tidbits about local forest fires but little specific information.

In her self-published history of Meeker Park, Crete Childers Dever mentions that the beautiful logs used in the construction of Meeker Park Lodge, on Highway Seven, “were found east of the valley near Allenspark, close to timberline.” They may have been victims of a forest fire, but we don’t even know which valley and there is no indication of a date.

Joe Mills, younger brother of the more famous Enos Mills, came to the Estes Park region in 1898. In his book, A Mountain Boyhood, published in 1926, he describes exploring a glacier [we don’t know if it’s one of the St. Vrain Glaciers or what is now called “Moomaw Glacier”] and nearly losing his life after falling into a crevasse. **He then writes:**

> The next morning I broke camp. I had had enough of close-ups of glaciers. I followed the crest of the Continental Divide northward, satisfied with such distant views of those treacherous juggernauts as could be had from the rim rocks.
>
> That was how I came to be camped at timberline above Allen’s Park when the big forest fire set the region south of it ablaze. From my lofty station I watched a thunder shower gather around Long’s Peak and move southward, tongues of lightning darting from it venomously. It was perhaps ten miles wide. It circled Wild Basin, then faced eastward toward the foothills, its forked tongues writhing wickedly. Those to the south struck repeatedly; I counted three fires they started, but two of these the shower extinguished; the third was miles beyond the edge of the rain and began spreading even as I watched.

The account continues, with the author ultimately fleeing the fire in a race for his life. It’s a gripping story, although one suspects it might well be exaggerated in order to appeal to the boys for whom it was written. It doesn’t indicate the date or location of the fire.

Fortunately, Allenspark historian and author, Lorna Knowlton, is a lot more specific in her book, Weaving Mountain Memories. On page 39 of the 1989 edition, she refers to “the climax ponderosa forest which covered the valley before the numerous fires in the last two decades of the 19th century and the first decade of the 20th.”

On page 189, in a chapter entitled, “FIRE” Knowlton writes: “A fire in 1898 burned a mile wide swath around the south side of Meadow Mountain and east along four miles of the Ironclads. Driven by huge winds, the fire created the famous ‘Pole Patch’ used so extensively by Allenspark woodsmen.”

TWO PHOTOGRAPHS: 100 YEARS OF VEGETATION CHANGE

Comparing the historic photographs on the following page reveals vegetation changes over time.

For example, look at the condition of vegetation in the 1910 photograph and compare it to the same locations in the 2008 photograph.

In 1910, the face of Lookout Mountain is heavily forested with aspen, Copeland Moraine's flanks are sparsely timbered by pine and there is plenty of aspen along its cap, Cowbell Hill has just a few scattered patches of ponderosa pine and Post Hill has widely spaced trees of many different ages and size. This variety of historical forest conditions is an example of beneficial forest diversity.

Now look at the photo taken almost 100 years later. Lookout Mountain's aspen was overtopped and replaced by a solid blanket of lodgepole pine, Copeland Moraine is mostly heavily timbered by mixed pine species with just its cap in aspen, the grassy openings on Cowbell Hill are almost forested over, and little trees have "caught-up" in size on Post Hill so that most trees are about the same size and tree crowns now touch each other. Today's forest condition is referred to as a continuous bed of fuel.

Solid fuel continuity means that a fire can run uninterrupted for long distances and at high intensity. Instead of a fire's behavior frequently changing and its spread occasionally being held in check by an absence of trees or large expanses of aspen (giving firefighters a chance at containment), a wildfire today will likely be uncontrollable.

There is some scientific debate over what exactly has caused our forests to become so dangerous. The situation is complex and results from many factors. Ranking high, however, is effective fire exclusion, which led to a lack of periodic disturbance and succession. Scientific uncertainty about exact cause not-withstanding, understanding the problem and knowing what to do about it is what is important.

That is the purpose of this plan. With it, Allenspark area landowners can learn how to protect themselves, their forest and their homes from dangerous wildfire.

Wild Basin and Mt Meeker from Post Hill, 1910

Wild Basin and Mt Meeker from Post Hill, 1986

Wild Basin and Mt Meeker from Post Hill, 2008

She then quotes long-time Allenspark resident, John McCollister, who wrote an account for The Allenspark Wind in March 1974.

"A man named Sieburn tried to reach a summer cabin up near the ski run and came out white with lather. He never made it to the cabin. Wind hurled twenty foot long blazing logs over his head and started new fires ahead of him on his way out. The wind shifted the second day, and we were all afraid the fire would take Allenspark. It didn't, but the smoke sure did. We couldn't even see much less breathe. We couldn't get out; the four or five families here then had come by stage.

"We all got into an old prospecting tunnel that ran north into Cowbell Hill below where the Ski road begins [obliterated now by bypass Highway 7]. It was less than three feet wide, but you could stand up in it. We stayed in it all the second day before it became safe to come out."

On page 190, Knowlton quotes a turn-of-the-century Lyons newspaper:

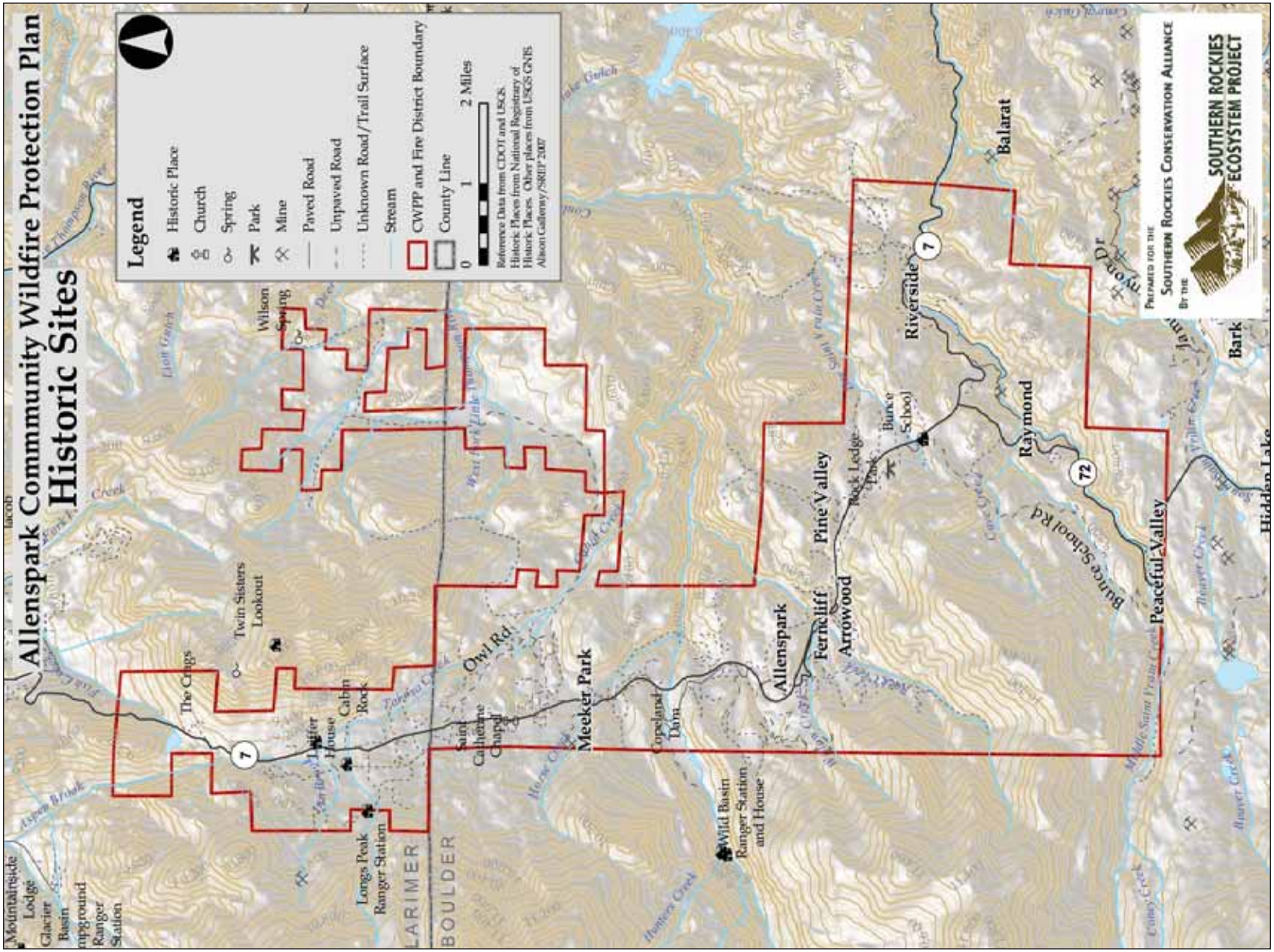
"George Pfeiffer put out a small fire near the mouth of Cabin Creek. He carried water in his hat to obliterate the blaze. The fire was presumably caused by careless fishermen throwing smoking equipment."

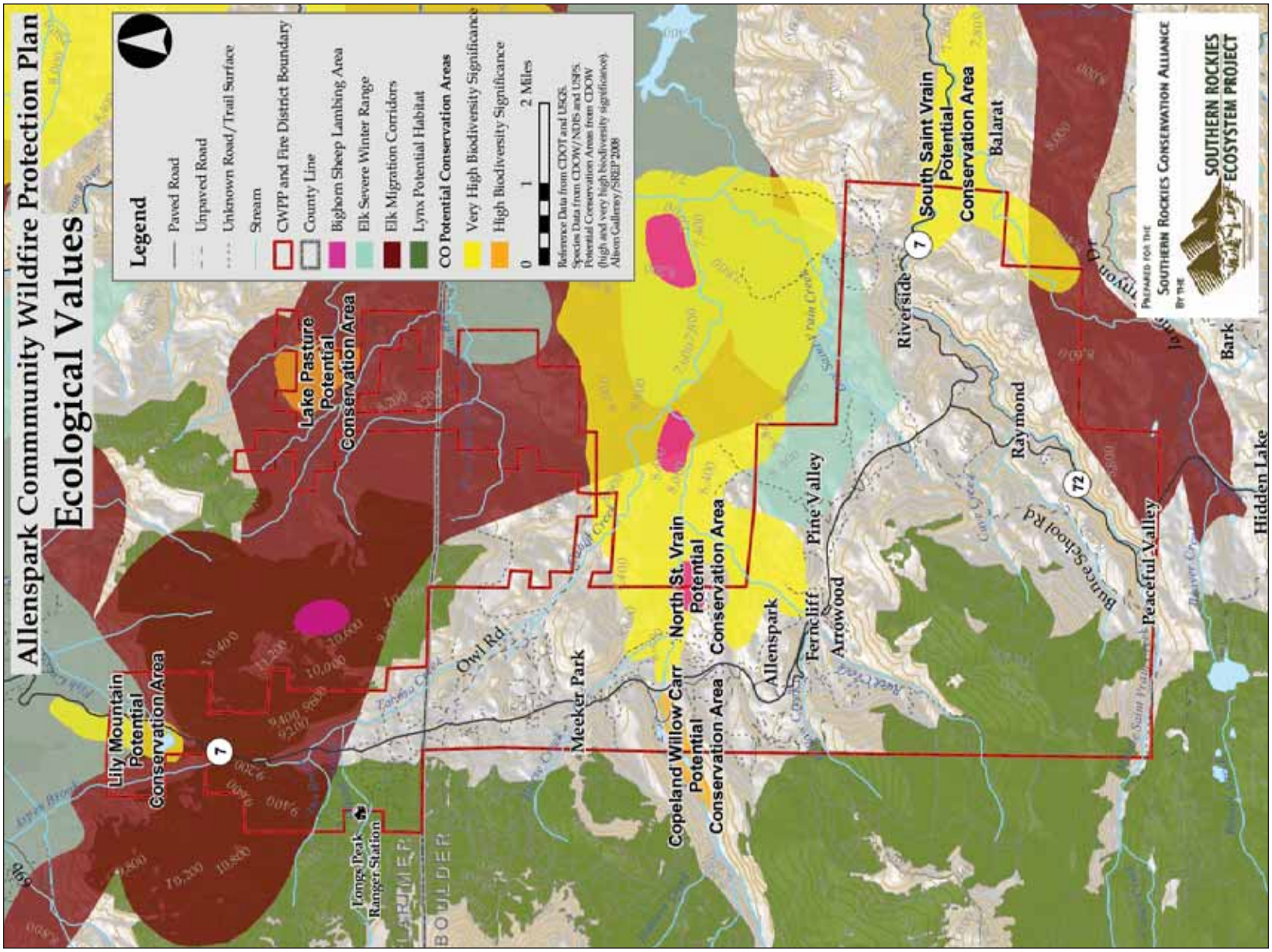
On page 194, Knowlton quotes "Fireman Fred," Gil Jones, who wrote about a fire that apparently occurred in 1974. It burned about fifty acres:

"'We had to hit it fast and hard,' said Chief Dean Wallace of the forest fire that broke out in mid-morning of May 13 on the east shoulder of Big John Mountain, about three miles due east of Allenspark."

It is easy to find descriptions of the Ouzel Fire; the scars are still visible. On August 9, 1978, lightning ignited a fire near Ouzel Lake, in Rocky Mountain National Park, although it wasn't discovered until August 13. At first, it was designated a "low risk" zone, and was allowed to burn. However, after several weeks, winds turned it into a dangerous fire, which threatened Allenspark. Finally, outside help was brought in. Six hundred people pitched in and, on September 30, the fire was contained. 1,050 acres were consumed. See Historic Sites and Ecological Values maps on the following pages.

Crown fire cresting the ridge over Allenspark, September 1978


Allenspark Community Wildfire Protection Plan
Historic Sites
Legend
Historic Place
Church
Spring
Park
Mine
Paved Road
Unpaved Road
Unknown Road/Trail Surface
Stream
CWPP and Fire District Boundary
County Line
0
1
2 Miles
Reference Data from CDOT and USGS.
Historic Places from National Registrary of Historic Places. Other places from USGS GNIS.
Alison Gallaway/SRHP 2007
Prepared for the
Southern Rockies Conservation Alliance
By the
Southern Rockies Ecosystem Project
Mountainside Lodge
Glacier Basin Campground Ranger Station
Longs Peak Ranger Station
Twin Sisters Lookout
The Crags
Cabin Rock
Wilson Spring
Saint Catherine Chapel
Owl Rd
Meeker Park
Copeland Dam
Wild Basin Ranger Station and House
Allenspark
Fern Cliff
Arrowood
Pine Valley
Rock Ledge
Bunce School
Bunce School Rd
Riverside
Raymond
Balarat
Peaceful Valley
Bark
Hidden Lake
LARIMER
BOULDER
7
72


Allenspark Community Wildfire Protection Plan
Ecological Values
Legend
Paved Road
Unpaved Road
Unknown Road/Trail Surface
Stream
CWPP and Fire District Boundary
County Line
Bighorn Sheep Lambing Area
Elk Severe Winter Range
Elk Migration Corridors
Lynx Potential Habitat
CO Potential Conservation Areas
Very High Biodiversity Significance
High Biodiversity Significance
0 1 2 Miles
Reference Data from CDOT and USGS.
Species Data from CDOW/NDIS and USFS.
Potential Conservation Areas from CDOW
(high and very high biodiversity significance).
Alison Gallaway/SREP 2008
Lily Mountain Potential Conservation Area
Lake Pasture Potential Conservation Area
Longs Peak Ranger Station
Owl Rd
Meeker Park
Copeland Willow Carr Potential Conservation Area
North St. Vrain Potential Conservation Area
Allenspark
Ferncliff
Pine Valley
Arrowood
Riverside
South Saint Vrain Potential Conservation Area
Balarat
Raymond
Bruce School Rd
Peaceful Valley
Bark
Hidden Lake
Prepared for the Southern Rockies Conservation Alliance
By the Southern Rockies Ecosystem Project

THE ALLENSPARK FIRE DISTRICT & FIRE SUPPRESSION

BY CHIEF MIKE OSMUN, AFPD

THE ALLENSPARK FIRE PROTECTION DISTRICT covers about one hundred and fifty-five square miles with fire protection, emergency medical services, wildland fire suppression, search and rescue, and handling of hazardous materials emergencies. We have twenty-seven highly dedicated volunteers who will respond to emergency situations.

The Fire Department has two Class A pumpers, three brush/mini pumpers, two tankers, one ambulance, one rescue vehicle, and one mass casualty vehicle. We have mutual-aid agreements with all the fire departments in Boulder County, plus Estes Park, the US Forest Service, and the National Park Service.

In the event of an emergency, we will respond and be there, you can count on it! However, the fuels situation and the reality of limited personnel and equipment for initial response indicate that our capability is limited, especially in extreme fire behavior.

Firefighter safety demands that I cannot put firefighters and equipment in harm's way. It may be that the only option we have is to have residents evacuate to a safe area. We will risk a great deal to save a life, but we must weigh the risk on saving property during extreme fire behavior. Property can be replaced, lives cannot.

Management of fuels is most effective when completed before a fire. Don't wait until the fire is just over the next ridge to decide that you should do some thinning, it is too late at that point!

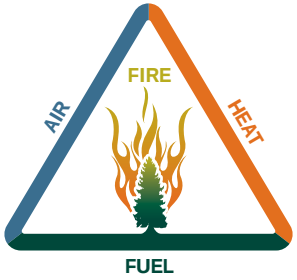
There are a lot of factors that go into deciding what a defensible property is, and one of the most important is if there is defensible space provided by the property owner. Remember: There are no guarantees that a property can be saved. Some fire mitigation may be your best course of action in helping us decide what we can or cannot defend.

As your Fire Chief, I wish to reiterate that the Allenspark Fire Department will respond and do what we can, and we can use all the help you can give us by providing good access roads, proper address signs, defensible space, water sources, and your cooperation in the event we need to evacuate you to a safe place. We must all work together to provide the protection that will keep our community safe!

Fire Understanding

Wildland fire understanding is based upon science. Information in this plan represents the best proven information each of the citizen volunteer authors can offer, to improve community safety from wildfire.

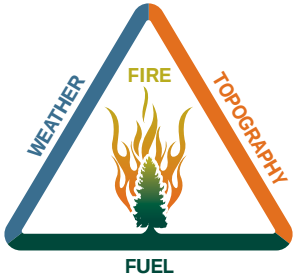
Fire requires three things, fuel, oxygen and heat. Remove any one leg of the Fire Triangle and a fire will go out.



Fire Behavior

The manner in which a wildfire will burn (its behavior) depends upon the weather, topography and fuel. The interrelationship of these factors is depicted in the Fire Behavior Triangle.

Notice that common to both the fire triangle and the fire behavior triangle is fuel.



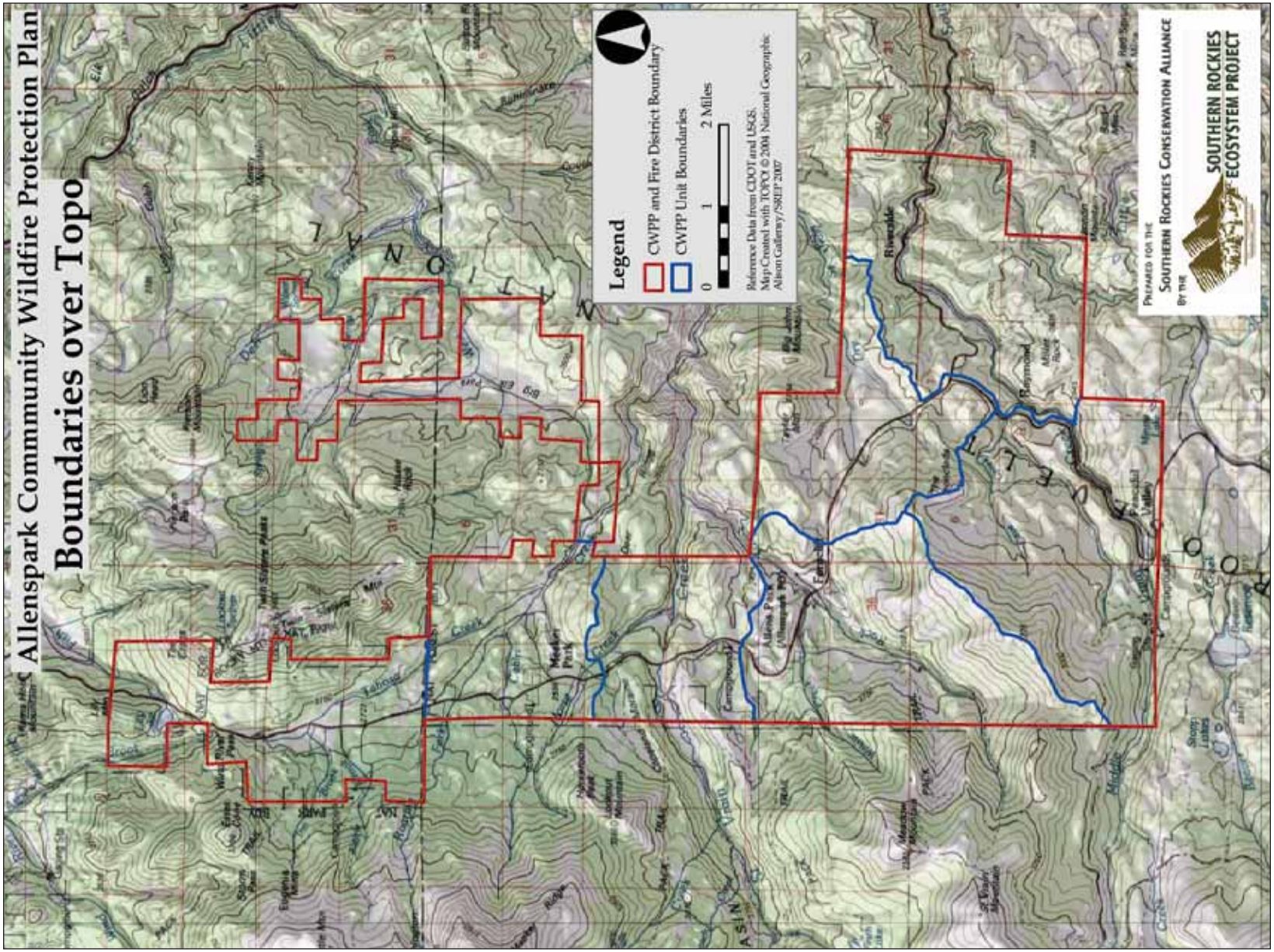
Listed here are some considerations for each of the wildland fire behavior variables.

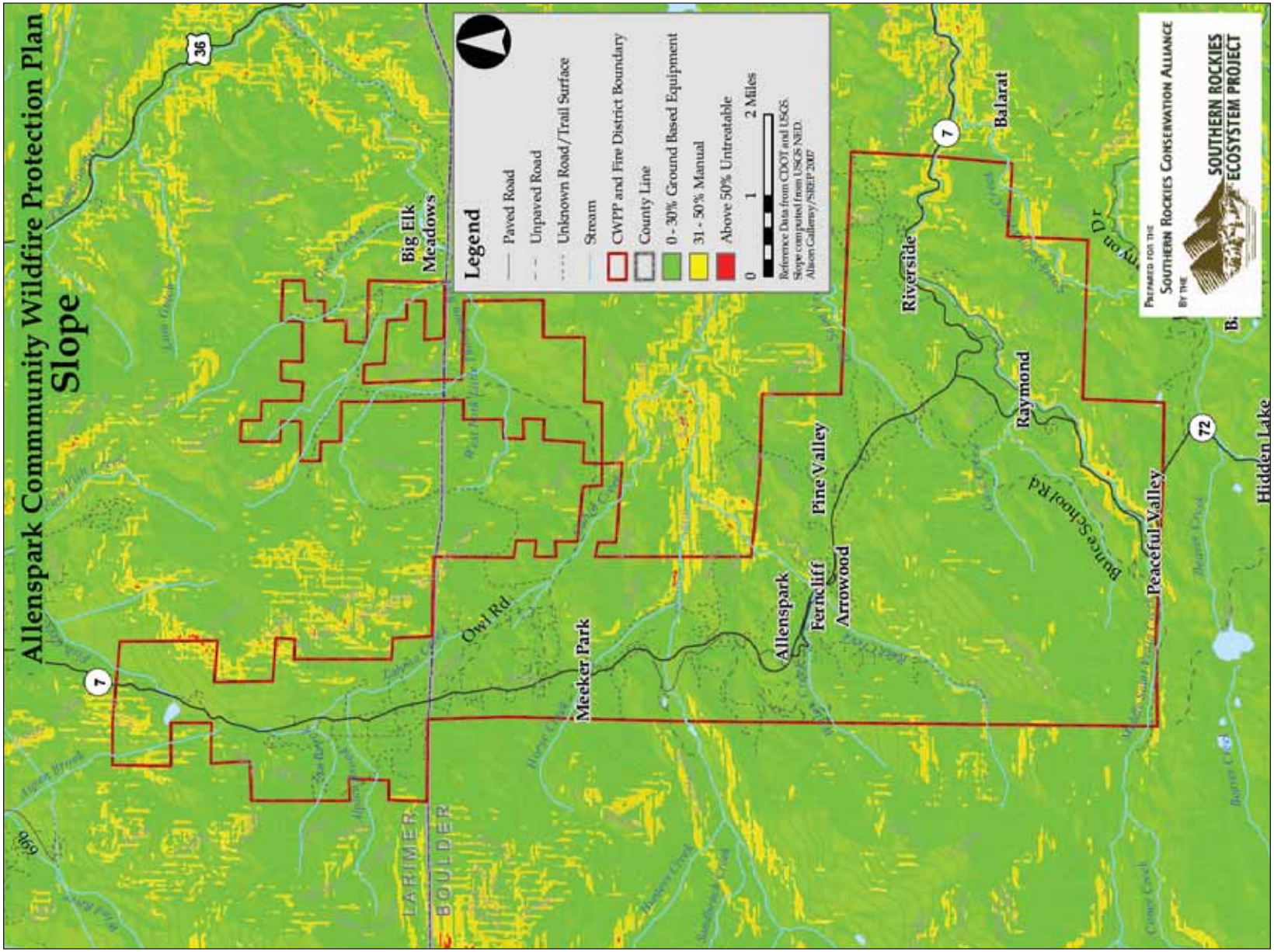
How destructive (or beneficial) a fire can be often is determined by human actions to address the condition of the fuels.

WEATHER	TOPOGRAPHY	FUEL	TOPO MAP REFERENCE
Wind	Slope	Quantity	SEE Allenspark Area Slope Map on Page 17
Temperature	Aspect (direction)	Continuity	SEE Allenspark Area Aspect Map on Page 18
Humidity	Position (on the terrain)	Size	SEE Allenspark Area Topo Map on Page 16
Drought	Features (draws, saddles)	Arrangement	
Season	Elevation	Moisture Content	

Beyond the Basics: Understanding Fire and Fire Behavior Ecological Restoration Institute, Northern Arizona University.

ALLENSPARK AREA BOUNDARIES OVER TOPO MAP




Allenspark Community Wildfire Protection Plan
Slope
Legend
Paved Road
Unpaved Road
Unknown Road/Trail Surface
Stream
CWPP and Fire District Boundary
County Line
0 - 30% Ground Based Equipment
31 - 50% Manual
Above 50% Untreatable
0
1
2 Miles
Reference Data from CDOT and USGS.
Slope computed from USGS NED.
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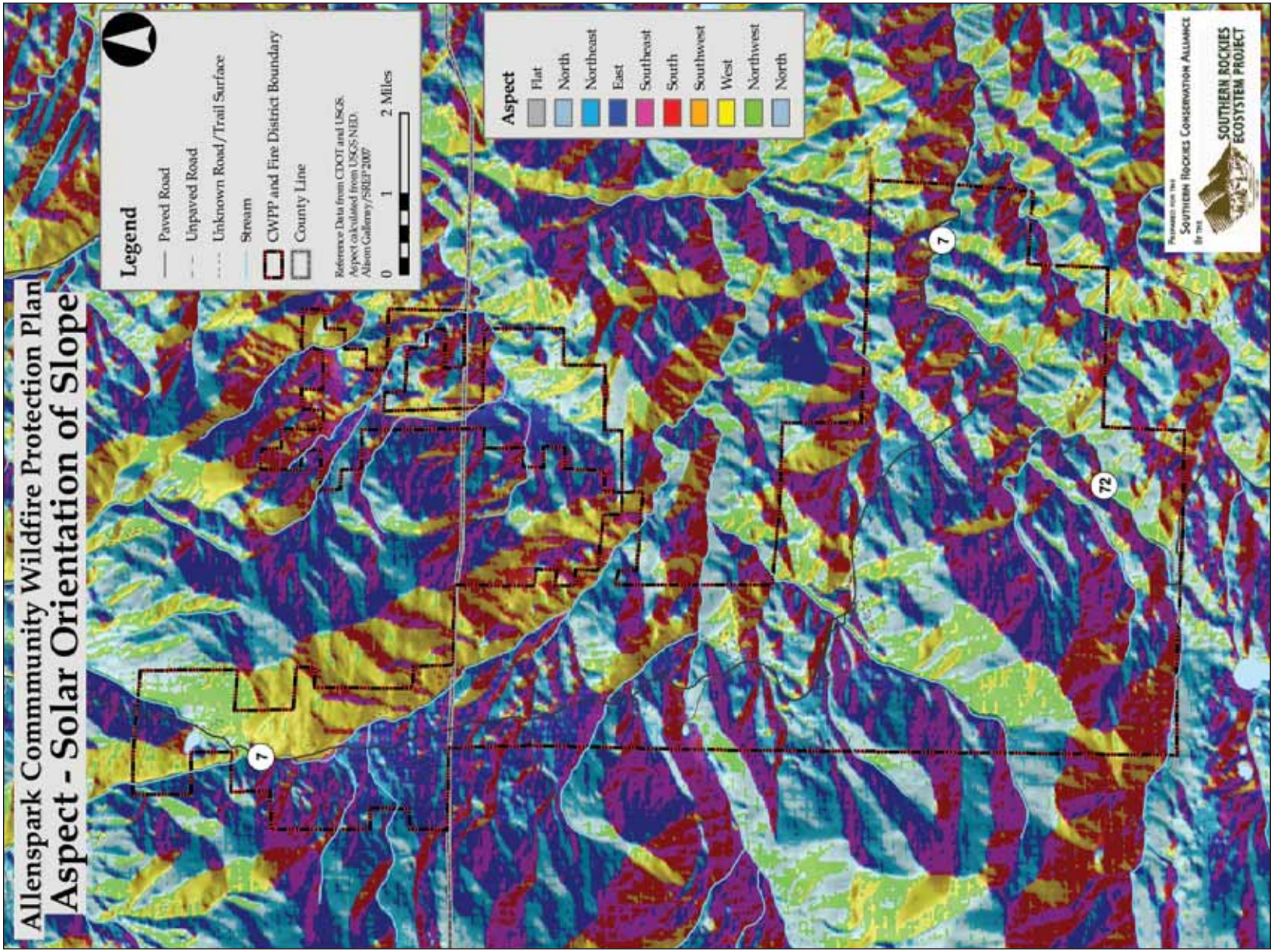
Big Elk Meadows
Meeker Park
Allenspark
Ferncliff
Arrowood
Pine Valley
Riverside
Raymond
Balarat
Peaceful Valley
Hidden Lake
Owl Rd
Burns School Rd
LARIMER
BOULDER
36
7
72

ALLENSPARK AREA ASPECT MAP



VEGETATION IS FUEL

BY RON GOSNELL

THIS SECTION IS INTENDED TO HELP PEOPLE RECOGNIZE AND UNDERSTAND the classifications of vegetation cover types and the burning properties of each type. Readers are given a general assessment of fire danger based upon forest fuels. Included are management actions one may take for each type to make property and neighborhoods safer from wildfire.

Vegetation cover types are identified by the association of plants that grow together. The type name is usually associated with the dominant tree or trees or other vegetation for that type. To understand this section, it helps if the reader can recognize and identify the common trees and other plants growing in the Allenspark area.

Different vegetation cover types will burn with different behaviors. During a wildfire, fire-fighting specialists, often with many years of experience, routinely use a number of tools to accurately gauge fire behavior.

Knowing the expected flame length, rates of spread, fire intensity, and heat release help other fire-fighters safely plan their attack. How a fire behaves is dependent upon the fuels, weather, and topography. Fire behavior is predictable.

Similarly, homeowners can learn to evaluate for themselves how the condition of the vegetation (fuel) surrounding their homes and neighborhoods will affect a wildfire—and their safety.

In many cases, understanding can lighten the burden of uncertainty and confusion. We hope that by reading this section, plan users will be encouraged to take free-will fuels-management action, either alone or with others. While some additional information is listed in the Resources Section of this plan, help is also available to those who seek it in the Resources Section of Allenspark CWPP website: **http://cwpp.allenspark.info/index.html**. i

Planned and proactive fuel management before a fire occurs is the best insurance one can get to reduce potential fire losses.

METHODOLOGY

Vegetation within the entire Allenspark Fire Protection District (the Plan area) has been type-mapped, using satellite imagery and the LANDFIRE wildland fuel mapping computer program. Additionally, the Plan area has been divided into eight named geographical areas called Management Units. Each unit represents a watershed with recognizable characteristics of development and surrounding vegetation, as shown on the **Vegetation Cover Maps included in this plan.** m

The boundaries of the color-coded mapped vegetation types are general and at a large scale of resolution. Therefore, for example, if one's home sits in a 2-acre patch of aspen inside a 300-acre area that is typed as lodgepole pine forest, the map may not show your area mapped as aspen.

VEGETATION COVER TYPE

Small isolated areas of vegetation are “rounded up” and mapped as part of the larger area forest type. This is not a mistake, only a limitation in the mapping scale chosen for this plan. There are 12 different vegetation types addressed in this plan.

Summaries of vegetation cover types in acres and percent composition are shown in Table 1 (below). Forestry planning experience shows that, even with some variability from what vegetation may be exactly on every acre, this information is very valuable for decision making.

TABLE 1: VEGETATION COVER TYPE BY MANAGEMENT UNIT

	Plan Area		Tahosa		Meeker Park		Little Thompson		Wild Basin		Allenspark		Dry St Vrain		Middle St Vrain		Peaceful Valley	
DESCRIPTION	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Lodgepole	8440	28	1270	33	1210	44	290	9	430	17	1150	24	660	20	470	10	2960	55
Douglas Fir Ponderosa	5960	20	50	1	110	4	980	30	730	29	560	12	830	26	2120	46	620	11
Ponderosa	3380	11	40	1	170	6	680	21	210	8	150	3	600	18	1390	30	180	3
Aspen Mixed Conifer	3170	10	450	12	330	12	280	8	300	12	610	13	520	16	60	1	620	11
Aspen	3010	10	1160	31	110	4	130	4	80	3	940	20	100	3	30	1	400	7
Cool Moist Mixed Conifer	1890	6	180	6	540	20	40	1	460	18	310	6	140	4	100	2	140	3
Spruce-Fir	850	3	190	6	0	0	0	0	0	0	620	13	0	0	0	0	120	3
Moist Riparian	1090	4	100	3	140	5	170	5	120	5	150	3	40	1	190	4	170	3
Woody Shrublands	660	2	50	1	20	1	150	4	45	2	210	4	150	5	min.	<1	min.	<1
Grasslands	670	2	90	3	60	2	540	16	45	2	40	1	60	2	min.	<1	min.	<1

STRUCTURE DENSITY BY MANAGEMENT UNIT

People living within the Meeker Park Unit where 44% of the vegetation is lodgepole pine will have a different set of concerns and fuel management options than people living within the Middle Saint Vrain Unit where only 10% is lodgepole, but 46% is Douglas fir/ponderosa.

Strategies must also change with the density of structures in a community. All of the Allenspark CWPP area is decidedly rural in character, but the Structure Density Table 2 (below) illustrates that some areas are much less rural than others.

TABLE 2: STRUCTURE DENSITY BY MANAGEMENT UNIT

	Plan Area		Tahosa		Meeker Park		Little Thompson		Wild Basin		Allenspark		Dry St Vrain		Middle St Vrain		Peaceful Valley	
Total Acres	30460		3800		2760		3310		2510		4820		3250		4580		5410	
Developed Acres	770	3%	100	3%	70	3%	15	<1%	50	2%	80	2%	120	4%	180	4%	140	3%
Est # of Structures	1375		157		327		9		127		291		118		276		70	
Acres/Structure	22		24		8		368		20		17		28		17		77	
Dev Acres/Structure	0.56		0.64		0.21		1.67		0.39		0.27		1.02		0.65		2.00	

CWPP MANAGEMENT UNITS & VEGETATION COVER TYPES

LOCATE AND LEARN about your Allenspark Area CWPP management units and vegetation cover types with this plan's vegetation type maps and vegetation cover type guide. Using the maps provided in this plan will help you determine the location and CWPP management unit for your property or area of concern. They will also help you locate, identify, and learn about the vegetation cover types within your CWPP management unit.

ALLENSPARK AREA CWPP MANAGEMENT UNITS INCLUDE:

Tahosa Valley
Little Thompson
Meeker Park
Wild Basin
Allenspark
Peaceful Valley
Dry Saint Vrain
Middle Saint Vrain

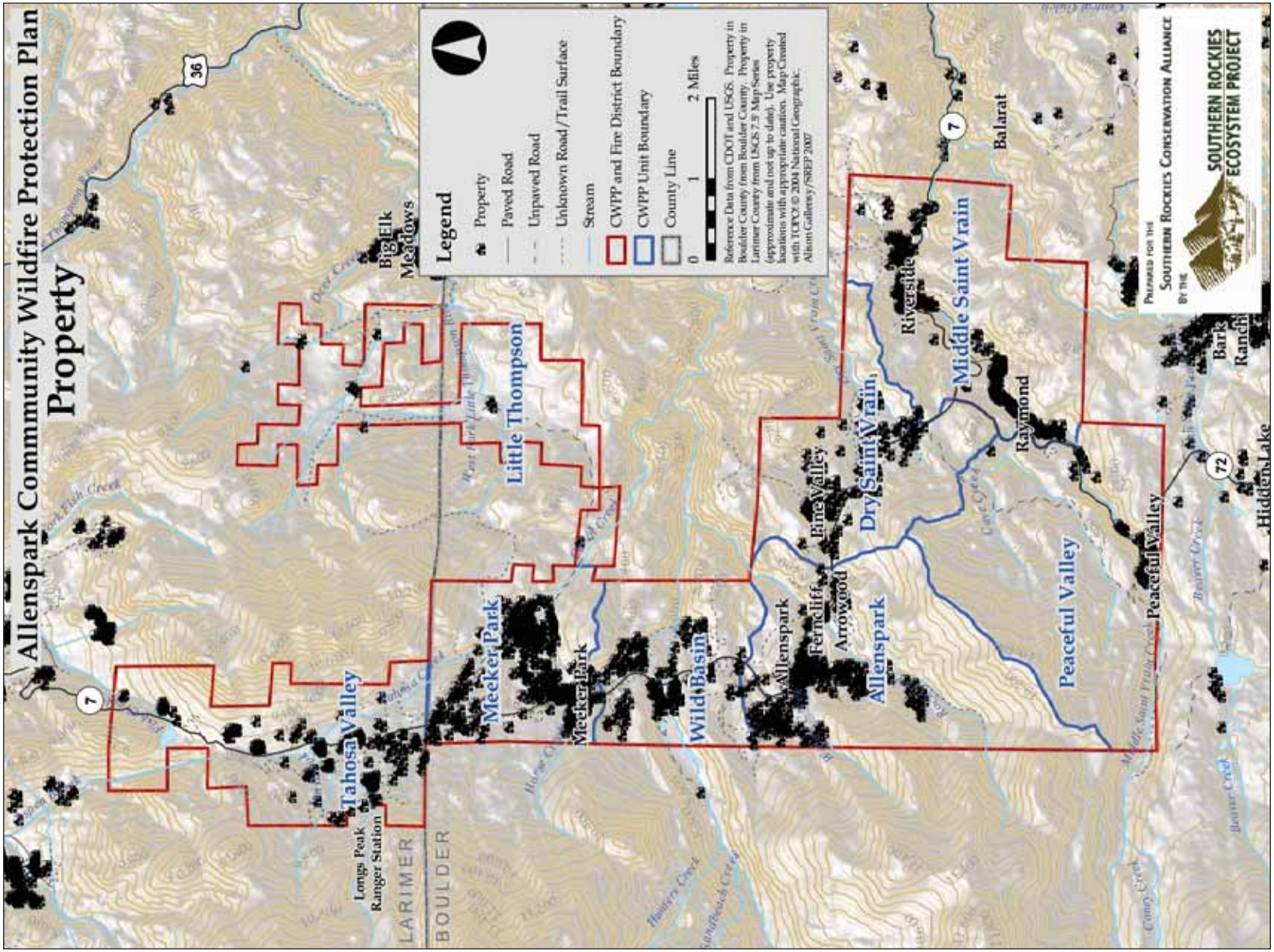
The detail photographs and type descriptions found in the Vegetation Cover Type Descriptions section of this plan will help you identify and understand various vegetation cover types, composition and fire behavior characteristics, and fire reduction actions.

THE MAPS IN THIS SECTION INCLUDE:

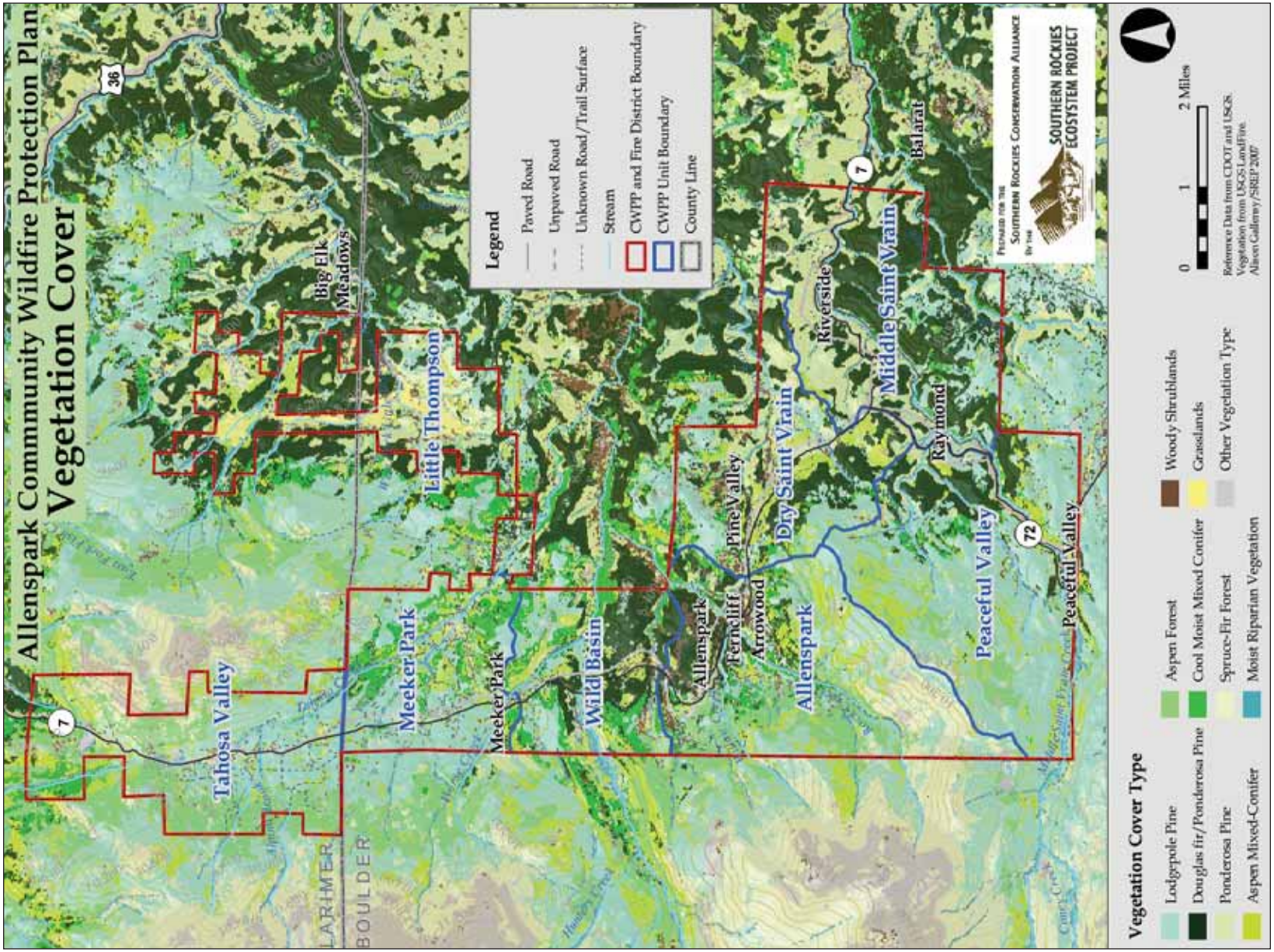
Allenspark Area CWPP Management Unit Map
Allenspark Area CWPP Management Unit Detail Maps
Vegetation Type Map
Vegetation Type Detail Maps
Crown Fire Run Model Maps

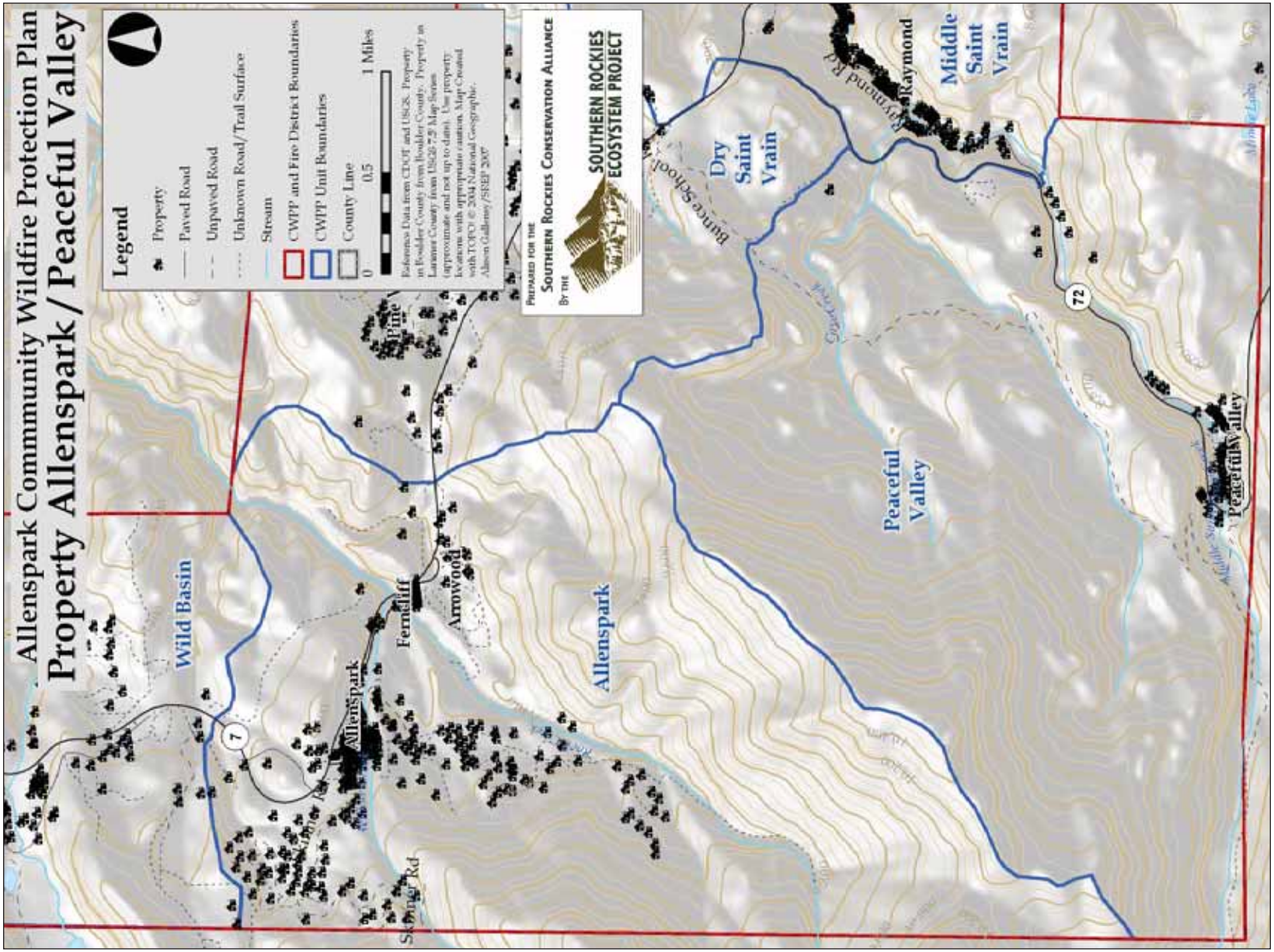
After you determine the management unit and cover types, read the appropriate Vegetation Cover type composition descriptions to understand what you face in terms of wildfire risk and behavior and what you can do to effectively reduce that risk.

When there is understanding about vegetation type fire behavior properties, and what can be done to reduce fire danger, people can communicate with neighbors and friends to develop a cooperative neighborhood strategy. If a neighborhood approach proves to be impractical, action on ones' own property alone will have fire protection and safety benefits to you and your family. Some additional sources of professional assistance for these matters are listed in the Resources Section of this plan, and additional help is also available in the Resources section of the Allenspark CWPP website: **http://cwpp.allenspark.info/index.html**.

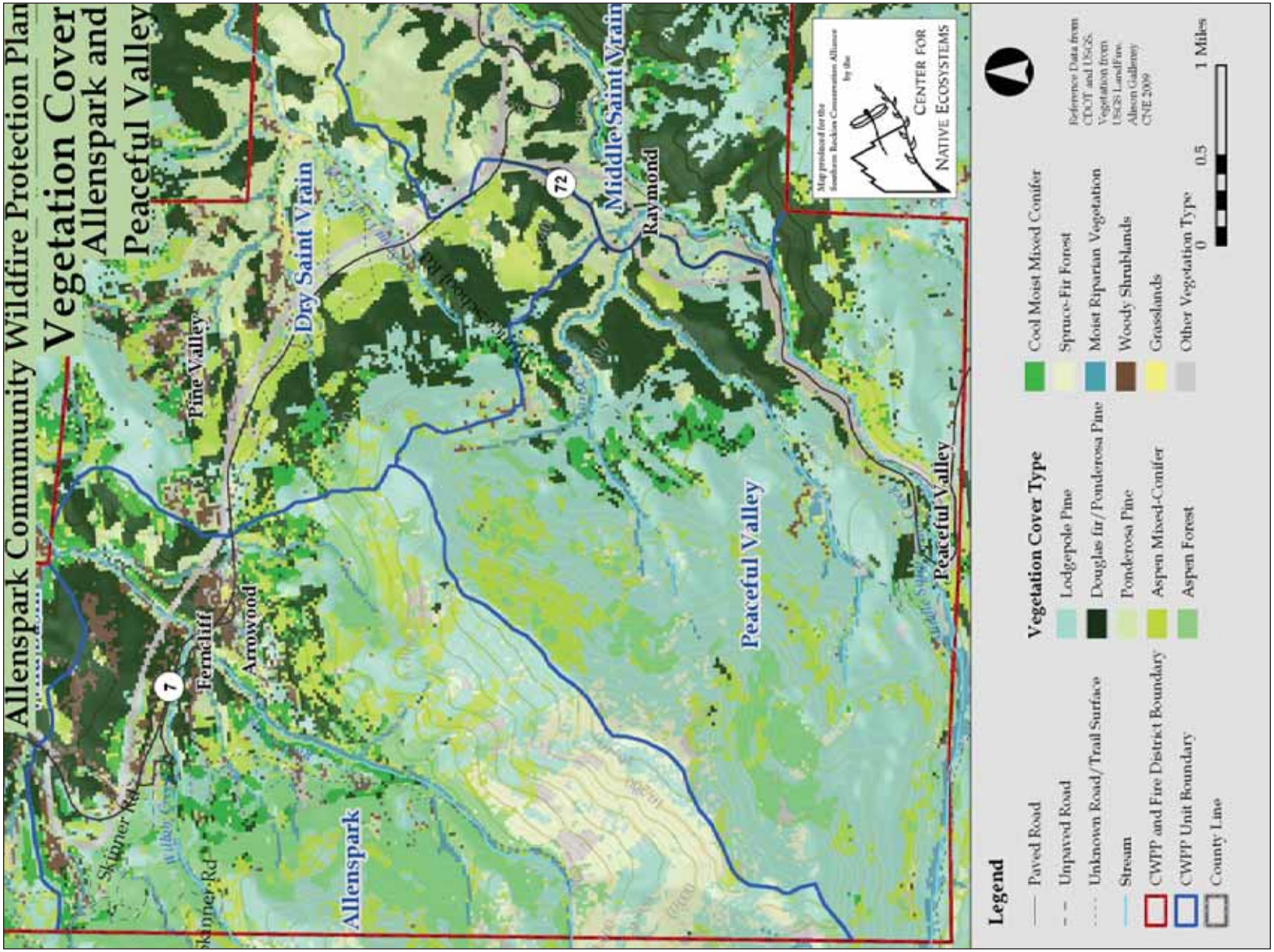

Allenspark Community Wildfire Protection Plan
Property
Legend
Property
Paved Road
Unpaved Road
Unknown Road/Trail Surface
Stream
CWPP and Fire District Boundary
CWPP Unit Boundary
County Line
0
1
2 Miles
Reference Data from CDOT and USGS. Property in Boulder County from Boulder County. Property in Larimer County from USGS 7.5' Map Series (approximate and not up to date). Use property locations with appropriate caution. Map Created with TOPO! © 2004 National Geographic. Alison Gallensky/SREP 2007
Prepared for the Southern Rockies Conservation Alliance by the Southern Rockies Ecosystem Project
Big Elk Meadows
Little Thompson
Meeker Park
Tahosa Valley
Longs Peak Ranger Station
LARIMER
BOULDER
Wild Basin
Allenspark
Fern Cliff
Arrowood
Pine Valley
Dry Saint Vrain
Riverside
Middle Saint Vrain
Raymond
Balarat
Peaceful Valley
Bark Ranch
Hidden Lake
36
7
72

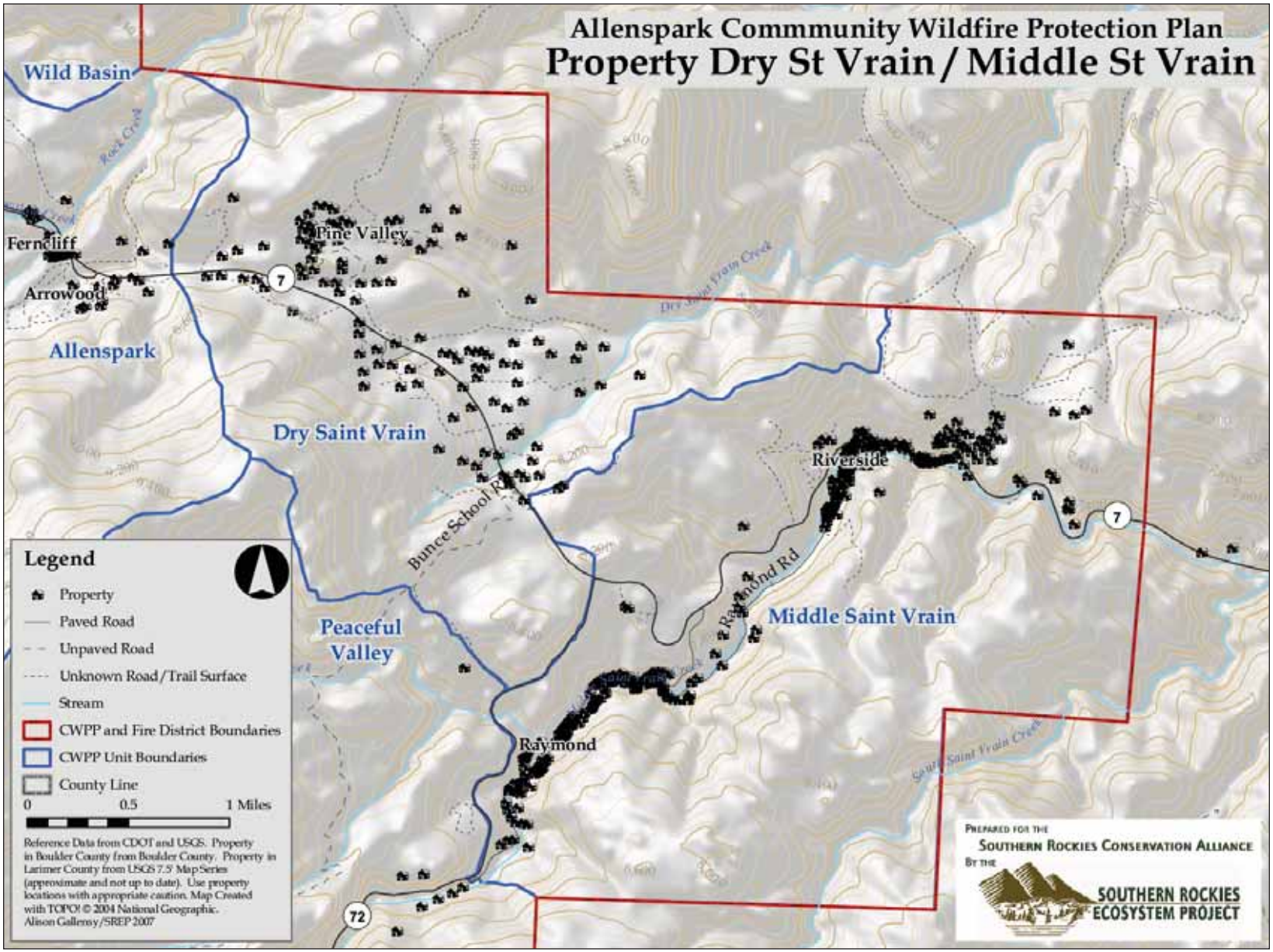
ALLENSPARK AREA CWPP MANAGEMENT UNITS: VEGETATION COVER TYPE(S) MAP




Allenspark Community Wildfire Protection Plan
Property Allenspark / Peaceful Valley
Legend
Property
Paved Road
Unpaved Road
Unknown Road/Trail Surface
Stream
CWPP and Fire District Boundaries
CWPP Unit Boundaries
County Line
0
0.5
1 Miles
Reference Data from CDOT and USGS. Property in Boulder County from Boulder County. Property in Larimer County from USGS 7.5' Map Series (approximate and not up to date). Use property locations with appropriate caution. Map Created with TOPO © 2004 National Geographic. Alison Gallaway /SEEP 2007
Prepared for the
Southern Rockies Conservation Alliance
By the
SOUTHERN ROCKIES ECOSYSTEM PROJECT
Wild Basin
Allenspark
Ferncliff
Arrowood
Pine
Skinner Rd
Allenspark
Dry Saint Vrain
Burrie School
Raymond Rd
Raymond
Middle Saint Vrain
Peaceful Valley
Peaceful Valley
7
72

PEACEFUL VALLEY VEGETATION COVER TYPE MAP




Allenspark Commmunity Wildfire Protection Plan
Property Dry St Vrain / Middle St Vrain
Wild Basin
Rock Creek
Ferncliff
Arrowood
Allenspark
Pine Valley
7
Dry Saint Vrain Creek
Dry Saint Vrain
Bunce School Rd
Riverside
Raymond Rd
Middle Saint Vrain
Peaceful Valley
Raymond
South Saint Vrain Creek
72
Legend
Property
Paved Road
Unpaved Road
Unknown Road/Trail Surface
Stream
CWPP and Fire District Boundaries
CWPP Unit Boundaries
County Line
0
0.5
1 Miles
Reference Data from CDOT and USGS. Property in Boulder County from Boulder County. Property in Larimer County from USGS 7.5' Map Series (approximate and not up to date). Use property locations with appropriate caution. Map Created with TOPO! © 2004 National Geographic. Alison Gallency/SREP 2007
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By the
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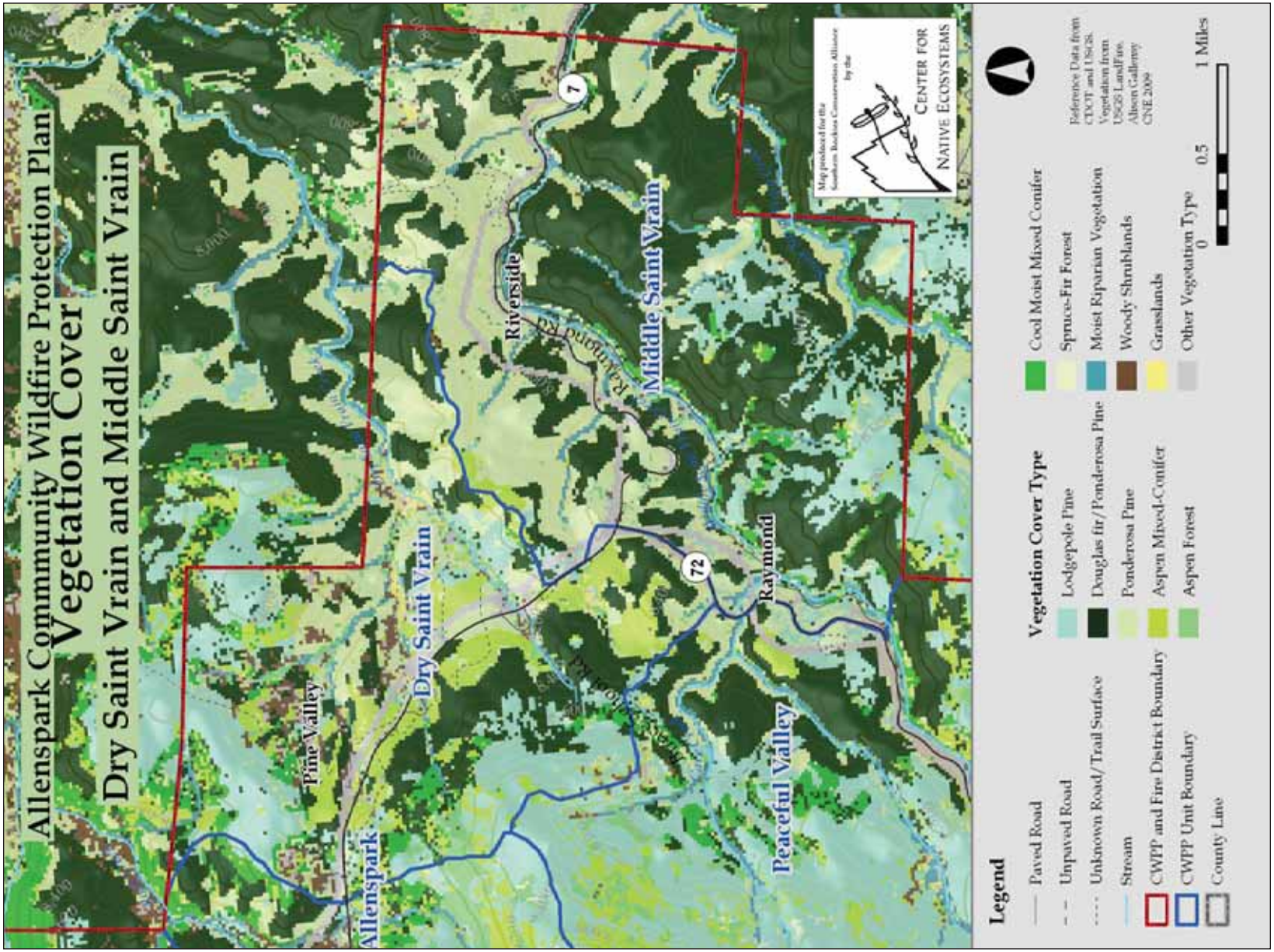
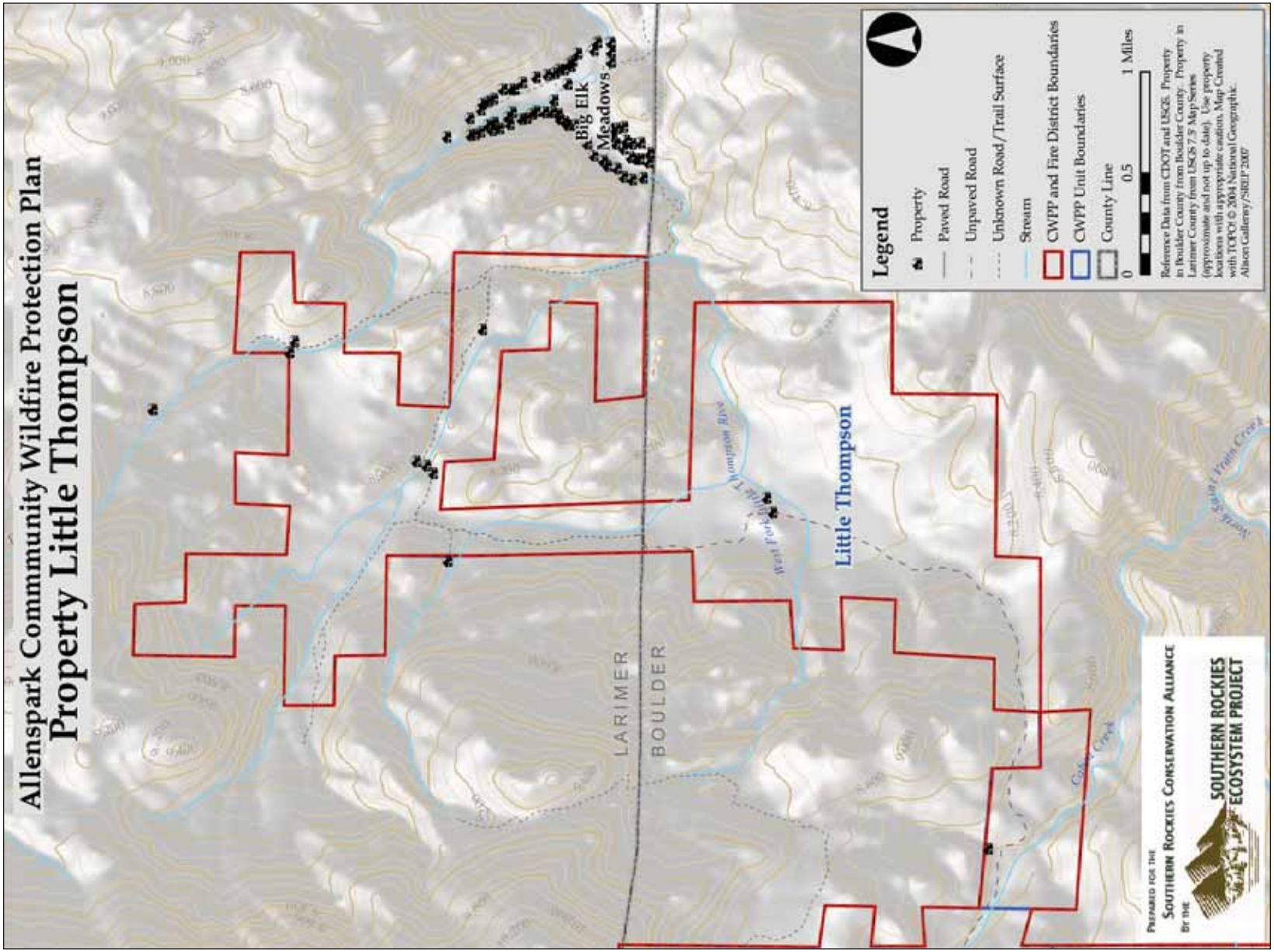
DRY ST. VRAIN / MIDDLE ST. VRAIN VEGETATION COVER TYPE MAP




Allenspark Community Wildfire Protection Plan
Property Little Thompson
Big Elk Meadows
LARIMER
BOULDER
Little Thompson
Legend
Property
Paved Road
Unpaved Road
Unknown Road/Trail Surface
Stream
CWPP and Fire District Boundaries
CWPP Unit Boundaries
County Line
0
0.5
1 Miles
Reference Data from CDOT and USGS. Property in Boulder County from Boulder County. Property in Larimer County from USGS 7.5' Map Series (approximate and not up to date). Use property locations with appropriate caution. Map Created with TOPO! © 2004 National Geographic.
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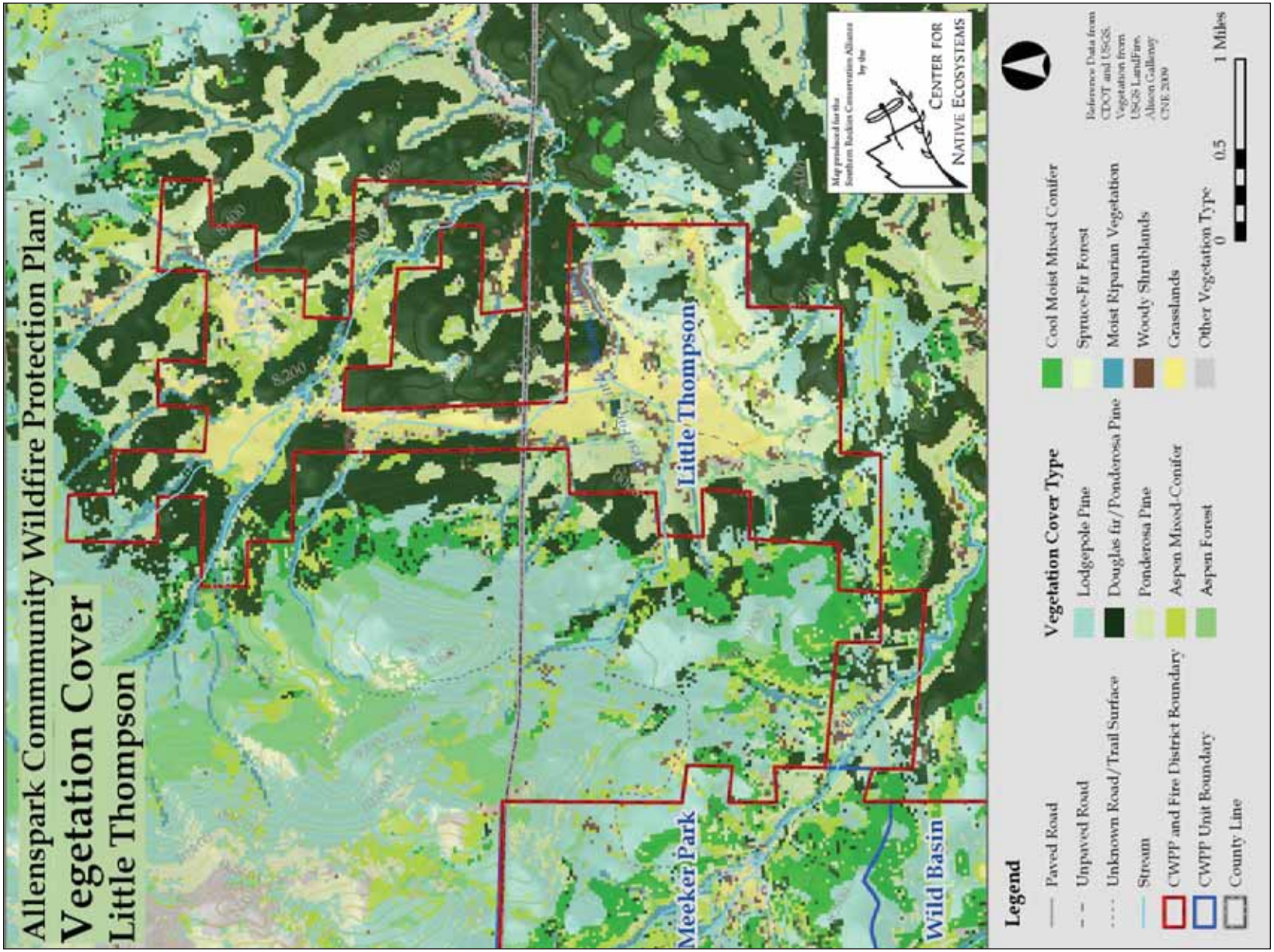
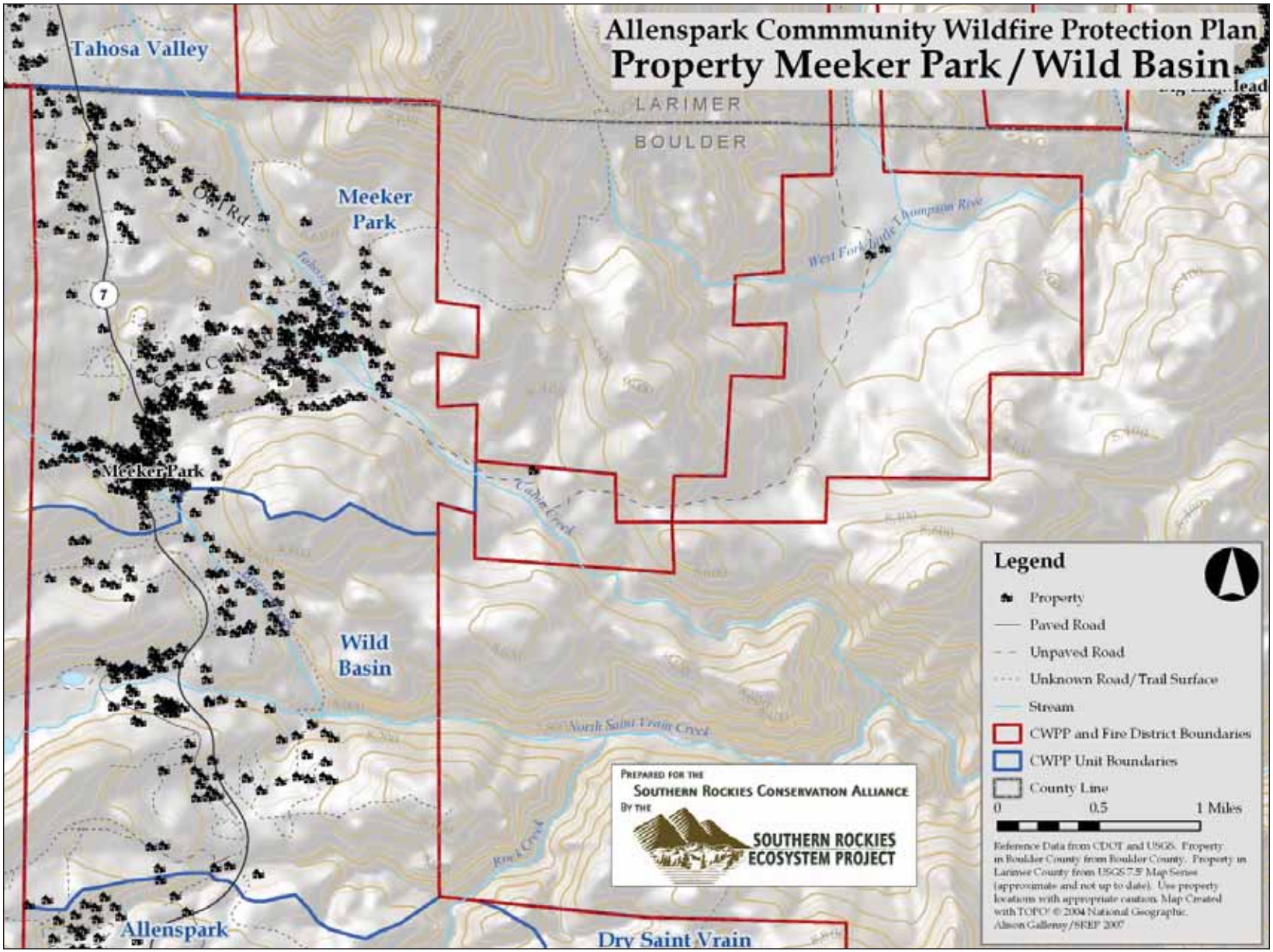
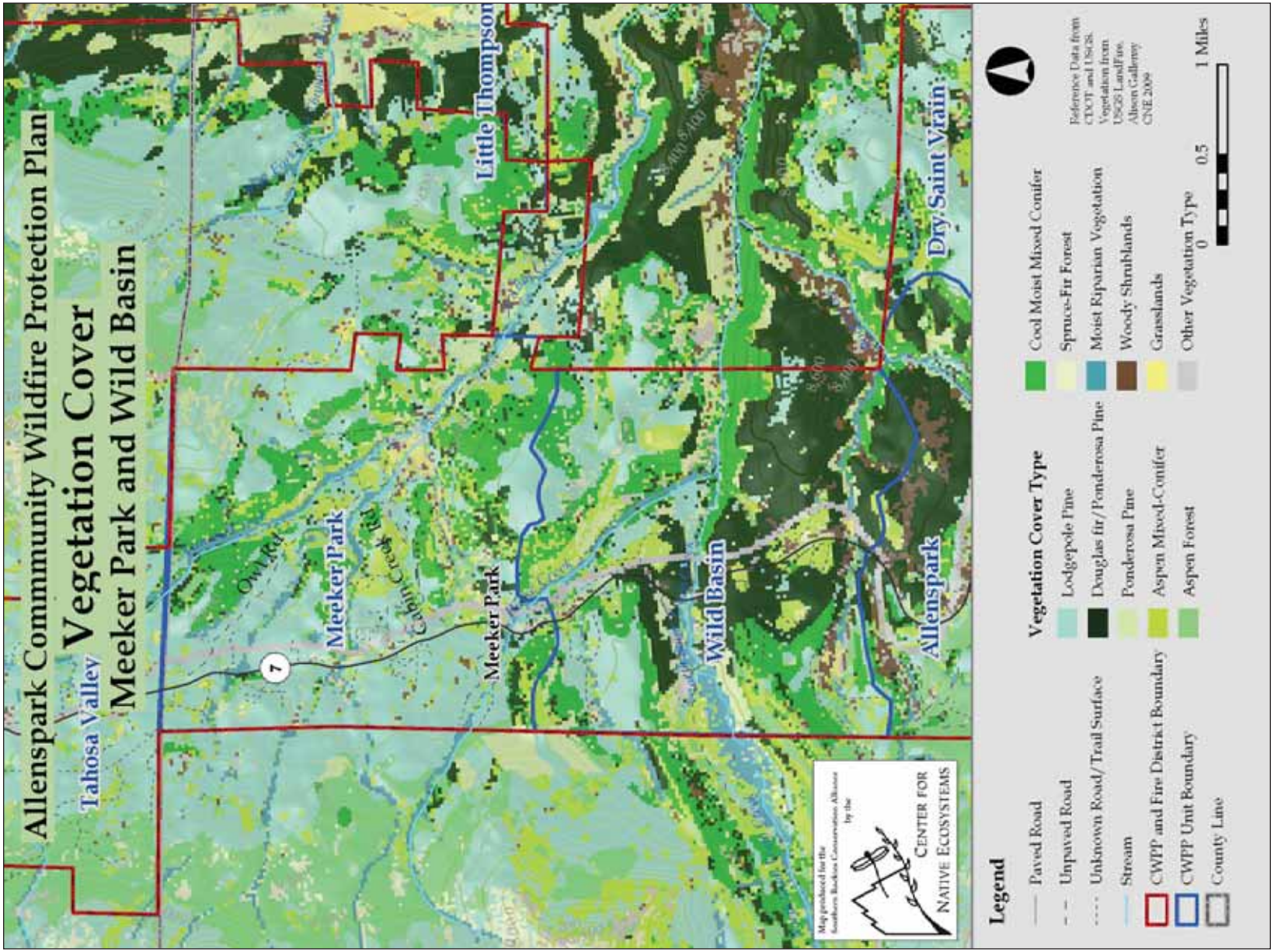
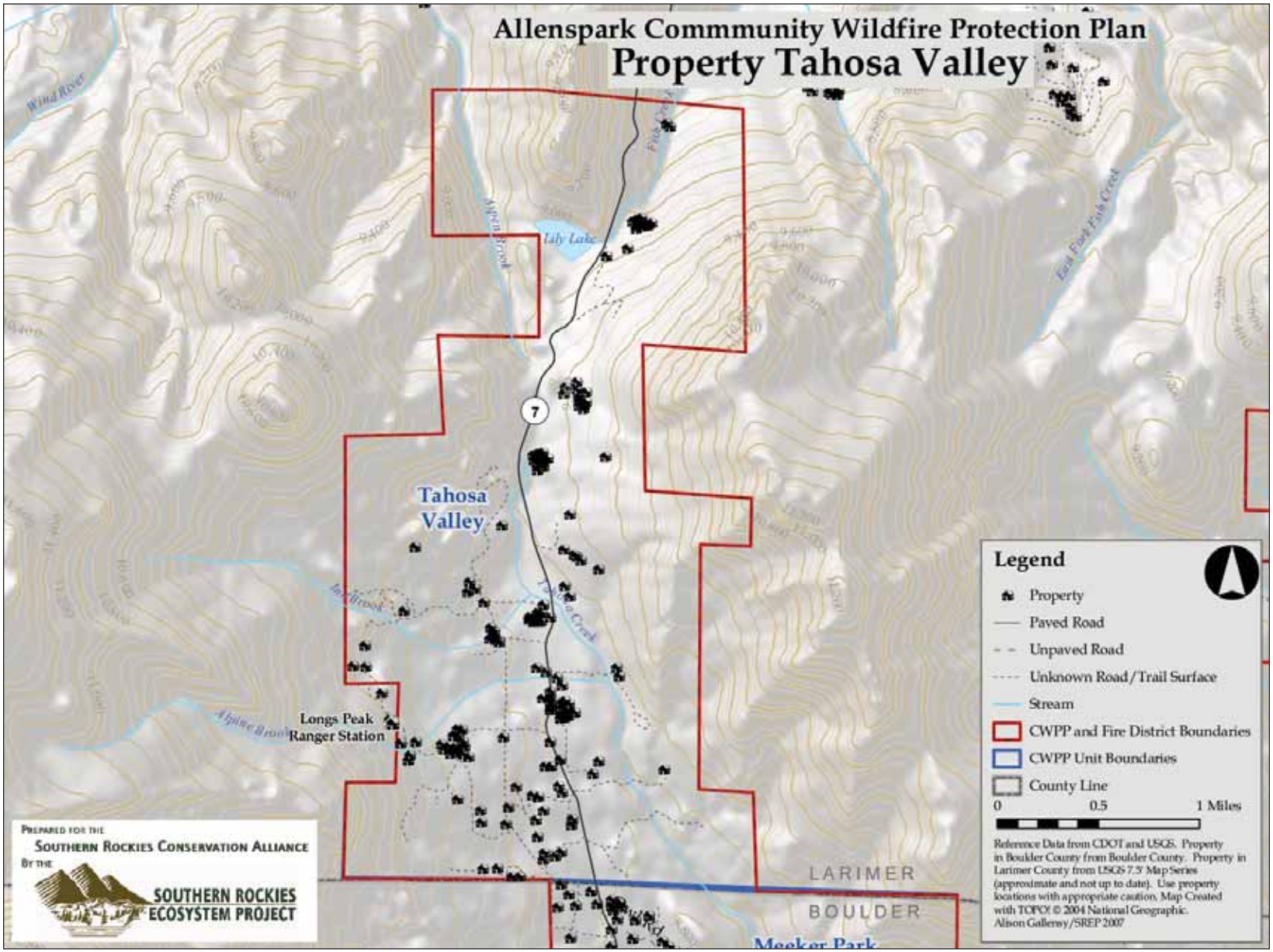
LITTLE THOMPSON VEGETATION COVER TYPE MAP




Allenspark Commmunity Wildfire Protection Plan
Property Meeker Park / Wild Basin
Tahosa Valley
LARIMER
BOULDER
Meeker Park
Meeker Park
Wild Basin
Allenspark
Dry Saint Vrain
West Fork Little Thompson River
North Saint Vrain Creek
Prepared for the
Southern Rockies Conservation Alliance
By the
SOUTHERN ROCKIES ECOSYSTEM PROJECT
Legend
Property
Paved Road
Unpaved Road
Unknown Road/Trail Surface
Stream
CWPP and Fire District Boundaries
CWPP Unit Boundaries
County Line
0
0.5
1 Miles
Reference Data from CDOT and USGS. Property in Boulder County from Boulder County. Property in Larimer County from USGS 7.5' Map Series (approximate and not up to date). Use property locations with appropriate caution. Map Created with TOPO! © 2004 National Geographic.
Alison Gallenny/SREP 2007

MEEKER PARK / WILD BASIN VEGETATION COVER TYPE MAP




Allenspark Commmunity Wildfire Protection Plan
Property Tahosa Valley
Wind River
Lily Lake
East Fork Fish Creek
7
Tahosa Valley
Longs Peak Ranger Station
Alpine Brook
LARIMER
BOULDER
Meeker Park
Legend
Property
Paved Road
Unpaved Road
Unknown Road/Trail Surface
Stream
CWPP and Fire District Boundaries
CWPP Unit Boundaries
County Line
0
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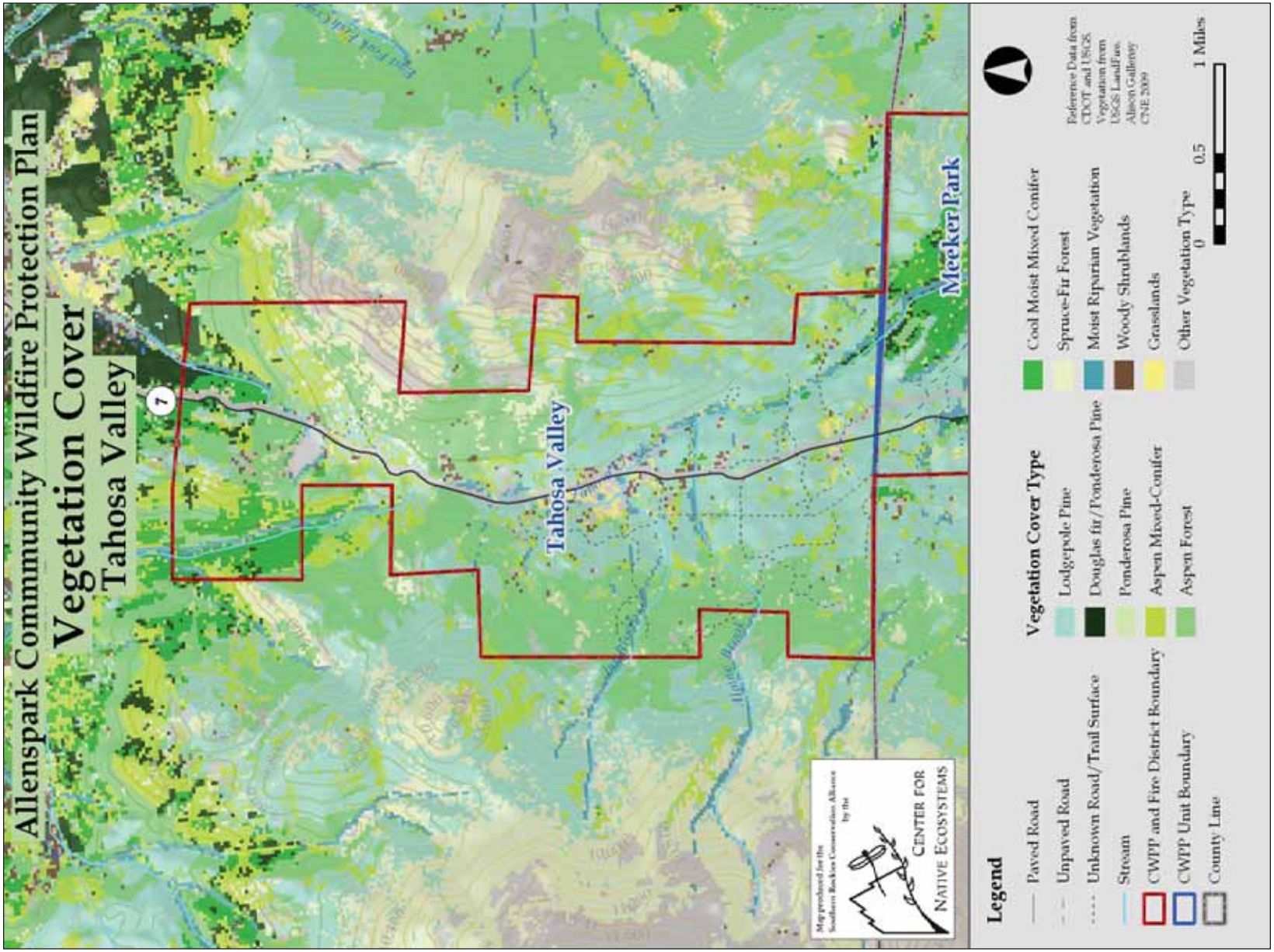
1 Miles
Reference Data from CDOT and USGS. Property in Boulder County from Boulder County. Property in Larimer County from USGS 7.5' Map Series (approximate and not up to date). Use property locations with appropriate caution. Map Created with TOPO! © 2004 National Geographic. Alison Gallenay/SREP 2007
Prepared for the
Southern Rockies Conservation Alliance
By the
Southern Rockies Ecosystem Project


Allenspark Community Wildfire Protection Plan
Vegetation Cover
Tahosa Valley
7
Tahosa Valley
Meeker Park
Map produced for the Southern Rockies Conservation Alliance by the
Center for Native Ecosystems
Legend
Paved Road
Unpaved Road
Unknown Road/Trail Surface
Stream
CWPP and Fire District Boundary
CWPP Unit Boundary
County Line
Vegetation Cover Type
Lodgepole Pine
Douglas fir/Ponderosa Pine
Ponderosa Pine
Aspen Mixed-Conifer
Aspen Forest
Cool Moist Mixed Conifer
Spruce-Fir Forest
Moist Riparian Vegetation
Woody Shrublands
Grasslands
Other Vegetation Type
Reference Data from CDOT and USGS. Vegetation from USGS LandFire. Alison Gallery CNE 2009
0
0.5
1 Miles

COMPUTER-MODELED MAPS SIMULATING CROWN-FIRE RUNS are a useful tool to help landowners and neighborhoods decide upon priority locations to manage vegetation. Crown fire is the most dangerous and destructive form of wildfire. Crown fires occur when the crowns, or tops, of conifer trees ignite and then ignite the crowns of neighboring trees.

Because of the intense heat they release, crown fires, especially if wind driven, spread with incredible speed. Crown fires move in somewhat predictable patterns, so it is useful to know their potential paths.

Computer models simulate the likely path of a crown fire through the forest by using a number of weather condition and ignition-source variables, combined with existing fuel and terrain features.

The modeled crown-fire paths appear as red lines on the crown fire maps. Since these simulations are dependent upon selected parameters, the red line does not necessarily mean a crown fire is assured in one location. Likewise, an area that is void of red lines is not necessarily risk-free for a crown fire event.

However, if, for different ignition source locations and different wind directions, simulated crown fire paths happen to cross or lead to one location, then an area of forest and homes worthy of consideration for site-specific protection action can be identified.

These crown fire run maps are presented as a tool to help assess risk. Additionally, neighborhoods can receive similar site-specific crown-fire prevention information from individuals who are experienced in fighting forest fires.

After assessing the fuels, topography, and expected weather conditions, a fire department member, consultant or agency fire manager might say with confidence, “This is a location very susceptible to crown fire and I recommend you manage the fuel here specifically to reduce the danger of crown fire in your neighborhood.”

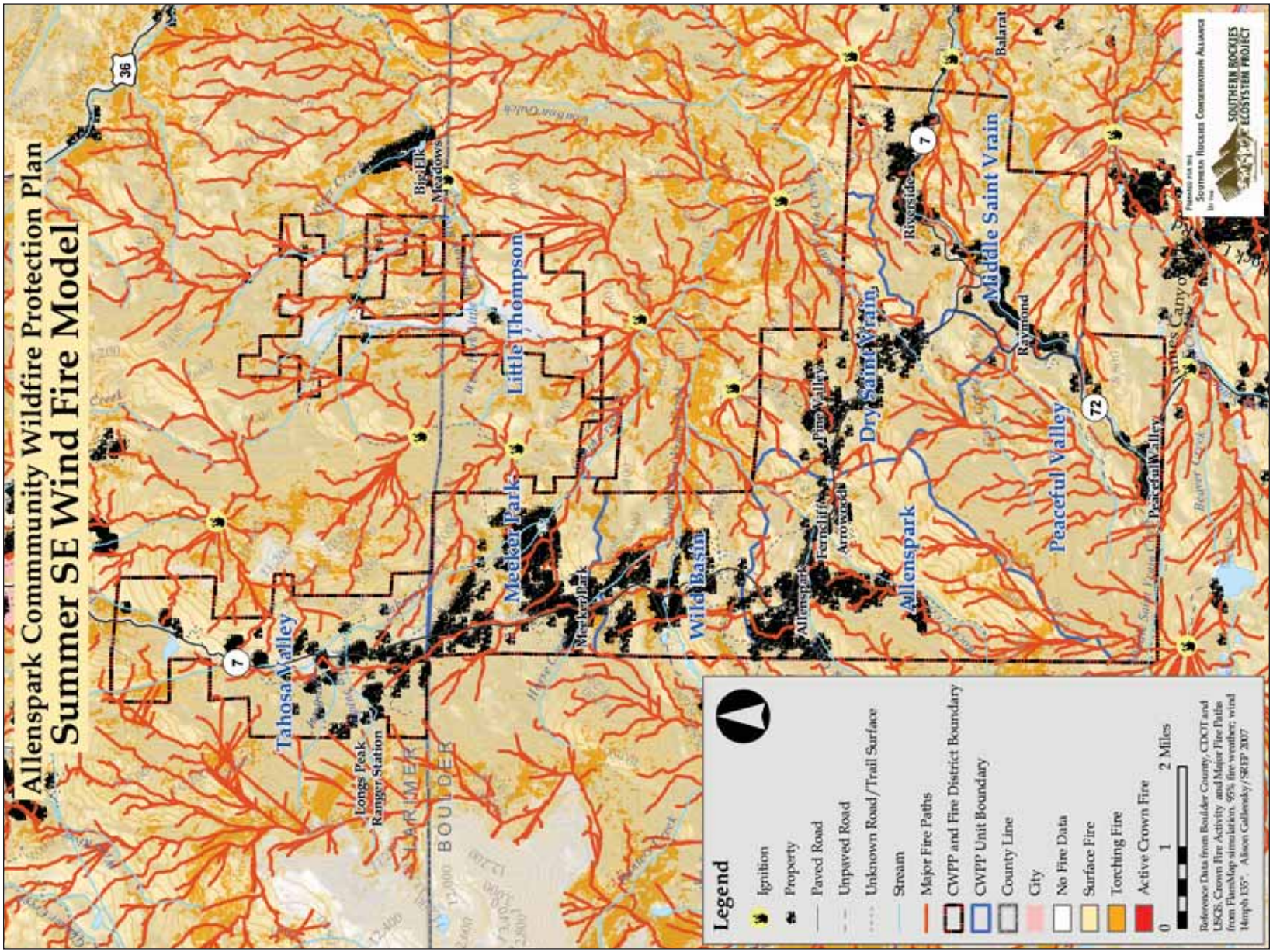
CROWN FIRE BEHAVIOR IS PREDICTABLE. And, the conditions of the forest that support crown fires can be modified. Managing vegetation as suggested in this plan can reduce the chance of crown fire behavior in each vegetation type.

Surface Fire

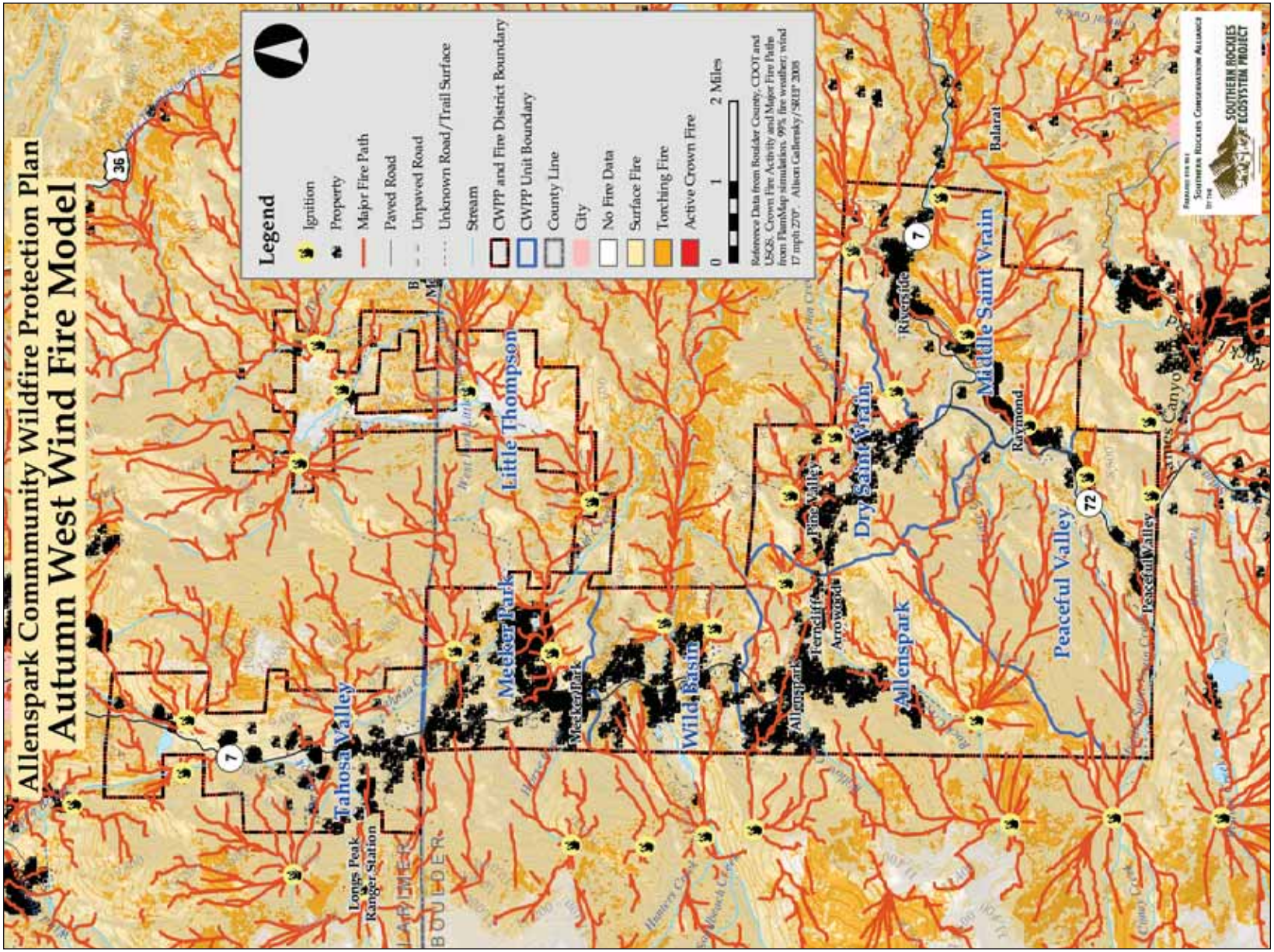
Crown Fire

The first step in assessing fire risk is awareness. The Crown Fire Run Model Maps on the following pages are intended to provide plan users with an awareness of the potential for crown fires.

ALLENSPARK AREA CROWN FIRE MODEL MAP: CROWN FIRE MODEL 95



ALLENSPARK AREA CROWN FIRE MODEL MAP: CROWN FIRE MODEL 99



ROCKY MOUNTAIN LODGEPOLE PINE

TYPE 1:
ROCKY MOUNTAIN LODGEPOLE PINE
Pinus contorta
Forest Code 2050

TREE FIELD GUIDE FACTS

Bark: Light brown, thin with many small scales.

Needles: Evergreen needles are yellow to dark green; 1 to 3 inches long; sharply pointed, stiff, stout, slightly flattened and often twisted; 2 needles per bundle.

Fruit: Shiny, yellow-brown, egg-shaped, serotinous* cones; ¾ to 2 inches long with raised, rounded cone scales and a tiny point. *Seeds released from cones by exposure to extreme heat.

Elevation: 6,000 to 11,000 feet.

Height: 20 to 80 feet.

Habitat: Mostly well-drained soils in high elevations, often in pure stands.

Relation to Fire: Ground fires kill many trees due to thin bark. New stands quickly establish when cones open and seeds are released. Lodgepole need fire or a disturbance to regenerate.

Of the 30,460 acres of vegetation in the Allenspark Fire Protection District, 8440 acres or 28% is classified as the lodgepole pine forest type. This type composes the following percent of vegetation in each management unit: Tahosa 33%, Meeker Park 44%, Little Thompson 9%, Wild Basin 17%, Allenspark 24%, Dry St. Vrain 20%, Middle St. Vrain 10%, and Peaceful Valley 55%.

COMPOSITION

This type is composed predominately of lodgepole pine trees with 70 to 90% canopy cover, from 500 to 2000 trees per acre. There is sparse understory vegetation of grass, shrubs, smaller trees, or a barren ground surface of dead needles, cones and branches, on typically coarse, well-drained soils.

Small patches of aspen may be interspersed on finer soils and there may be scattered spruce, subalpine fir, limber, bristlecone, and ponderosa pine. There may be same-aged or many-age stands of lodgepole trees depending upon the presence of open or closed cones, and the site's disturbance history.

Lodgepole tends to perpetuate itself, meaning this vegetation type regenerates back to lodgepole after a disturbance. Lodgepole may presently dominate some sites which are more favorable for other forest types, but fire exclusion has favored this thin-barked and highly flammable tree.

FIRE BEHAVIOR

Before fire suppression began in the late 19th century, and when frequent fires periodically killed some trees and consumed accumulated ground fuel, most fires in this type were low-intensity creeping surface fires that burned for days, weeks or months in duration.

Occasionally, high-intensity crown fires can erupt. Crown fires are favored by extended drought, wind, insect- or disease-killed and fallen timber, and areas of trees growing closely together. Accumulated surface fuels such as small trees plus dead or living and persistent tree limbs make a “fire-ladder” for surface fire to carry into the tree crowns.

Crown fires’ size and duration are largely dependent upon the continuity (uninterrupted) of the tree crowns, and the extent of a uniform condition. A fire sustained in the tree crowns is much different than a surface fire.

Surface fires follow the fuel at ground level and may result in scattered trees “torching”, meaning individual tree crowns burst into flame, and usually only some trees (a few too many) are killed within the perimeter of a surface fire.

Crown fires, however, are “stand-replacing fires” and usually most trees within a crown fire’s perimeter are killed. This leads to the establishment of a new generation of same-age trees soon after accumulated seed, stored inside pine cones, is released.

Narrow ribbons of wind-driven, crown-fire-initiated lodgepole forest can be detected west of the Allenspark area in aerial photographs. These ribbons of same-age trees run west to east, usually from higher to lower elevation, or east to west when upslope.

FIRE-REDUCTION ACTIONS

There are several fuel-reduction actions communities and individual homeowners can take to break the continuity of fuel.

So that fire does not climb into the crowns, prune off lower tree branches. Thin to provide space between smaller trees from taller ones. Clean up dead and downed vegetation on the ground.

To prevent fire traveling long distances, create fuel breaks and fire lanes through the forest. Make patch cuts of various sizes from 10 to 100 or 1000 trees in size. Overlap forest-opening locations as viewed from above, from the direction of prevailing wind.

Separate patch openings with lightly thinned or un-thinned bands of trees so that horizontally, some of the openings in the tree cover are hidden from view (this is for esthetics and privacy if desired).

Encourage other species like aspen and thicker barked ponderosa, especially below 9000 feet elevation, by favoring them when thinning out the competing lodgepole. Remove most competing conifers from areas of aspen to help sustain aspen.

Control the bark beetle epidemic by annually removing infested trees and destroying the brood (kill the beetles before they emerge to attack new trees). This will keep both the beetle population in check, and the number of dying and highly flammable dead trees at a manageable level.

General thinning of old lodgepole pine does little good to improve growth rates of stagnated trees more than 100 years old, and there is risk of windthrow (trees uprooted by excessive wind) after thinning old stands too heavily for this shallow-rooted tree. Light thinning may be appropriate to reduce fuel and make more space between tree crowns.

Remove dead trees from the forest to reduce fuel and especially remove dead trees from highly exposed locations to lessen the chance of lightning strikes on snags. Leave some dead trees standing for wildlife habitat.

Dispose of the cut-off limbs (slash) by permitted-burning during appropriate weather conditions. Reintroduce fire periodically with planned surface-fire prescribed burns only when it is safe to do so and after, by other means, fuel volumes have been reduced and fuel continuity is broken into a mosaic of vegetation with openings.

DOUGLAS FIR WITH PONDEROSA PINE

TYPE 2:
DOUGLAS FIR WITH PONDEROSA PINE
Pseudotsuga menziesii
Forest Code 2051

TREE FIELD GUIDE FACTS

Bark: Gray and smooth with resin blisters on young trees; red-brown, very thick and deeply furrowed with broad, often corky ridges at maturity.

Needles: Evergreen needles are ½ to 1½ inches long with bracts at the base.

Fruit: Light brown, short-stalked cones that hang down from the branches; 1-1/3 to 3 inches long; many thin, rounded cone scales on top of a long, 3-pointed, winged seeds that sticks out beyond scales.

Elevation: 6,000 to 9,500 feet.

Height: 100 to 130 feet.

Habitat: Rocky soils of moist northern slopes; in pure stands and mixed coniferous forests.

Relation to Fire: Thin, resinous bark of young trees makes them highly susceptible to fire; after 40 years, trees have developed a very thick layer of back to protect them during hot ground and surface fires.

The Dry Mixed Conifer Forest and Woodland—Douglas fir with ponderosa pine—vegetation type covers 5960 acres for 20% of the vegetation in the fire district. The percent of this type vegetation in each management unit is: Tahosa 1%, Meeker Park 4%, Little Thompson 30%, Wild Basin 29%, Allenspark 12%, Dry St. Vrain 26%, Middle St. Vrain 46%, and Peaceful Valley 11%.

COMPOSITION

This is a highly variable ecosystem and a transition forest between the pure ponderosa pine zone and the cool, moist, mixed-conifer zone. This vegetation type is found between 6900 and 9500 feet on well-drained soils, and may exist at higher elevations on south facing slopes, or lower on north-facing slopes.

Ponderosa, limber pine, and occasional bristlecone pine, Douglas-fir, Rocky Mountain and common juniper, and limited aspen, plus a number of woody shrubs and grass grow in association with each other. The ponderosa and Doug-fir often share canopy dominance.

Ponderosa regenerates after fire and other disturbance that bares mineral soil. Doug-fir can regenerate in between or after disturbance. Old Doug-fir acquires thick bark and branch-free lower trunks much like ponderosa, and therefore has similar fire resistance. Young Douglas fir, however, is very flammable.

Pine beetles can be present, but because of species diversity and wide tree spacing, beetle populations may be managed to reduce impacts and fire danger.

FIRE BEHAVIOR

Frequent low-intensity fire was the norm, with historic fire intervals averaging about 15-year intervals but with a high degree of variability in fire intensity and tree-killing effects.

With many years of uninterrupted vegetation growth (fuel buildup), high-intensity, stand-replacing fire is likely.

FIRE REDUCTION ACTIONS

Return the composition to fewer and wider-spaced trees and maintain or encourage species diversity by thinning. Encourage natural openings to break fuel continuity. Avoid having young trees, especially Douglas fir, beneath the canopy of older taller trees. Remove either one or the other, at least along the perimeter of tree groups. Control bark beetle infestations. Introduce managed-fire broadcast-burning to sustain a low fire-intensity forest condition. Do this only after safe fuel levels are achieved by other means.

PONDEROSA PINE WOODLAND

TYPE 3:
PONDEROSA PINE
Pinus ponderosa
Forest Code 2054

TREE FIELD GUIDE FACTS

Bark: Dark on young trees; nearly 3 inches thick, red-orange and furrowed into large flat scaly plates on mature trees.

Needles: Evergreen needles are stiff, dark yellow-green; 3 – 7 inches long; typically in bundles of 3 that form tufts near the ends of branches.

Fruit: Light red-brown cones; 3 to 4 inches long; egg-shaped with scales that are tipped by a sharp point; small long winged seeds.

Elevation: 6,300 to 9,500 feet.

Height: 40 to 160 feet.

Habitat: Dry, nutrient poor soils in open park-like stands or with Douglas-fir, Rocky Mountain juniper and spruce.

Relation to Fire: Resistant to fire, due to open crowns, thick, insulating bark, self-pruning branches, high moisture content in the leaves and thick bud scales. Ponderosa pine is a fire adapted species and generally needs fire to survive.

The ponderosa woodland type makes up 11% of the vegetation mapped in the fire district. This type's percent composition in each management unit is: Tahosa 1%, Meeker Park 6%, Little Thompson 21%, Wild Basin 8%, Allenspark 3%, Dry St. Vrain 18%, Middle St. Vrain 30%, and Peaceful Valley 3%.

COMPOSITION

Ponderosa pine is the dominant tree species often existing in pure or almost pure stands on coarse texture soils having good aeration. There is a large variety of woody shrubs and grasses in the understory. This vegetation type occurs in between lower elevation grasslands and the mixed conifer forests, on warm, dry exposed sites.

Rocky Mountain and common juniper are usually present. Douglas fir may occur on north-facing slopes. Open meadows interspersed between timber stands are common depending upon soils and moisture. Vegetation in this type must survive periods of drought during the growing season. Ponderosa tends to grow in recognizable groups of trees. Regeneration follows any disturbance that bares mineral soil when seed and moisture are available.

FIRE BEHAVIOR

Historically, there were far fewer trees than there are today, partly because frequent, low-intensity surface fires periodically killed many young trees that had regenerated after the previous fire. A sustainable fire-resistant living forest condition remained because of frequent change-initiating fire disturbance.

Mostly surface fires occurred, carried along by tree regeneration, grass, and shrub vegetation, occasionally torching individual trees or tree groups. Crown fires may have occasionally occurred in drought or windy conditions usually on steep terrain, and were likely encouraged by bark beetle infestations.

With the dense-crowed tree condition that exists now after a century of effective fire exclusion, crown fires are very likely without some kind of fuel management.

FIRE REDUCTION ACTIONS

Drastically reduce the number of trees. Manage in groups and make frequent canopy openings or grassy clearings between tree groups. Increase greatly the space between tree crowns by thinning or harvesting. Wide spacing to recreate a historic fire resistant “open forest” condition is recommended for these very windfirm species.

Control bark beetles to prevent rapid accumulations of tinder dry fuel. Dispose of slash by burning or chipping. Reintroduce managed fire, which will contribute a natural appearance to the fired landscape mostly from the manner in which fire kills trees randomly.

VEGETATION TYPE CLASSIFICATION DESCRIPTIONS,

past and expected fire behavior and actions to reduce fire danger were given for each of 12 vegetation types.

TYPE 4:
ASPEN/MIXED CONIFER
Forest Code 2061

ASPEN/MIXED CONIFER

The Aspen/Mixed Conifer type makes up 10% of the fire district vegetation. The percent composition by unit is: Tahosa 12%, Meeker Park 12%, Little Thompson 8%, Wild Basin 12%, Allenspark 13%, Dry Saint Vrain 16%, Middle Saint Vrain 1%, and Peaceful Valley 11%.

COMPOSITION

This type occurs generally between 8000 and 11000 feet, sometimes lower. Aspen grows in association with spruce, fir, and pine depending upon elevation, generally on soils with finer texture than the course, gravely ones supporting mostly conifers. This is considered a fire-adapted community of plants, meaning that without fire, the conifers overtop, shade out, and replace the aspen over time. The presence of just a single aspen tree means that an extensive root system likely exists and the site would have supported a mostly all-aspen cover type historically.

FIRE BEHAVIOR

Most of this type today represents the later stages of succession when conifers have had time since the last fire disturbance to contribute increased flammability. Low intensity surface fires of 10 to 20 year intervals used to kill the invading conifers and encourage regenerative suckering of the aspen. Now there is the likelihood of surface fires becoming intense, stand-replacing crown fires, depending upon the density of invading conifers.

Fire Reduction Actions

Aspen's physical properties resist intense fire behavior. Restore areas of this type back to predominantly aspen by cutting out the conifers, with occasional conifers and groups of conifers left for diversity. Reintroduce fire with managed broadcast burning and protect the resulting aspen regeneration from domestic livestock grazing. If there is not much suckering aspen in an area, deer and elk grazing may damage aspen regeneration. Try to accomplish aspen regeneration over large areas, perhaps with the cooperation of many different owners. Large quantities of new aspen can reduce concentrated-damage to new aspen shoots.

ASPEN FOREST

TYPE 5:
ASPEN FOREST
Populus tremuloides
Forest Code 2011

TREE FIELD GUIDE FACTS

Bark: Green-white, smooth and thin with raised dark patches; on very large trees, trunk base is often gray, thick and furrowed.

Needles: Broad-leaf foliage is bright green above and dull green below; rounded with a pointed tip, 1 to 3 inches wide on a flattened leaf head; nearly round and sawtoothed.

Fruit: Fruit are catkins; up to 4 inches long; many light green capsules contain 6 to 8 tiny, cotton-like seeds.

Elevation: 6,500 to 11,500 feet.

Height: 35 to 50 feet.

Habitat: Many soil types, especially on well-drained, sandy and gravelly slopes; often in pure stands.

Relation to Fire: Easily killed by fire, but quick to send out many sucker shoots; readily colonizes after a fire.

Aspen comprises 10% of the vegetation in the fire district. The percent composition of each plan management unit is: Tahosa 31%, Meeker Park 4%, Little Thompson 4%, Wild Basin 3%, Allenspark 20%, Dry Saint Vrain 3%, and Middle Saint Vrain 1%, Peaceful Valley 7%.

COMPOSITION

Aspen is a very adaptive tree species and can live in a broader range of environments than most plants found in association with aspen. Conifers are generally not found in this type that exists between 7000 and 11000 feet, growing on deep, cool, moist, fine-texture soils. Stands of aspen may be single-storied (mostly the same age and height) or multi-storied (many different ages and sizes of trees together). Aspen regenerates itself by sprouting, although its light cotton-like seed is produced from catkins, widely dispersed by wind, and seed regeneration on bare mineral soil is possible. Aspen is the most widely distributed tree species in the world.

FIRE BEHAVIOR

Fire seldom originates in aspen; fire in aspen usually comes from adjacent forest types. Aspen's physical properties contribute to a generally low-intensity burning with fire spread usually dependent upon the associated herbaceous (wildflowers) shrubs and grass vegetation in the understory.

FIRE REDUCTION ACTIONS

Encourage more aspen regeneration and plant aspen. Because of the low-intensity burning qualities, aspen is a good choice to have in the vicinity of structures, if nearby trees are desired. Aspen also helps break up the continuity of conifer forest to reduce the likelihood of crown fires moving uninterrupted through the forest canopy.

Aspen may be planted with seedlings, transplanted with root clumps, or purchased in multiple-stem, burlap-wrapped root clumps. Having diversely aged stands of aspen is desirable for sustainability. Aspen regeneration can be encouraged by patch-cutting or thinning, although self-perpetuating stands may not require disturbance for regeneration. Tree mortality can provide openings in aspen stands that stimulate sprouting. Prescribed fire may be an appropriate tool to treat diseased stands and encourage disease-free aspen sprouts.

TYPE 6:
COOL MOIST, MIXED CONIFER
Forest Code 2052

COOL MOIST, MIXED CONIFER

This forest type makes up 6% of the district vegetation. The percent of this vegetation in each management unit is: Tahosa 5%, Meeker Park 20%, Little Thompson 1%, Wild Basin 18%, Allenspark 6%, Dry Saint Vrain 4%, Middle Saint Vrain 2%, and Peaceful Valley 3%.

COMPOSITION

This is a highly variable transitional forest, dependent upon moisture and soils, aspect, and slope between 7000 and 10500 feet elevation, and in between the dry mixed conifer type and the sub-alpine zone. There is much less ponderosa pine here than in the dry mixed-conifer type, but it does exist often in small groups or isolated locations. Douglas fir and ponderosa pine can share canopy dominance. Blue spruce will be near moisture. Doug-fir, ponderosa pine, and lodgepole pine can group together, and Engelmann and blue spruce, aspen, and juniper grow in association. Lodgepole exists here and has been favored over time by fire exclusion.

FIRE BEHAVIOR

Fire, insects, and diseases are common disturbance agents. Historic fire frequency intervals were highly variable every 6 to 60 years for surface fires and 100 years plus for stand-replacing crown fires. Post-lethal fire regeneration is dependent upon the species present on a site before a disturbance.

FIRE REDUCTION ACTIONS

Promote a mosaic forest condition of many different species, ages, and densities interspersed with forest openings to break up fuel continuity. Patch cutting or thinning may be appropriate depending upon the species and tree conditions. Favor aspen if a tree cover is desired near structures. Create fuel breaks and meandering fire lanes through the timber for emergency access. Control bark beetle infestations to prevent rapid build-ups of dead and down fuel. Introduce managed fire after fuel quantities and continuity have been safely altered from present dangerous condition by mechanical means.

SPRUCE/FIR FOREST

TYPE 7:
SUBALPINE FIR
Abies lasiocarpa
Forest Code 2055

TREE FIELD GUIDE FACTS

Bark: Gray and smooth with resin blisters while young; shallow fissures and scaly when mature.

Needles: Evergreen needles are dark, blue-green with silvery lines on both surfaces; 1 to 1½ inches long; flat and blunt tipped; crowded and curved upward on twigs at nearly right angles.

Fruit: Upright, cylindrical, very dark purple, 2 to 4 inches long in the upper park of the crown; fine, hairy, cone scales; long, broad-winged seeds. These deciduous cones fall apart when mature so they are rarely found on the ground.

Elevation: 8,000 to 12,000 feet.

Height: 60 to 100 feet.

Habitat: Cold, high elevation forests; with Engelmann spruce and other conifers.

Relation to Fire: Generally killed by low intensity fires because of thin, flammable bark, shallow roots, low growing branches, and dense growing conditions. Seeds readily germinate on recently burned ground.

TYPE 7:
COLORADO BLUE SPRUCE
Picea pungens

TREE FIELD GUIDE FACTS

Bark: Gray-brown with thick scales on mature trees.

Needles: Evergreen needles are blue or light-green with white lines; 1 to 1¼ inches long with thin, long, flexible and irregularly toothed scales; contains paired , long-winged seeds.

Fruit: Shiny light-brown, cylindrical cones; 2½ to 4 inches long with thin, long, flexible and irregularly toothed scales; contains paired, ong-winged seeds.

Elevation: 6,700 to 11,500 feet.

Height: 70 to 115 feet.

Habitat: Well-drained, sandy soils; moist sites of narrow bottomlands or along mountains streams; often in pure stands.

Relation to Fire: Easily killed by fire due to thin bark, shallow roots and low branches.

SPRUCE/FIR FOREST (continued)

TYPE 7:
SPRUCE/FIR FOREST
Abies lasiocarpa
Forest Code 2055

This forest type comprises 3% of the fire districts vegetation. The plan management unit component is: Tahosa 5%, Meeker Park 0%, Little Thompson 0%, Wild Basin 0%, Allenspark 11%, Dry Saint Vrain 0%, Middle Saint Vrain 0%, and Peaceful Valley 2%.

COMPOSITION

The type is limited to the sub-alpine region between 9500 and 11000 feet. Engelmann spruce and subalpine fir are the dominant tree species, with occasional limber and bristlecone pine plus juniper on drier sites. Usually, because spruce and fir are shade tolerant (grow well under a canopy of older trees) there will be many different ages and sizes of trees present at once. An occasional aspen patch, Douglas fir, ponderosa pine, or lodgepole may be seen, but spruce and fir dominate the canopy. The zone is cold year round, with frost possible any day of the year. Precipitation is predominantly snow that may persist into late summer. Except during drought, fuels remain moist.

FIRE BEHAVIOR

Disturbance may include blow down, insect outbreaks, and stand-replacing fire. Fire intervals are 150 to 300 years or more between fires. Stand-replacing fires may become hundreds of acres to thousands of acres in size, depending upon fuel continuity. Smaller, lightening-caused fire disturbances of 10 acres or less are possible depending upon weather.

FIRE REDUCTION ACTIONS

Most of this forest type in the district is above and removed from human development, although occasional cabins or homes may exist here. Cooperate with the appropriate government land jurisdiction to create breaks in the fuel continuity so as to reduce the likelihood of a crown fire in this type from coming down and reaching developed areas. When lodgepole and mixed conifer types are contiguous with spruce fir, patch cut openings or heavily thin in the wind-firm lower elevation forest. Use of prescribed fire in spruce fir would require special considerations. It may be best to isolate the fuel type and let nature take its course.

An excellent example of this forest type that is not presently subject to crown fire can be seen on the mountain side to the west when driving I-70 west over Vail Pass. Here, after more than 70 years since a big, stand-replacing fire, the spruce is growing in patches with mostly treeless open spaces between the patches of trees. The forest is very attractive and safe. Encouraging this kind of fire-resistant condition by harvesting spruce-fir may be another strategy to reduce fire danger, but in areas without access, it is not practical.

MOIST/RIPARIAN VEGETATION

TYPE 8 & TYPE 9:
MOIST/RIPARIAN VEGETATION
Forest Codes 2159 & 2160

Two categories of riparian vegetation separated by elevation differences are combined here for descriptive purposes and comprise about 4% of the total vegetation in the fire district. Percent of vegetation by management unit is: Tahosa 3%, Meeker Park 5%, Little Thompson 5%, Wild Basin 5%, Allenspark 3%, Dry Saint Vrain 1%, Middle Saint Vrain 4%, and Peaceful Valley 3%.

COMPOSITION

There are riparian plant association distinctions between the high-elevation sub-alpine and the mid-elevation montane regions; however, descriptions are generalized here for simplicity. Riparian vegetation may be stream side, lake or pond side, floodplain and wet meadows, or bogs. Depending upon elevation limitations, plants include willows and cottonwoods, sedges, grasses and other herbaceous (leafy) vegetation, aspen, and conifers (usually spruce and fir, but sometimes pines). Disturbance is usually by flooding, wind-throw, beavers, avalanche, and seldom low-intensity fire made possible during drought.

FIRE BEHAVIOR

The moisture associated with riparian systems promotes very low fire frequency and low-intensity fire compared with adjacent uplands. Wet meadows seldom burn. If burned, pre-fire herbaceous vegetation is not permanently destroyed and rapidly recovers, often in the same growing season. Top-killed woody plants will sprout from stems or roots. If an adjacent conifer fire's heat does kill riparian conifers, regeneration of conifers will be by seed and take long periods of time to reestablish, giving way to other early succession stage vegetation on the riparian site.

FIRE REDUCTION ACTIONS

The stringers of riparian vegetation that follow streams serve as a fuel break. Limit any possible "fuel bridge" danger that the presence of dense conifers here might cause with isolation. Do this by thinning or harvesting conifers only well away from the riparian environment. Because riparian systems add very little fire danger, and in fact contribute to reduced fire danger, it is recommended that vegetation here be left alone.

WOODY SHRUBLANDS

TYPE 10 & TYPE 11:
WOODY SHRUBLANDS
Forest Codes 2086 & 2080

Two shrub vegetation types are combined here for simplicity. Woody shrublands comprise just 2% of all the vegetation in the fire district. The percent shrubland vegetation in each management unit is: Tahosa 1%, Meeker Park 1%, Little Thompson 4%, Wild Basin 2%, Allenspark 4%, Dry Saint Vrain 4%, Middle Saint Vrain 0%, and Peaceful Valley 0%.

COMPOSITION

Woody shrubs dominate on sites where dry conditions and poor soils may limit tree growth. Shrubs, herbaceous (leafy) plants, and some grasses will grow in association. Shrubs include mountain mahogany, rabbitbrush, bitterbrush, snowberry, chokecherry, sumac, and sagebrush.

FIRE BEHAVIOR

Fire plays an important role to perpetuate this important wildlife habitat vegetation cover type. Most shrubs either regenerate by root sprouts or by seed on bare mineral soil. Fire exclusion may cause an invasion by trees on shrub sites with just enough moisture for trees. With dry and windy conditions and sufficient understory grass to carry fire into dense woody shrub branches, stand-replacing fire (low crown fire) is the norm. Otherwise, shrublands are fire resistant. Since shrubs quickly recover after fire, short fire return intervals (3 to 10 years) are possible but highly variable.

FIRE REDUCTION ACTIONS

Prescribed fire is a useful and the most practical tool to reduce woody shrub volumes and initiate young vigorous sprouting that invigorates shrub growth, and to kill invading trees.

GRASSLANDS

TYPE 12:
GRASSLANDS
Forest Codes
81 & 82

About 2% of the vegetation in the fire district is typed as grasslands.

COMPOSITION

Grasslands may be natural meadows, pasture, and hay lands.

FIRE BEHAVIOR

Grass is a fine fuel. It quickly changes in moisture content to match surrounding air humidity. With cured grass, sometimes this can happen in just one hour. That is why fire behavior experts refer to grass as a one-hour fuel. A previous day may have had rain, but grass can burn the very next day. Grass fires are dangerous as they spread quickly, often catching people off-guard. Surprising to many people, numerous fire fatalities are caused by grass fires.

FIRE REDUCTION ACTIONS

Haying, and grazing by domestic livestock and wildlife reduce fuel volumes. Perimeter fuel breaks such as roads and trails can isolate this fuel fairly well, though in some conditions flame lengths can exceed the width of breaks. Prescribed fire is a useful tool to periodically reduce fuel volumes, eliminate thatch and invading tree species, and invigorate grasslands with a flush of nutrients in the form of ash. Spring burns result in late spring new growth.

VEGETATION TYPE CLASSIFICATION DESCRIPTIONS, past and expected fire behavior, and actions to reduce fire danger were given for each of 12 vegetation types presented in 10 descriptions.

The concept of managing vegetation to reduce fire danger was presented. This idea may seem foreign to some residents whose experience has only been to leave the forest alone. The forest has not been totally left alone, however. The principal agent of forest change and sustainability—fire—has been mostly excluded by effective suppression for a long time and on a grand scale. As a result, forest fuels have accumulated dangerously far beyond historic natural levels.

A growing human presence in the forest environment makes continued suppression of unwanted fire essential to protect lives and property. Yet fuel quantities have accumulated to such a degree as to make fire suppression very difficult if not impossible in some circumstances. Therefore, fuel management is essential to the community's safety.

The different kinds of fuel reduction actions presented are general in nature and fit well with the ecology of each vegetation type. Progress with mechanical thinning and harvesting of excess trees will have to come about gradually and over a long period of time. There are not yet enough human skills, equipment, and markets available for the community to sufficiently address the entire forest fuels problem. But it is important to start.

Prescribed fire is a tool mentioned as appropriate to maintain low fire danger for a number of the vegetation types. After several generations of people learning to fear fire, this is likely to be a foreign concept to many property owners.

The components of safe prescribed fire management are covered in the Resources Section under Prescribed Fire. Once fuels are reduced sufficiently to safely reintroduce managed fire, this tool can help keep fuel levels safe in a cost-effective manner and by a means that are complementary to the natural ecology of the vegetation.

For residents and neighborhoods wishing to pursue fuel management practices, the next step is to look at specific sites and develop action plans that are appropriate for each property owner involved. Additional information, professional help, and grant funding sources may be found in the Resources Section of the plan and the Allenspark CWPP website: **http://cwpp.allenspark.info/index.html**.

VEGETATION RECOMMENDATIONS

Plan and implement cooperative neighborhood fuels (vegetation) management projects or individual fuel-reduction projects when neighborhood projects are not practical. Involve the appropriate government land jurisdiction to include beetle control and fuels management on adjacent public lands. Managing vegetation to reduce fire danger is only one component of this plan.

BY JOHN CHAPMAN

THE IMPORTANCE OF DEFENSIBLE SPACE TO MITIGATE FIRE DANGER AND BEHAVIOR

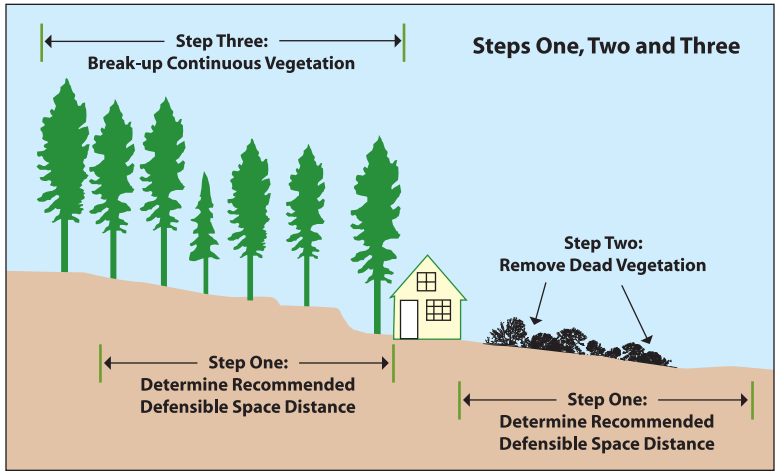
You, as residents of the Allenspark CWPP area, are the most important component of the plan!

The Community Wildfire Protection Plan discusses fire, topography, vegetation, and fire risk, but it is our actions that are truly meaningful in protecting life, property, and the beauty of the area in which we live. Grant requests can be written, but funds are always limited. Cooperative agreements can be signed with adjacent land management agencies but they too have competitive priorities. It is the collective acts of the community that can make a real difference in how fire behaves.

Wildfire is a natural part of our ecosystems. It has been a major factor in creating the landscape we love in Allenspark. We need to take actions that enable living with fire in and around our neighborhoods. To achieve that goal, we can take positive steps to make our homes and properties less vulnerable to wildfires.

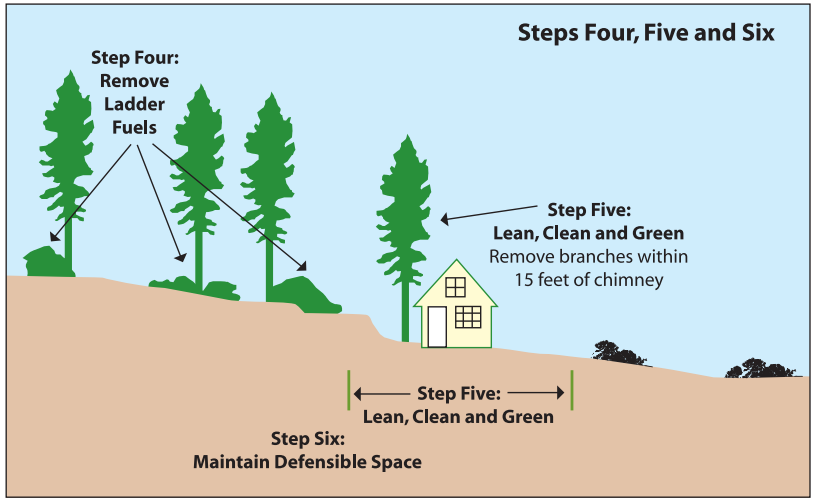
To quote the Colorado State Forest Service, “Fire is capricious. It can find the weak link in your home’s fire protection scheme and gain the upper hand because of a small, overlooked, or seemingly inconsequential factor. Start with the easiest and least expensive actions. Begin your work closest to your house and move outward.”

You do not have to clear-cut your property! Defensible space can be created in an esthetically pleasing manner that maintains privacy and the natural character of the community. A defensible space is an area, either man-made or natural, where the vegetation is modified to slow the rate and intensity of advancing wildfire. It also creates an area where fire suppression operations can occur and helps protect the forest from a structure fire. While a CWPP cannot mandate you take personal action on your property, it is hoped that residents will work to protect the entire Allenspark area once they see how defensible space can be attractively created and realize that when everyone takes action the broader neighborhood landscape is much better protected than if just one parcel is defensibly addressed.



RESEARCH INDICATES HOMES WITH FIRE-RESISTANT ROOFS and defensible space have an 85% chance of surviving a wildfire, while homes with neither of these characteristics have a 15% survival rate.

An effective defensible space consists of flame resistant vegetation (aspen or large-diameter trees without lower limbs) within 30 feet of the structure, the use of low flammability landscaping plants, mowed grass, lack of firewood stacks, and absence of fuel tanks immediately adjacent to structures. The defensible space should be larger on the downhill side for structures built on slopes. Most of this work can be done using little more than hand tools. Defensible space should also be created around out buildings.



These efforts can be encouraged and coordinated through community meetings, training, and project demonstration days, and using properties with completed defensible space for site visits to show what can be done in a pleasing manner. Planning and working together on neighborhood projects to provide each other assistance can be effective: assisting each other and the elderly; sharing ladders and tools, and working together on larger neighborhood area needs such as thinning near roads. There may be areas where ground fuels are especially thick in drainages that run through the neighborhoods. These tend to be on individual lots, but their clean up will benefit the neighborhood as a whole.

SUGGESTED ACTIONS TO ACHIEVE DESIRED RESULTS

Recommended action items are divided into a number of fuels mitigation and nonfuels-related categories. Hazardous fuels reductions categories include: defensible space, shaded fuel break construction, and area treatments. Nonfuels-related actions include: education and outreach, building upgrades, fire department preparedness, and access/egress improvements. Some of these projects require the support and coordination of the fire department and other governmental entities as well as substantial planning and funds. However, those actions most essential to the preservation of homes during a wildfire rest in the hands of the individual.

Following is a brief summary of defensible-space actions. Excellent pamphlets providing instruction in defensible space, enhancement of structural protection from ignitability, and building and landscaping materials are available at the Colorado State Forest Service website for wildfire publications, and at the national website for FireWise. Several of the pertinent Colorado publications are referenced in the Resources section of the Allenspark CWPP website: **http://cwpp.allenspark.info/index.html.**

DEFENDING THE WATERSHED

The neighborhoods in the Allenspark area exist in several ecosystems, but most share the characteristics of being surrounded by dense forests. The "Vegetation is Fuel" section describes the various vegetation types and fuel behaviors we share. Thinning and patch cutting will reduce the ability of a fire to crown, or burn from tree canopy to tree canopy, and it will reinvigorate the forest's health, benefiting flora and fauna as well as the human community. Selective tree removal is important, but it does not prevent fires outright. Also recognize that selective cutting is different from clear-cutting. Removing too many trees at a poorly selected location may promote erosion and blow-down of trees opened to wind channeling, and threatens the health of the forest and its inhabitants.

PROPERTY AND HOME MITIGATION STRATEGIES

1. Use the principles of defensible space to help drop fire from tree crowns down to the surface. Thin trees so that the branches don't touch each other and remove low-lying branches, called ladder fuels, that allow a fire to "climb" into aerial fuels. Remove ladder fuels to 8 feet above ground and thin trees throughout the property.
2. Fire burns faster uphill than downhill or laterally. As fire burns, it preheats fuels above it. Therefore, property owners need to remove more fuels (thinning) on the downhill side of the house than the uphill side.
3. Most structures DON'T ignite from direct flame contact. Wildfires tend to ignite structures via radiant heat (heat that doesn't warm the intervening air but does warm objects). As a fire is burning, the heat passes through air and windows to objects that warm to the point of ignition then smolder for hours. Firefighters have learned to return to burned-over neighborhoods to extinguish these smoldering fires before they become active structure fires. You have an important role making the house resistant to radiant heat: use a non-combustible roofing material and spark arresters on chimneys, non-combustible siding, and prevent woody debris from accumulating under decks and in gutters. Also, use heavier fabrics or shutters to protect windows and keep the radiant heat out.

4. Embers or fire brands also ignite house fires. As fires burn, they suck in oxygen and push heated air upward. That column of rising air contains embers and tosses them anywhere, including onto unburned fuels. These “spot fires” are tough to manage. The Hayman fire created spot fires miles downwind. Embers can get stuck in “traps” on roofing, such as beside chimneys or in gutters. If the roofing material is non-combustible, the risk is minimal. If the roofing is flammable wood shake shingles and those shingles ignite, they can become embers and start dozens of new fires. Clean pine needles out of gutters and off roofing, and rake them from the yard.
5. Large windows are a threat to homes because they allow radiant heat to enter the structure. Remove lacey and other decorative curtains from windows when a fire approaches to prevent the radiant heat from igniting them through the glass. Large windows, especially single-panes windows, also are vulnerable to breaking from debris blowing in fire-generated winds. A broken window could allow embers to enter the structure.

VISIBLE SIGNING

Homes need visible address signing at the ends of their driveways, but some don’t have it. Firefighters, ambulances, and law enforcement respond based on street addresses and last names. Both forms of identification should be easily visible from the road, especially after dark. Firefighters cannot defend homes they cannot find.

EVACUATION PLANNING IS CRITICAL

You may have five hours to evacuate; you may have five minutes, so create an evacuation plan for your family in advance of that stressful moment. Include a meeting place outside your area, and a family member or friend outside of your area who can be a point of contact you can call with updates on your status. Family members and friends can call or e-mail that person to learn about your well-being without overloading the local telephone circuits needed by emergency crews. Think about the Four Ps: Pets, Pills, Papers, and Photos.

Consider compiling a list of those important documents, photographs, and memorabilia that you want to remove in case of evacuation to ease the task if it becomes necessary. If you do leave, set a ladder in the driveway and connect garden hoses to spigots so that firefighters can use your equipment to help defend your home.

ROADS & EMERGENCY ROUTES

BY GENE MACKEY

FROM ANCIENT ROME TO THE WAGON TRAINS of the western crossing of America, roads have always been the key to getting from one place to another efficiently. In this modern world, most of us use roads on a daily basis. A road that we drive every day may seem adequate, but when the world around us is on fire, that road can be a death trap.

Our wooded mountain terrain lends itself to narrow, heavily fueled dead-end roads. **How easily can fire fighters safely get to your house? And how safely can you evacuate? These points must be considered long before the flames are in your neighborhood.** This brief road inventory and recommendations are meant to start neighborhood discussions. Minor modifications to your road or driveway could save your life.

Most roads accommodate travel in both directions, but in the event of a forest-fire evacuation heavy traffic will be traveling out and at that same time, large fire trucks and emergency vehicles will be traveling toward the fire. The efficiency of the evacuation is critical, as is the speed that emergency vehicles can get into position. Therefore, simultaneous egress and ingress are very important to think about when looking at a road.

The Allenspark Fire Protection District (the boundaries for our CWPP) has two state highways running through it, Highway 7 and Highway 72. Both are wide, with two 14-foot lanes and eight-foot shoulders, except for the stretch from Wind River Ranch on Highway 7 (mile marker 7) to past our district's boundaries near Mary's Lake road. In this stretch there are minimal shoulders.

While evacuation can be made in either direction (toward Lyons, Estes, or Nederland), in the event of a forest fire the main highways could be closed to through traffic at any point of the road because of proximity of fire or firefighting operations. **Persons who would use this road for evacuation should be aware of possible closures and fire personnel should have a plan to quickly direct traffic if a closure is called.**

The AFPD has 28 county-maintained roads between Boulder County and Larimer County. Most of these have 60 feet of deeded right-of-way and an average of 24 feet of drivable surface, adequate for a fire truck and a car to pass. Three of the Boulder County roads have "prescribed rights-of-way" which means the roadway from ditch to ditch is all that is deeded to the County.

These include Big Owl road (CR 82E), Cabin Creek road (CR 82), and Triple Creek road (CR 90). These have an average width of 14 feet, a tight squeeze for a fire truck and a car to pass. **These roads should be examined to make them wider where possible and at least make turnouts for fire trucks at a minimum of every 1000 feet.** Widening these roads would require negotiations with the landowners, many of whom have small properties and would understandably not want the road encroaching on their property any more than it does. There are also large landowners along these roads who may be willing to give up an extra 6 feet of property to make the road safer for everyone.

Because of the narrowness of these roads, vegetation (fuel) along the roadways should be examined even more critically than on other roads. While privacy screening is often desired, thinning trees, brush, and branches and removing dead wood along the roadways would make the road a more effective fire break and lessen the danger of burn-over by a fire. Done with good planning, such thinning can lessen the dangers wildfire poses without greatly reducing the screening effect. Sections of County Road 90 have large fuel loads that could make egress and ingress dangerous for all. Triple Creek road is the only egress for over forty homes in a heavily fueled area, making it a very important road to protect in the event of a wild fire. There is another road that crosses private property within Meadow Mountain Ranch but this road is behind locked gates and is narrow and heavily fueled. **Negotiations should be made for possible use of this road for evacuation and emergency use to and from the Triple Creek area.** If suitable permission can be acquired, all residents should be made aware of this alternate route and if it is designated an escape route; some widening and thinning should be done.

The AFPD has numerous roads that are minimally maintained by the US Forest Service or private landowners. **For safety of the residents and fire fighters, these should all be examined for width, fuel load along the roadway, and areas where fire trucks can pull over.**

How easily can fire fighters safely get to your house? And how safely can you evacuate? These points must be examined long before the flames are in your neighborhood.

Current codes for driveways call for a pullout every 400 feet of at least 40 feet in length to accommodate a fire truck and passing cars. They also call for roadways to have 12 foot wide clearances and roadway, as well as cleared 12 foot vertical clearances to allow for high-clearance emergency vehicles. Roads that should be maintained to at least at this minimum clearance include Rockwood Lane; County road 113 North, South, and East; Tahosa Roads North and South; Wagener Road; Norske Trail; Iron Clad View Drive; Haugen Slide Road; Arrowood Drive; Big John Road; and numerous private drives and other roads as well. Bunce School Road and Conifer Hill Road each access US Forest Service land and would be used heavily by emergency vehicles if a fire occurred in those areas.

Work to widen roads or thin fuel on the sides of roads can be a matter of community project time with a chain saw or hiring contractors to move dirt and trees. Property owner's rights must be upheld in all instances, but in many cases neighborhood cooperation can make the roads safer for everyone. Remember, every fire fighter has one mantra drilled in at every training session: "Is the scene safe?" If it is not, the fire fighter is trained to not put him/herself or the equipment at risk. An inadequate road to your house may cost you your home.

STAGING AREAS

In the event of a large forest fire, many people and large equipment will be brought here to try to stop the fire. A proposed staging area would need room to accommodate the fire fighters and their needs of tent areas, food, and latrines. An area would need room to bring in and park fire trucks and tractor trailers carrying bulldozers and other specialized equipment for large fire lines. It would also need an open area to park and fuel helicopters for water-bucket operations. In our area, the obvious choice would be the large church camps that we have in our district. Covenant Heights and Highlands Camp have agreed to allow room for a fire camp of this magnitude and would also be willing to open their kitchens for such an operation. Additional areas could also be the Salvation Army Camp and the Meadow Mountain Girl Scout Camp. Although the road to the latter is poor access for large trucks, they do have a large open area for tent camps and adequate parking for various fire apparatus. **A relationship should be maintained with these camps to allow an easy conversion to a fire camp in an emergency situation.**

SUMMARY OF RECOMMENDATIONS

- Form and maintain a plan for emergency traffic control.
- Widen narrow roads and thin fuel along roadways.
- Gain permission and inform residents in the Triple Creek area of an alternative escape route through the Meadow Mountain Ranch. Inform the residents if permission is granted and work out a system to alert residents if the alternative route should or should not be used during a particular emergency.
- Examine all roads and driveways for adequate fire operation access.
- Maintain a relationship with owners of possible staging areas.

HOW EASILY CAN FIRE FIGHTERS SAFELY GET TO YOUR HOUSE? And how safely can you evacuate? These points must be examined long before the flames are in your neighborhood.

EMERGENCY WATER SOURCES

BY HOWARD HARMS
Inventory and mapping by Eric Philips &
Tony Simons, Boulder and Larimer Counties

SOME EMERGENCY WATER SOURCE LOCATIONS within the fire district are already identified and mapped by our fire department. Visiting firefighters who may be here to assist will benefit with mapped sources.

Water, even rising humidity, is generally the most effective agent to cool a fire for suppression. Water sources, at least some sources close to a fire, are often very limited. The more water there is available, and the more locations for firefighters to obtain water, and get back to the fire quickly, the better chance to contain unwanted fire.

Some emergency water source locations within the fire district are already identified and mapped by our fire department. Visiting firefighters who may be here to assist will benefit with mapped sources. Within the town of Allenspark, some pressurized fire hydrants are installed as part of the water district's domestic water system.

There are six drafting hydrants (see Map or Boulder County Water Sources at **http://cwpp.allenspark.info/watersources.jpg**) between Aspen Lodge and Peaceful Valley. These are sometimes called dry hydrants because there is only air in the hydrant and a fire engine must draft the water to pull it up from its freeze-proof source.

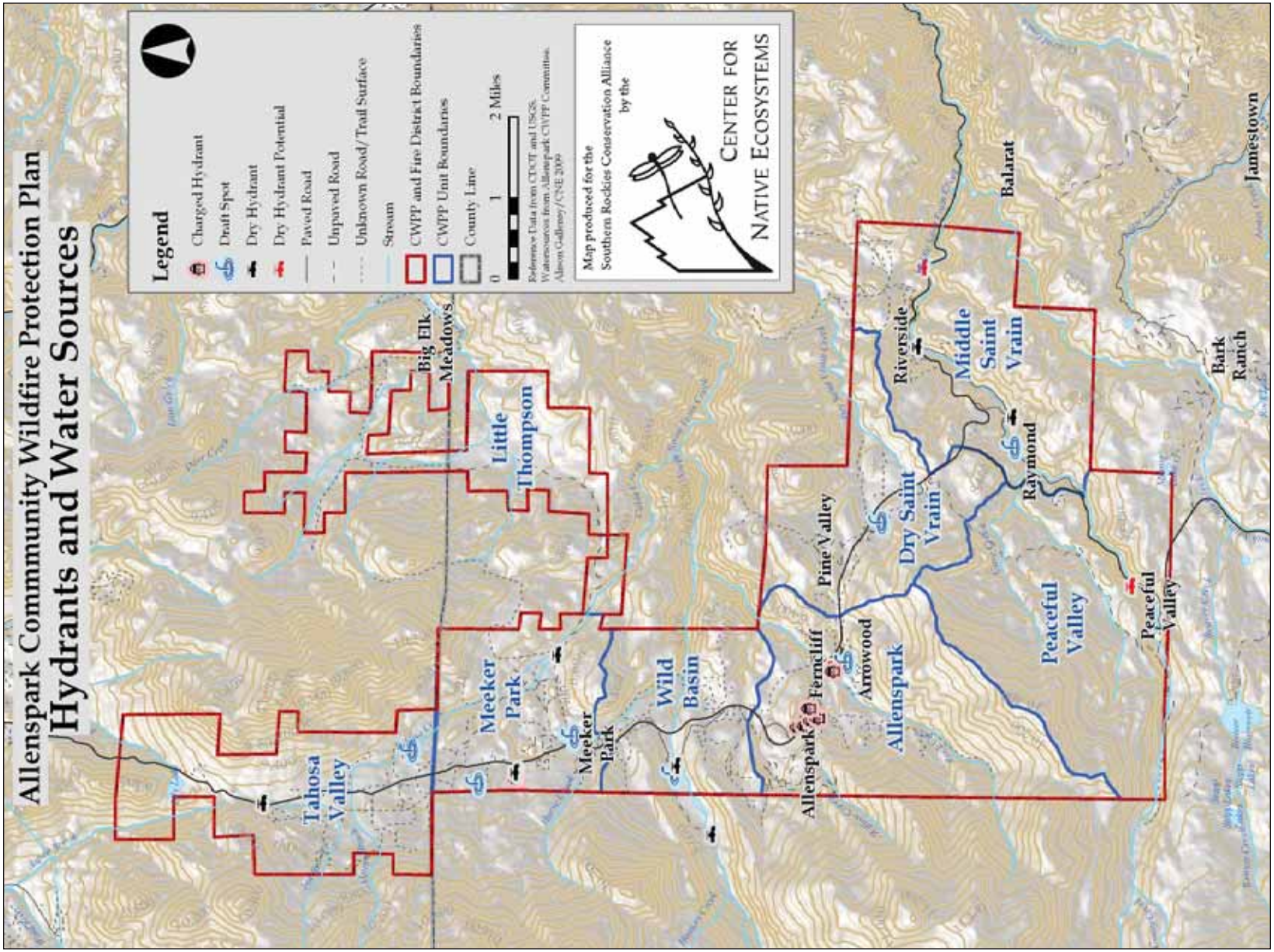
CATEGORIES OF EMERGENCY WATER SOURCES AND THEIR STANDARDS FOR USEFULNESS ARE LISTED:

1. **Pressurized hydrants,** *PH*—charged with water under pressure, equipped with a valve and hose fittings, and serviceable in all weather conditions.
2. **Draft Hydrant (dry-hydrant),** *DH*—not charged with water but an empty air-tight pipe equipped with a hose fitting, and the lower submerged end below an all-weather water source, usually a stream or pond. The water level in the pipe must not exceed 10 feet below the adjacent driving surface, and there must be good access for a fire engine to park and draft with no more than two 10 foot long hard suction hose lengths. (Drafting is limited by elevation and distance from the water to the pump)
3. **Cisterns,** *CN, CP*—Tanks of water protected from freezing generally by burying underground, often equipped with an air-tight pipe with a hose fitting for drafting, or just a lid to be removed for drafting access. There may be neighborhood or private cisterns.

4. **Engine Draft Pools,** *EDP-L, EDP-M, EDP-H*—Sources of water to draft with fire engines during periods of above freezing temperatures. The water level and driving surface must be similar to Draft Hydrant locations, but may not have year-round serviceability. Also, flow rates in streams must exceed the draft capability of the engine, in gallons per hour. A temporary check dam will be installed in streams with plastic sheeting and a suction hose with a strainer will be attached to the fire engine's pump to draft. Low flow = 50 gallons/minute, Medium flow = 50-300 gallons/minute, High flow exceeds 300 gallons/minute.
5. **Portable Pump,** *PP-L, PP-M, PP-H*—Sources of water where a portable pump can be positioned immediately adjacent to a check dam, to draft and pump water through a hose to fill a waiting fire engine parked within 200 feet of the pump location. Engine draft levels of flow apply.
6. **Helicopter,** *HB, HT, HS*—these are sources capable of providing water to a bucket-equipped helicopter or internal-tank helicopter, or snorkel-equipped helicopter to fill and then fly to the fires and drop water. Some internal-tank helicopters must land to fill. Snorkel-equipped helicopters are large with a long suction hose hanging below and must have large quantities of deep water to access and safe flying space. Elevation limits all helicopters load capabilities.

Given the size of the Allenspark Fire District, the CWPP team is urgently trying to locate and develop additional water sources. Here is a good opportunity for you to assist the team with your knowledge of the community. After reviewing the mapped water source locations, if you know of other locations which meet at least one of the standards for usefulness, please let a CWPP team member know about this. There will be follow up, a site evaluation by an experienced individual, and then a recommendation to the district to include the new source as a mapped emergency water source location.

See **Hydrant and Water Sources Map** on the following page.

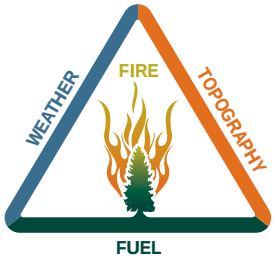

Allenspark Community Wildfire Protection Plan
Hydrants and Water Sources
Legend
Charged Hydrant
Draft Spot
Dry Hydrant
Dry Hydrant Potential
Paved Road
Unpaved Road
Unknown Road/Trail Surface
Stream
CWPP and Fire District Boundaries
CWPP Unit Boundaries
County Line
0
1
2 Miles
Reference Data from CDOT and USGS.
Watersources from Allenspark CWPP Committee.
Allison Gallegos/CNE 2009
Map produced for the
Southern Rockies Conservation Alliance
by the
CENTER FOR
NATIVE ECOSYSTEMS
Big Elk Meadows
Little Thompson
Tahosa Valley
Meeker Park
Meeker Park
Wild Basin
Allenspark
Ferncliff
Pine Valley
Arrowood
Allenspark
Dry Saint Vrain
Riverside
Middle Saint Vrain
Raymond
Balarat
Peaceful Valley
Peaceful Valley
Bark Ranch
Jamestown

WEATHER & WILDFIRE PROTECTION

BY DR. WILLIAM RENSE, GEOGRAPHER

WEATHER IS THE KEY THIRD LEG TO THE FIRE BEHAVIOR TRIANGLE. Be it light rain showers for an hour turning to sunshine and wind the next, or drought during an entire summer, recognizing the effects of fire weather is critical to appropriate fire protection action.

Allenspark, and the entire East Slope of the Front Range, has specific weather and climate conditions that are conducive to wildfire.



- There is a high frequency of drought and prolonged dry stretches.
- Weather conditions are typically very dry and warm from June until the arrival of the “monsoon” in July.
- There are many days with low humidity.
- There is a high incidence of wind.
- There are frequent lightning storms, often with gusty wind and little rain.

Understanding begins with awareness. How can people become more aware of fire weather conditions and what they mean? It is not as easy as one might expect.

Today’s lifestyle often overshadows attention paid to weather. As unlikely as it may sound, people often behave as if they are insulated from the effects of weather. But, in fact, weather is constantly affecting us as individuals and as a society. This also applies to our forests and their condition to burn.

Many years of science and research about weather and wildfire have led to significant advancements in the ability to predict weather’s affect on fire danger. Automatic fire weather stations measure cumulative parameters, not just current conditions.

Measurements are taken to calculate the moisture content of both live fuel (living vegetation) and dead fuel (fallen branches, needles, logs, etc.). Computer programs calculate both the fire potential and simulated fire behavior for different vegetation fuel types.

This all means that on a day-to-day basis there are people who know how likely a forest fire is to occur and what will likely happen if it occurs. Calculated information predicts how fast a fire will spread, how high the flames will reach, and whether a crown fire (the worst kind) is likely. Fire weather also helps determine what resources are necessary to contain a fire, especially in the initial stages.

But what good is this important fire behavior information for homeowners and forest visitors if human behavior is not modified to reduce the chances of an accidental fire starting at all? Ignorance of fire weather is demonstrated by uninformed people’s behavior on high fire-risk days. Nearly all accidental fires can be linked to poorly informed individuals and their carelessness.

CATASTROPHIC WILDFIRES HAVE BEEN STARTED BY:

- arson,
- unattended campfires,
- discarded cigarettes,
- burning used toilet paper to dispose of it,
- burning trash,
- burning slash piles,
- starting a signal fire,
- improperly located warming and camp fires,
- ill-timed prescribed burns,
- parking automobiles with catalytic converters over tall, dry grass,
- children playing with matches,
- fireworks,
- tracer bullets and bullet ricochet,
- welding in grass,
- improper disposal of fireplace ash,
- faulty outdoor extension wire connections, and
- in the case of Colorado's largest fire in recorded history, burning a letter (although it may have been arson).

The chances are if everyone that caused fire by the behavior described above had been confronted, had witnessed a fire danger alert, had been warned about inappropriate behavior and understood the consequence of inappropriate behavior, they would not have been so careless.

Presently, with the exception of the fire chief and his officers, few people in the community know how to routinely access available fire danger information. People may learn about the need for behavior modification on a limited basis from fire danger signs, newspapers, and TV/radio broadcasts. Sometimes that information is disseminated after the fire has started!

Manually operated fire danger signs, however, have limitations. Weather conditions can change quickly. A fire danger sign that is only a few days out of date is meaningless. Consider a sun-faded Smokey Bear fire danger sign that registers high fire danger after several days with rain, or a low fire rating on a hot day with 10% humidity and strong wind. Thus, we tune-out of the information on them. Fire danger alerts have better results when they are known to be accurate and timely. This is not a criticism of well-meaning people charged with responsibility for updating fire danger signs. Work schedules and other duties interfere with taking care of the signs.

The recommendations of this section address ways to effectively modify human behavior so as to minimize both the causes and impacts of wildfire. It is not only important to use technology to ascertain fire danger, but to make people aware of fire danger and encourage appropriate fire prevention action based upon real time and accurate information.

Following is a list of possible partners for the Allenspark community in order to create a mutually beneficial real time weather/fire danger information system:

- Towns of Lyons and Estes Park,
- The Lyons, Left Hand, Pinewood Springs, and Estes Park Fire Districts,
- Big Elk Meadows,
- Boulder and Larimer Counties,
- State Highway department,
- State Forest Service,
- USDA Forest Service,
- Rocky Mountain National Park,
- Longmont Water Department,
- Allenspark Water District,
- The Northern Colorado, St. Vrain, and Lefthand Water Conservancy Districts.

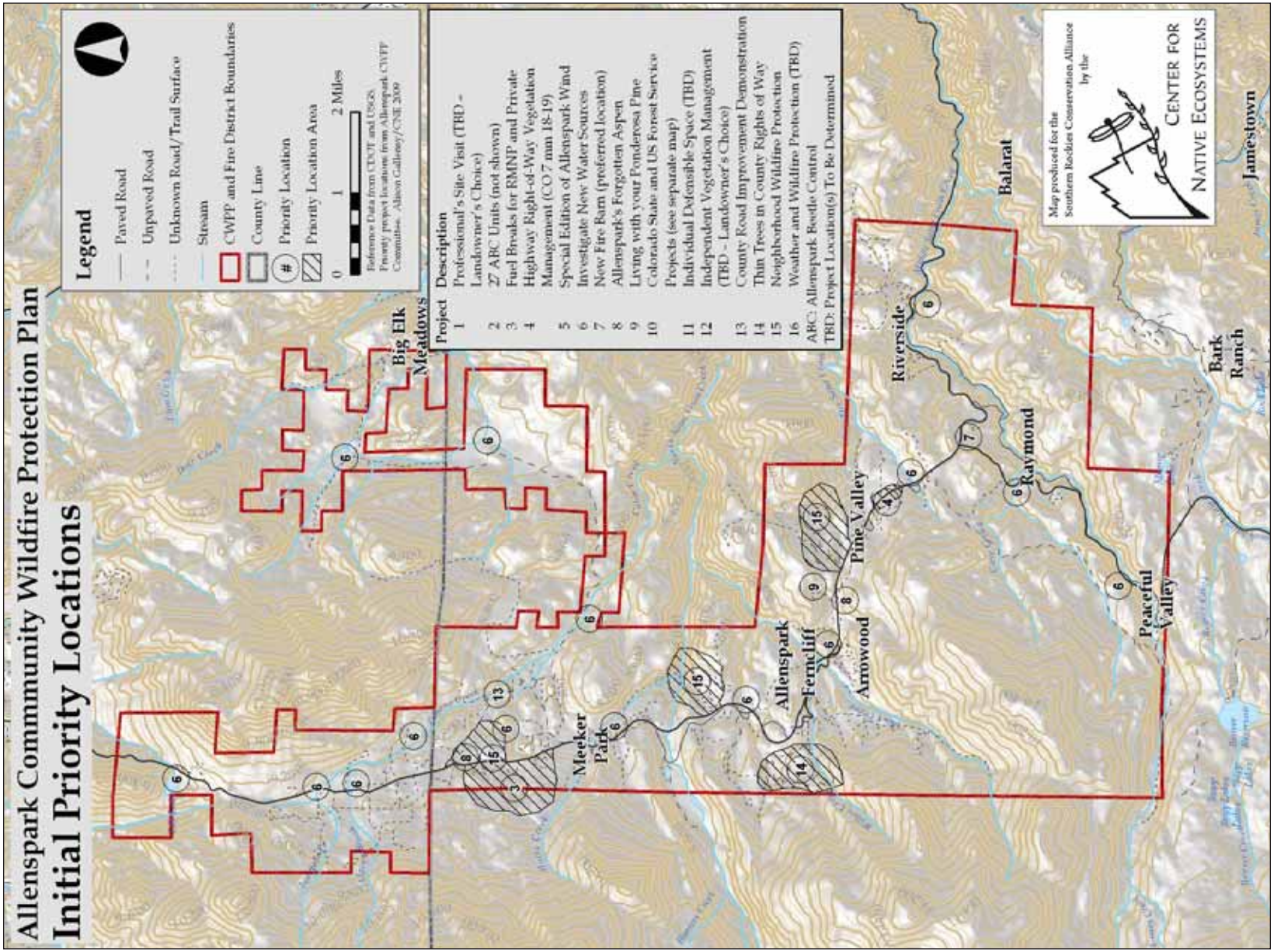
RECOMMENDATIONS

1. Develop electronic access to daily local fire weather/danger information. This information can be disseminated electronically on web pages, new fire danger signs and by links to appropriate web sites from agencies that post current fire weather/danger information. Possible sites for electronic fire danger signs would be the Allenspark Post Office, in Lyons before the junction of Highways 7 and 36 or along Highway 7 only, the junction of Highway 72 and Jamestown Road, and along Highway 7 south of Estes Park (possibly at Lily Lake). Signs must have both electric power and power back-up such as solar-charged batteries, plus an Internet phone line link. Appropriate behavior for the current fire danger rating should be included.
2. Encourage local radio stations to provide fire weather/danger information during regular news broadcasts.
3. Develop a local wildfire prevention partnership among the various cooperative partners and share planned program responsibilities.
4. Develop and publish appropriate fire prevention actions for different levels of fire danger. Disseminate this information both electronically and through local businesses via handbills, and publish in local newspapers.
5. Organize annual programs in local schools to teach the importance of fire weather, fire danger, and wildfire prevention.
6. Organize citizen volunteers who can share helpful information with individuals found to be careless or uninformed during periods of high fire danger.
7. Cooperate with law enforcement agencies to develop a community approach for eliminating inappropriate behavior and for arson prevention.
8. Encourage the use of rain gauges by individuals to monitor daily rainfall, or inform the community about the CoCoRaHS website where daily rainfall at numerous locations in the Front Range can be monitored. **http://www.cocorahs.org/Maps/ViewMap.aspx?state=CO&county=BO**.

INTRODUCTION AND ACCOMPLISHMENTS. This section describes 16 community projects that the CWPP committee chose for action. Projects presented are in no particular order of priority. Each project identifies a beginning priority or starting-point to initiate action(s) or location(s) where landowners are ready to start their respective project.

CWPP COMMITTEE ACCOMPLISHMENTS THAT LEAD TO THIS SECTION:

1. A plan framework was chosen to fit with Allenspark area values, concerns, and to meet national CWPP standards.
2. Allenspark CWPP authors presented section narratives that included their recommendations for action based upon experience and subject research.
3. With each section's availability, plan progress, including maps and references, was made available on the CWPP web page.
4. Over 100 copies of the Draft CWPP plan (less maps and this section) were distributed throughout the community for public review and comment on June 12, 2008.
5. A CWPP public meeting held June 24, 2008, provided an opportunity for landowners and agency personnel to collaborate about potential community protection projects. Meeting participants made written project suggestions.
6. A CWPP subcommittee met to review all citizen comments. The subcommittee determined ways to incorporate citizen input into this section's projects.
7. The Allenspark CWPP committee used all that was learned in the CWPP process, then prepared and approved project descriptions found in this section. Initial action priorities are determined by landowners ready to begin.


Allenspark Community Wildfire Protection Plan
Initial Priority Locations
Legend
Paved Road
Unpaved Road
Unknown Road/Trail Surface
Stream
CWPP and Fire District Boundaries
County Line
Priority Location
Priority Location Area
0
1
2 Miles
Reference Data from CDOT and USGS
Priority project locations from Allenspark CWPP Committee. Alison Calloway/CNE 2009
Project Description
1 Professional's Site Visit (TBD - Landowner's Choice)
2 27 ARC Units (not shown)
3 Fuel Breaks for RMNP and Private
4 Highway Right-of-Way Vegetation Management (CO 7 mm 18-19)
5 Special Edition of Allenspark Wind
6 Investigate New Water Sources
7 New Fire Barn (preferred location)
8 Allenspark's Forgotten Aspen
9 Living with your Ponderosa Pine
10 Colorado State and US Forest Service Projects (see separate map)
11 Individual Defensible Space (TBD)
12 Independent Vegetation Management (TBD - Landowner's Choice)
13 County Road Improvement Demonstration
14 Thin Trees in County Rights of Way
15 Neighborhood Wildfire Protection
16 Weather and Wildfire Protection (TBD)
ARC: Allenspark Beetle Control
TBD: Project Location(s) To Be Determined
Big Elk Meadows
Meeker Park
Allenspark
Ferncliff
Arrowood
Pine Valley
Riverside
Raymond
Balarat
Peaceful Valley
Bark Ranch
Jamestown
Map produced for the Southern Rockies Conservation Alliance by the
CENTER FOR NATIVE ECOSYSTEMS

PROJECT DESCRIPTION

ENCOURAGE INDIVIDUAL HOMEOWNER ACTION to create defensible space and fire resistance for every dwelling in the Allenspark FPD, and in cooperation with the fire department.

PURPOSE

Homes with defensible space are easier to protect from wildfire, and with flame-resistant materials installed they will better resist ignition. Structure fires can be contained better and will be less likely to ignite surrounding forest when vegetation (fuel) surrounding homes is managed to reduce potential burning intensity. Lives will be better protected and fire-loss costs reduced.

METHODOLOGY

In conjunction with the Area Club's spring clean-up, conduct a voluntary home and surrounding vegetation inspection offer. Advertise in conjunction with the Area Club's clean-up project. Participating professionals and consultants will make themselves available at no cost to homeowners for a month prior to community clean-up day.

Homeowners may request an available professional of their choice to make an obligation-free inspection. On-site suggestions for defensible space and fire resistance actions will be offered to the homeowner. The strategy will be to help homeowners learn about and then take effective and minimal-cost actions first, starting close-in to the home and then working outward to improve fire safety. Subdivisions and neighborhoods will be encouraged to participate as a unit. Handouts such as homeowner fire-safety checklists, vegetation guides, and evacuation plan outlines will be provided to participating homeowners.

PRIORITY

Calendar year 2009 Area Club Clean-Up/Roll-Off Day Period

PROJECT 2 Community Bark Beetle Control

PROJECT DESCRIPTION

MAINTAIN THE ALLENSPARK BEETLE CONTROL (ABC) organization, its activities and the cooperative community mobilization effort to reduce impacts from the pine bark beetle epidemic.

PURPOSE

To hold the number of beetle killed trees in check, where possible; to reduce the number of dead and dying trees in the forest; and to protect the forest and retain high-value trees plus a component of big and old trees for forest diversity. This is to mitigate wildfire hazard and avoid an accumulated build up of beetle-killed trees in the forest.

METHODOLOGY

Share bark beetle suppression information including approved procedures for cooperative beetle tree treatment on USFS and RMNP lands. Empower landowners with knowledge about bark beetles and encourage cooperation in the community for beetle suppression with local, county, state, and federal government/agency support.

PRIORITY

Areas of settlement within the entire Allenspark Fire Protection District and government lands critical to protection of that private land forest.

PROJECT DESCRIPTION

ESTABLISH STRATEGIC AND AESTHETIC FUEL BREAKS on both private and park lands near the eastern border of Rocky Mountain National Park, to protect areas between Lily Lake and Allenspark.

PURPOSE

Fuel breaks are to interrupt the large expanses of dense vegetation that connect park and private lands. Fires in the National Park can then better be contained and confined there and, similarly, wildfires originating on private lands can better be contained before spreading into RMNP.

METHODOLOGY

Pending NEPA compliance, RMNP fire managers with interested adjacent private property owners will cooperate and jointly assess land features, vegetation, fire history, and expected fire behavior for adjacent lands. They will jointly prepare site-specific plans for selected portions of the boundary. Natural fuel breaks and fuel treatment alternatives will be identified. Reports will be prepared for each alternative on after-treatment expected wildfire behavior, costs to complete the work, and ways to maintain effectiveness. A “best approach” for both RMNP and the participating private property owners will be jointly chosen. Eventually, over a decade or more, it is anticipated that most property owners along the border will see the benefits and choose to participate in this project.

PRIORITY

An area that includes the USFS Meeker Park Campground, Camp St. Malo, and north along the RMNP boundary to include portions of Rockwood subdivision.

PROJECT 4 Highway Right-of-Way Vegetation Management

PROJECT DESCRIPTION

COOPERATE WITH THE COLORADO DEPARTMENT OF TRANSPORTATION and develop a way to manage vegetation on the community's State Highway rights of way, for fuel break benefits, wildfire mitigation with adjacent property owners, bark beetle control, hazard tree removal, and thinning of tree regeneration to avoid dangerous fuel buildups over time.

PURPOSE

State Highways 7 and 72 rights-of-way are significant corridors of partially forested real estate through the community. Right-of-way forest vegetation is not presently managed except for urgent transportation-needs purposes. There are unmitigated wildfire and bark beetle risks in the right-of-way. A safe, legal, and cooperative way is needed to address the vegetation in the right-of-ways for fire protection fuels-management, bark beetle control, and long-term care. And this must be complimentary with community wildfire protection and CDOT transportation needs. This project is to plan and initiate a demonstration project for cooperative highway right-of-way vegetation management.

METHODOLOGY

Adjacent private property landowners, selected CWPP Committee members, and CDOT engineers meet to explore vegetation management possibilities within the constraints of CDOT policy and transportation regulations. Develop a joint CDOT/adjacent landowners plan and grant request to complete a ROW vegetation demonstration, within two years.

PRIORITY

East and West sides of Highway 7 in a portion of the area between mile markers 18 and 19.

PROJECT DESCRIPTION

PREPARE A SPECIAL EDITION OF THE WIND, the local newspaper for the Allenspark area. This edition would be mailed to every landowner in the Allenspark Fire Protection District.

PURPOSE

Promulgate information on fire mitigation. The special edition would educate landowners and encourage methodologies for protecting private properties from wildfires.

METHODOLOGY

Gather and request informational articles from forestry personnel and members of the community with specialized expertise.

PRIORITY

Educate as many landowners as possible on the value of a fire mitigation plan. This special edition would encourage an area wide strategy for controlling and containing wild fires. The goal for mailing this edition would be spring 2009.

PROJECT DESCRIPTION

AN AREA-WIDE PLAN FOR DEVELOPMENT of emergency water sources for firefighting in the Allenspark area.

PURPOSE

Development of emergency water sources is one of the five major components of the CWPP. Whether responding to house fires or wildfires, fire trucks need water for firefighting beyond the small supplies they carry from the firehouse. Some water can be obtained from regular pressurized fire hydrants connected to community water systems, or from small (1000 to 1500 gallon) domestic firefighting cisterns at individual houses. Much of the Allenspark area, however, is not served by these sources, and supplemental emergency water is also needed. In addition to resupplying fire trucks, water is also needed to supply firefighting helicopters that can dip water directly from impoundments.

Over the years, a number of dry hydrants (unpressurized hydrants tapping natural water sources) have been developed in the Allenspark area by various community groups, and several sites have been identified where aircraft can dip water for resupply. The purpose of this project is to map the existing emergency water sources in the Allenspark Fire District and develop new emergency water sources, especially in areas that are underserved by emergency water.

METHODOLOGY

CWPP volunteers will work with the Allenspark Fire District and the Boulder County Land Use Department Wildfire Mitigation Coordinator to develop new emergency water sources. An existing map of emergency water sources in the Allenspark area will be updated as necessary. The Fire District will be consulted regarding underserved areas.

Potential additional emergency water supplies along public rights of way will be evaluated. Landowners with impoundments will be invited to volunteer the use of their impoundments for development of dry hydrants or dip sites. Funding sources will be identified and construction will be coordinated when new sites are ready to be developed. If suitable natural water bodies cannot be found in areas that are seriously underserved, we will investigate the possibility of obtaining and installing large (30,000 gallon) cisterns that could be filled or topped off in the spring when runoff water is available.

PRIORITY

Priority will be given to areas that are currently underserved by existing emergency water sources. According to the existing map, these could include the Highway 7 corridor near crossings of Horse Creek (Meeker Park area), Fox Creek (Clarabelle Road area), and Dry St. Vrain Creek. Also included could be the Highway 72 corridor to Peaceful Valley, and the Ski Road area. In addition, priority could be given to projects where landowners with suitable impoundments are willing to cooperate, such as the H-Bar-H Ranch dry hydrant.

PROJECT DESCRIPTION

CONSTRUCT A TWO-UNIT FIRE BARN ON PROPERTY KNOWN AS GLACIER VIEW OVERLOOK, located at 19354 Highway 7 on SE corner of Highway 7 and non-maintained county road. This proposed structure would provide a satellite fire equipment facility approximately five miles to the east of Allenspark.

PURPOSE

Improvement of fire protection and public safety for the greater Allenspark community. A fire-barn facility at the proposed location would reduce response time by ten to fifteen minutes (over the Allenspark Station One firehouse) for physical emergencies and fire-related events, particularly for those calls east (down-valley) of the new fire barn. A new facility would house both fire-fighting and emergency-response equipment. Cost of building maintenance, especially snow removal and maintenance of minimum, indoor-above-freezing temperatures would be reduced by newer construction at a site designed for this purpose. Glacier View would provide a more central location than the current single-engine house in Raymond proper and remove the necessity of a time-consuming, up-hill climb.

METHODOLOGY

Property owners have offered a long-term lease at no cost to the Allenspark Fire District. The owners and Fire District Officials have already met with Boulder County Land Use staff, who are supportive of the project and must grant a special-use permit for the fire barn construction. The Allenspark Fire District will assume responsibility for funding construction of the fire barn; however, as budgets are necessarily finite, establishing the proposed fire barn construction as a CWPP priority would enhance opportunities for the District to apply successfully for available grant money.

PRIORITY

Initial priority is for the Forest Service to approve an already-submitted, land-swap petition as the proposed fire-barn site is currently situated on National Forest property. The owners have petitioned the Forest Service to consider an acre-for-acre land swap that will both accommodate the new fire barn and resolve a long-standing encroachment issue. The land-swap petition is not currently a high priority for the Forest Service; however, it is hoped that inclusion of the fire barn as a priority on the CWPP may serve as an incentive for the Forest Service to make a expeditious and favorable decision regarding the proposed land swap.

PROJECT 8 Allenspark's Forgotten Aspen

PROJECT DESCRIPTION

SIMULATE THE EFFECTS OF SMALL, INTENSE, CROWN FIRES by clearing openings in our closed canopy forests, creating the opportunity for Aspen regeneration.

PURPOSE

Prior to settlement of our community, aspen acted as natural limits to stand-replacement fires. Crown fires that burn with such fearsome intensity in lodgepole drop to the forest floor and lose their momentum when they encounter aspen. Then, it is often more aspen that regenerate first in freshly burned areas. Today, stand-replacement fires are not an option and our aspen have largely been replaced by rapidly maturing pines. If aspen are to regain their niche in our community, we must simulate the effects of small, intense, crown fires by clearing openings in aspen-adept locations within our closed canopy forests.

METHODOLOGY

This project begins with education followed by action at one or more demonstration sites. Drawing on the expertise of agency professionals and using our own properties as demonstration sites we will learn aspen regeneration through a series hands-on workshops. Topics covered will include:

1. Identification of aspen-adept locations.
2. Defining optimal patch cut for a given location.
3. Identification of merchantable timber.
4. Disposal options for removed material.

PRIORITY

Initial demonstration sites will be on Big Owl Road and Buck Road.

PROJECT DESCRIPTION

TEACHING FOREST RESTORATION for properties dominated by Ponderosa Pine.

PURPOSE

Together, the Ponderosa Pine Woodland and Douglas Fir with Ponderosa Pine Vegetation Cover Types cover nearly one-third of the area served by the Allenspark CWPP. These two ecosystems have much in common, but for our purposes, one shared trait stands out: People and their structures can exist within these forest types safely and in harmony with nature, but, only if these ecosystems are restored to something resembling the natural, fire-resistant conditions that existed prior to settlement.

METHODOLOGY

Initial efforts will be focused on education. Drawing on agency professionals and using our own properties as classrooms we will learn ponderosa ecosystem restoration through a series of hands-on workshops.

TOPICS COVERED WILL INCLUDE:

1. Identification of Ponderosa Pine Woodlands and Douglas Fir with Ponderosa Pine forests.
2. Defining restored conditions for a given location.
3. Defining safe residual fuel load for a given location.
4. Defining insect and disease resistant strategies.
5. Identification of special considerations for a given location.
6. Identification of merchantable timber.
7. Disposal options for removed material.

PRIORITY

Initial demonstration sites will be on Whiz Bang Road.

PROJECT DESCRIPTION

COLLABORATE WITH THE COLORADO STATE FOREST SERVICE and the US Forest Service to review fuel mitigation project proposals they have developed; select the key projects having greatest beneficial effect on Allenspark CWPP priorities and refine the areas into final treatment projects.

PURPOSE

Provide the greater Allenspark area protection from wildfire hazards by reviewing fuels mitigation project area recommendations made by the Colorado State Forest Service and the US Forest Service, and select those which will be most effective in protection of life and property.

METHODOLOGY

CWPP team and Allenspark Fire Protection District specialists meet with specialists from the Colorado State Forest Service and US Forest Service and others deemed important participants, such as Boulder and/or Larimer County specialists.

The group reviews the proposed treatment areas outlined by the Colorado State Forest Service, and by the US Forest Service in their ongoing St. Vrain Fuels Treatment Project. Using data and maps on fire behavior, vegetation, and property density, the team selects project areas where fuels treatment is most likely to be effective in protection of values at risk. Treatments would be on non-private lands, but would be accomplished first near areas where residents have an active interest in project accomplishment and personal defensible space so that treated areas tie in with private property defensible space actions to give a broader landscape treatment result.

Selected project areas are then prioritized for treatment action based on professional analysis of areas of greatest risk and willingness of various residential areas to be involved in treatment actions. The CWPP team and the AP Fire District work with the agencies to assure follow up and accomplishment of established priorities.

PRIORITY

Areas of settlement and values at risk within the entire Allenspark Fire Protection District; priorities determined by the CWPP team (in conjunction with knowledge of willing neighborhood units), Allenspark FPD management, and input from the Colorado State Forest Service and the US Forest Service.

PROJECT DESCRIPTION

CONDUCT CONTINUING EDUCATIONAL EFFORTS AND ON-SITE DEMONSTRATIONS to show residents the advantages of taking actions to create defensible space and mitigate home ignition threats so that Allenspark neighborhood units will achieve greater overall protection from personal and property damage when wildfires occur.

PURPOSE

Creation of defensible space and mitigation of structural ignitability are major factors in forming and carrying out an effective Community Wildfire Protection Plan. The purpose of this project is to educate and encourage Allenspark area residents/businesses to complete actions for defensible space and structural protection. Such actions will result in linking of properties into mini fuel breaks which will provide broader protection from damage by wildfire.

METHODOLOGY

CWPP team and Allenspark Fire Protection District specialists engage in a variety of methods to provide information, education, and encouragement to residents/businesses to complete defensible space and structural ignitability mitigation projects.

Methods used could be: Annual Roll-Off Day; Community FireWise Days; demonstration projects showing properties where work has been or is being accomplished; presentations by specialists from the Colorado State Forest Service, US Forest Service, Boulder, or Larimer County fire mitigation specialists, and the Allenspark Fire District; and use of handouts and website information. These activities could be done separately or together, but should be done at least once or twice annually.

HANDOUT MATERIALS COULD INCLUDE (NOT ALL POTENTIALS LISTED HERE):

1. FireWise™ handouts
2. A special issue of the Allenspark Wind discussing wildfire behavior, defensible space, and mitigation of structural ignitability
3. Continued distribution of the Allenspark CWPP in paper and on disk
4. Colorado State Forest Service defensible space materials
5. Selection and distribution of pertinent magazine and other articles as they appear

The CWPP team could also enlist assistance for residents in submitting for grant or other assistance.

PRIORITY

The priority would be constant and continuing to bring about increasing landscape action and protection.

PROJECT DESCRIPTION

INDEPENDENT ACTIONS BY INDIVIDUAL PROPERTY OWNERS

to reduce fire danger by managing vegetation.

PURPOSE

To help landowners recognize opportunities to manage their property's vegetation and make their property safer from wildfire, to give vegetation management ideas, to encourage action by individuals and neighbors cooperatively, when previously none was considered.

METHODOLOGY

The following are a few Vegetation Management Actions and Ideas to consider. Not all will fit your situation and these are listed in no particular order.

- For all pine type vegetation surrounding your home, reduce the volume and interrupt the vegetation's fuel-continuity. Limb-off lower branches and create a defensible fuel-free space between a potential approaching fire and your buildings.
- In pine type areas with signs of aspen, patch cut the pine to stimulate aspen regeneration.
- For any tree-cutting activity, try to market the merchantable material which effectively removes this volume of wood (fuel) from the forest. Treat the slash (tree limbs) by burning, chipping, or hauling to approved sites for recycling.
- In areas near or in a potential crown fire path, create fuel breaks, patch cuts, and thinning to discourage crown fire behavior. Locate and design these cuts based upon predicted fire behavior and likely direction of fire advancement. Make narrow meandering fire lanes for product-removal vehicles and emergency vehicle access.
- Prune off mistletoe-infected "witches broom" branches so as to remove this highly flammable branching pattern and improve tree vigor. Limit mistletoe pruning to no more than one-third of the crown and begin low on the trunk and work up toward the tree top. Alternately, remove heavily infected trees entirely to reduce mistletoe spread.
- Patch cut inside stands of continuous lodgepole pine in a manner to interrupt fuel continuity from approaching fire, and to regenerate the stand. New lodgepole seedlings will be immune to attack from the Mountain Pine Beetle for many decades.
- Avoid areas of young short trees with branches at the ground surface, underneath taller trees. Remove one or the other to discourage surface fire climbing and becoming a tall timber crown fire. Clean up and dispose of dead trees and limbs and downed trees to reduce the intensity of a surface fire and thereby reduce the chances of transition to crown fire behavior.

- Encourage a sustainable condition to your forest by reducing the volume and continuity of trees and when safe to do so introduce managed fire to maintain a diverse and naturally crown-fire resistant condition.
- For wind-firm trees, thin to widely variable spacing. Avoid a "plantation appearance" by artistic leave-tree selections, making some patches of trees closer spaced than other patches. Naturally, younger trees are usually more closely spaced than older ones, but again, avoid even spacing even in groups.
- For neighborhoods surrounded by ponderosa pine, create shaded fuel breaks (see Glossary) strategically located so as to cause an approaching crown fire to become a surface fire. This approach will usually involve a number of different property owners working in cooperation.
- Conduct road-side thinning or patch cuts to widen the effectiveness of roads-as-firebreaks. Patch cut near road right-of-way to offer potential emergency turn outs for safe passage of emergency vehicles and evacuating residents.
- Regenerate large tracts of aspen by cutting out much of the competing pine vegetation. When aspen regeneration occurs over a large enough area, wildlife browsing damage is less concentrated and less harmful to the aspen. Larger tract aspen regeneration will likely involve numerous adjacent landowners in cooperation.
- Plant aspen trees, instead of pines, in the vicinity of homes and roads for privacy and noise abatement considerations.
- Protect wetlands and, if patches of dense pines, spruces, and firs present a fire danger problem by contributing to continuous tree crown cover, isolate the riparian areas by patch cutting or heavily thinning at locations well away the areas to protect.
- Control (suppress) bark beetle outbreaks to avoid large areas of dying trees with highly flammable red needles. Remove as much of the beetle infested and beetle killed timber from the forest as is practical. Start bark beetle detection surveys immediately after summers beetle flight so that beetle trees can be treated during the 10 or 11 month period following brood establishment. Leave some old needle-less beetle killed trees for wildlife habitat. Bark beetle control is benefited by cooperation.
- Encourage a viable locally based wood merchandizing enterprise so that forestry work and especially removal of wood from the forest can proceed year round. Avoid pine tree thinning and harvesting and large accumulations of chipped slash during active bark beetle periods, as beetles are attracted to the scent of freshly cut pine. Arrange for prompt removal of wood products from the forest before beginning a harvest or thinning.
- When removing trees by thinning or harvest, select a variety of ages, species, shapes, and sizes to retain and remove insect-infested and diseased trees first.
- Do not stack fresh-cut timber or firewood next to trees intended to be retained, as this may attract bark beetles to attack favored trees. Remove fresh-cut wood from the forest promptly and avoid piles of freshly chipped slash near trees.

- Obtain professional site-specific forestry consultation for your property or your neighborhood. Effective management of vegetation to protect from wildfire is done with variable prescriptions for local conditions. Planning an effective project with site-specific detail is a good first step following a decision to take fire protection action.
- Formulate personal goals for your forest and keep a record of your forestry accomplishments. Forestry plans and records may be recorded for a permanent record for future property owners.
- Periodically assess the condition of your vegetation; it grows and changes every year. Consider your alternatives over time to maintain a fire-safe condition. An effective way to avoid large scale and undesirable disturbance, for example crown fires and beetle epidemics in your neighborhood, is to initiate small periodic and beneficial disturbance such as thinning, harvests, patch cuts, and prescribed fire.
- Communicate with your friends and neighbors about wildfire protection. Encourage cooperation to achieve common goals. Talk about forest conditions and ways to best care for forests to protect and sustain them. Recognize that change can be difficult to accept, especially if one “likes it just the way it is.” However with forests, change is inevitable

PRIORITY

Individual or neighborhood actions from the listing, or when included in other project plans.

PROJECT DESCRIPTION

WIDEN COUNTY ROADS with limited rights of way.

PURPOSE

Big Owl road (CR 82 E), Cabin Creek Road (CR 82), and Triple Creek Road (CR 90) have prescribed right of ways, which limits widening the road. These roads have an average width of 14 feet, which is not adequate to allow a fire truck heading to a fire and outgoing traffic to pass at the same time.

METHODOLOGY

Work will include authorization of willing property owners, County engineers, and County road crews to widen roads where property owners will allow encroachment on their land to widen for ingress and egress. Turnouts and widening will be utilized to effectively make travel on those roads safe in the event of a wild fire.

PRIORITY

Big Owl would be first priority because of its length and narrowness and also because one property owner, Don Cheley, has agreed to allow the road to be widened onto his land for a truck turnout. Cabin Creek and CR 90 should also be examined and work completed in a timely fashion.

PROJECT 14 Thin Trees in County Rights of Way

PROJECT DESCRIPTION

THIN TREES IN COUNTY RIGHTS OF WAY along maintained roads to act as a fuel break and better support ingress and egress to and from a wild fire.

PURPOSE

In the event of a wild fire, fire lines must be established quickly and effectively. The use of already maintained roads can serve as both a firebreak and help protect travel on that road. Removing the fuel before a fire threatens an area is much more efficient and lessens the danger.

METHODOLOGY

Most County-maintained roads within the Allenspark Fire Protection District have a right of way of 60 feet. Trained foresters will mark all trees that may cause a hazard, including dead trees and leaning trees and other possible hazard trees within the right of ways of County roads working in conjunction with County engineers if road boundaries are in question. Trees will be cut by paid staff, slash removed, and wood can be left for local use or hauled to an agreed location as necessary.

PRIORITY

Initial Priority should be the Triple Creek area because of the heavy fuel load in that area.

PROJECT DESCRIPTION

TO DETERMINE FUEL BREAK NEEDS and then plan to fulfill them.

PURPOSE

There is too much unmanaged and dangerous vegetation to try and mange it all. Neighborhoods can benefit by strategic analysis to determine the best locations to concentrate their fuel break efforts and reduce wildfire danger. Landowners will learn the critical vegetation locations and most cost effective approach for their situation. This information will be available to the interested landowners before they begin or continue to invest in fire protection action.

METHODOLOGY

Conduct a thorough analysis of vegetation, likely ignition locations and expected wildfire behavior in and surrounding neighborhoods for which landowners have decided to take wildfire protection action. Then plan best actions to take. Strategic analysis steps for a neighborhood and its surroundings may include and not be limited to the following:

- Inventory campfire rings, camp locations and hiking paths and nearby public parking locations, previous lightening strikes and previous fire ignition locations or sources when known. GPS these coordinates as ignition spots for computer simulated fire modeling.
- Computer run multiple scenarios from the ignition sites and identify areas of higher probability to burn. Match high probability burn sites with locations of structures. Determine strategic locations for fuel breaks or shaded fuel breaks to protect the structures. An alternative to computer simulation is an experienced fire manager's on site analysis.
- Inventory any previous fuel breaks and thinnings and match them with simulated wildfire paths. Determine if these are strategic fuel breaks to sustain or improve for effectiveness.
- Inventory aspen stands or pine forest with aspen, all areas that might serve as "passive fuel break locations" by interrupting fuel continuity. Determine where to expand aspen stands to a larger area or restore aspen as the dominant species. Identify competing vegetation to remove.
- Combine results from analysis of past fuel breaks, aspen passive breaks and high probability fire paths. Determine locations for needed additional fuel breaks.
- Prescribe appropriate management actions to achieve the desired strategic effectiveness.

- Collect pre-treatment monitoring data such as species lists, fuel load, site productivity, expected growth rates and determine follow up maintenance needs after initial treatment, to keep fuel break effectiveness.
- Implement, monitor and record results.

PRIORITY

These priorities denote where landowners have indicated an interest to protect their neighborhood, and have already started coordinated effort toward this project.

1. Pine Valley
2. Big Owl Road/Highway 7 Vicinity south and east
3. Lab Road neighborhood

During the CWPP planning process, the committee has been made aware of additional interest in neighborhood protection. Unfortunately, few people offer to coordinate their own neighborhood protection planning. That is what it will take. Someone or some local neighborhood group is needed to organize locally and cooperatively, for every neighborhood.

To encourage wildfire protection considerations and to recognize their important values to the community as a whole, the CWPP Committee encourages landowners in all neighborhoods to convene neighborhood meetings and to discuss wildfire protection actions. CWPP Committee members may be available to assist or attend such neighborhood gatherings. Encouragement is given for places including but not limited to the Allenspark town site, Triple Creek, Meeker Park, Cabin Creek, Tahosa North and South, Wild Basin, Raymond, Riverside, Peaceful Valley, Conifer Hill, Longs Peak Trailhead, Coyote Hill, Lab Road, Deer Ridge, Covenant Heights, and Tahosa Valley.

PROJECT DESCRIPTION

ESTABLISH AWARENESS OF THE RELATIONSHIP BETWEEN WEATHER AND WILDFIRE HAZARD.

Establish access to daily local fire weather/danger information.

PURPOSE

Information about fire weather for homeowners and forest visitors is useless unless human behavior is modified so as to reduce the chances of accidental wildfire. By creating awareness of the weather/wildfire relationship, and access to wildfire weather danger levels, local residents and visitors will be able to mitigate their own actions that could lead to wildfire. Changes in behavior because of education and increased knowledge of weather conditions should lead to fewer human-caused wildfires. Furthermore, knowledge of when weather conditions are prime for wildfire makes people more observant to detect the occurrence of natural wildfire and thus provide an earlier report to authorities.

METHODOLOGY

Few people in the local community know how to routinely access available fire danger information or how to assess this information. Through educational programs and publicity, the public will be informed of current wildfire hazard resulting from weather conditions and how to interpret wildfire hazard levels. Access to wildfire weather hazard through the Internet will be one technique as various web sites provide important information. Another technique will be the establishment of a fire danger sign in a visible, public location, probably along Highway 7 at or near the current Fire Station or the new Community Center. Such a fire danger sign would not be manually operated, but would be programmed remotely by computer. The person responsible for this has yet to be identified.

PRIORITY

The priorities for this project are:

1. Disseminate knowledge about fire weather to the local community and how to access such data on the Internet.
2. Establish a fire danger sign in a visible, public place and program this sign with current fire danger on a daily basis.
3. Establish wildfire weather danger information system partnerships between the community and various agencies such as Boulder and Larimer Counties, local fire districts, regional water districts, Federal and State Forests and Rocky Mountain National Park.
4. Develop, publish and disseminate fire prevention actions appropriate for different levels of fire danger.
5. Encourage local radio stations to include fire weather/danger information during news broadcasts.
6. Cooperative actions with law enforcement to eliminate inappropriate behavior and arson.
7. Organize local volunteers who can share helpful information with individuals found to be careless or uninformed during periods of high fire danger.
8. Organize annual fire weather programs in local schools.
9. Encourage local members of the community to use rain gauges to monitor daily rainfall, or to access the CoCoRaHS Internet site where daily rainfall in the Front Range is available.

THE USDA FOREST SERVICE PROPOSES to reduce the amount of potential wildfire fuel through vegetation management in the Estes Valley and the St. Vrain Project Areas on the Canyon Lakes and Boulder Ranger Districts of the Arapaho and Roosevelt National Forests and Pawnee National Grasslands.

The Forest Service has prepared this Environmental Assessment (EA) in compliance with the National Environmental Policy Act (NEPA) of 1969, the Healthy Forests Restoration Act (HFRA) and other relevant federal and state laws and regulations. This EA discloses the direct, indirect and cumulative environmental impacts that may result from the implementation of the Proposed Action. It is prepared according to the format established by the Council of Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500-1508).

Activities proposed on National Forest System lands as part of the Estes Valley and St. Vrain Project Areas must conform to the 1997 Revised Arapaho and Roosevelt National Forests and Pawnee National Grasslands LRMP (Forest Plan) Standards and Guidelines.

This Proposed Action is also tiered to a number of other documents. Additional documentation, including more detailed analyses of project area resources, may be found in the project planning record located at the USDA Forest Service Canyon Lakes Ranger District Office in Ft. Collins and the Boulder Ranger District Office in Boulder, Colorado. These records are available for public review.

More information about the Estes Valley and St. Vrain Fuels Reduction Projects is available at the USDA Forest Service websites: **http://www.fs.fed.us/r2/arnf/projects/ea-projects/brd/stvrain/html/index.shtml**

Estes Valley
http://www.fs.fed.us/r2/arnf/projects/ea-projects/clrd/estesvalley/index.shtml

St. Vrain
http://www.fs.fed.us/r2/arnf/projects/ea-projects/brd/stvrain/html/index.shtml

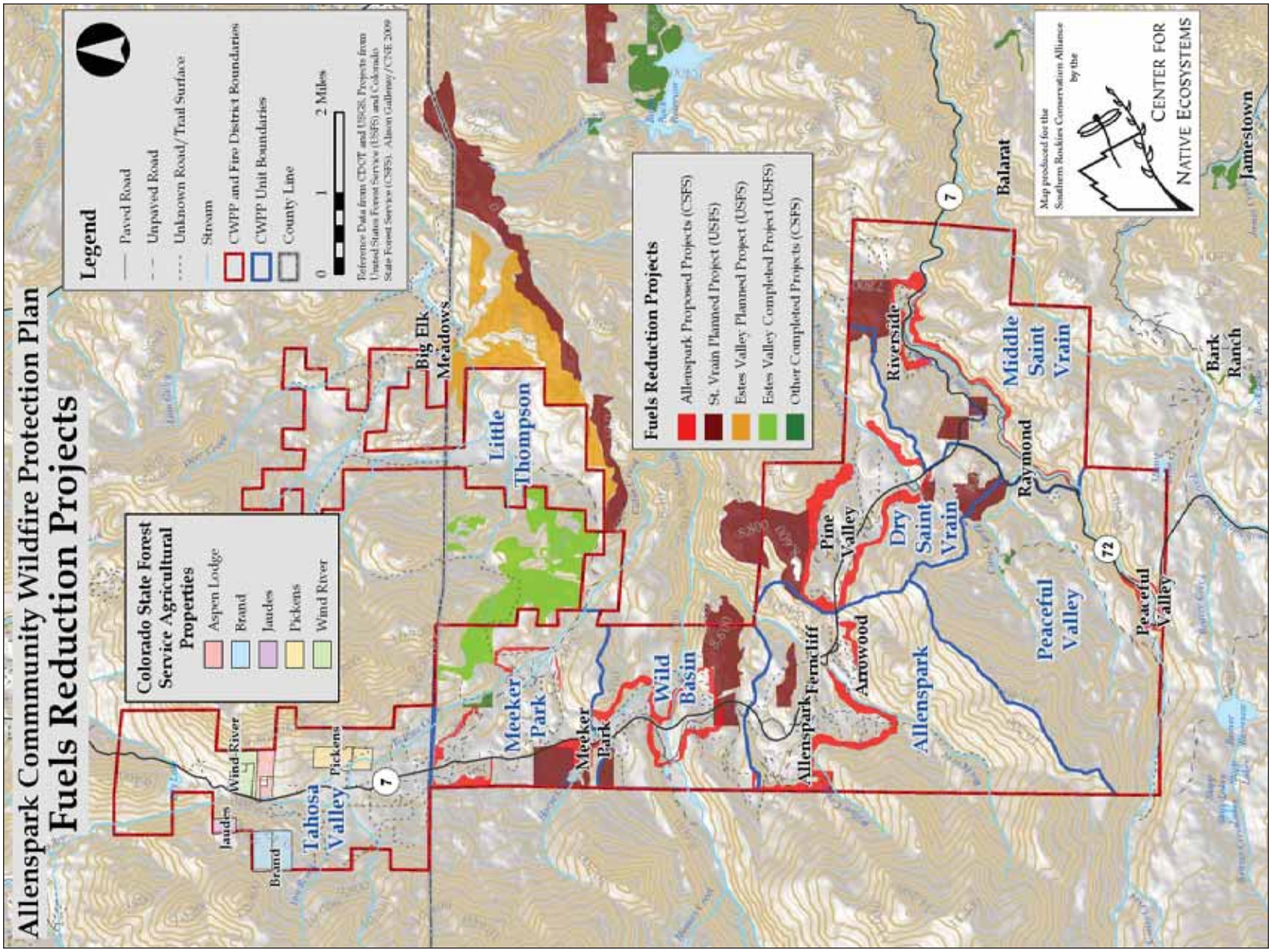
ST. VRAIN PROJECT AREA

The Colorado State Forest Service, Ft. Collins and Boulder Districts, propose that private property owners take similar fuel reduction actions as the USDA Forest Service on both Larimer and Boulder County private properties.

The Ft. Collins District has provided names and locations of individual projects planned for completion in Larimer County. The Boulder District has offered possible fuel break locations to protect neighborhoods in Boulder County.

The Allenspark CWPP Committee encourages Plan readers to consider this information for cooperative project planning with the agencies.

Readers are referred back to this Plan's approved Allenspark CWPP Projects and their initial priority locations, beginning on page 67.


Allenspark Community Wildfire Protection Plan
Fuels Reduction Projects
Legend
Paved Road
Unpaved Road
Unknown Road/Trail Surface
Stream
CWPP and Fire District Boundaries
CWPP Unit Boundaries
County Line
0
1
2 Miles
Reference Data from CDOT and USGS. Projects from United States Forest Service (USFS) and Colorado State Forest Service (CSFS). Alison Gallaway/CNE 2009
Colorado State Forest Service Agricultural Properties
Aspen Lodge
Brand
Jaudes
Pickens
Wind River
Fuels Reduction Projects
Allenspark Proposed Projects (CSFS)
St. Vrain Planned Project (USFS)
Estes Valley Planned Project (USFS)
Estes Valley Completed Project (USFS)
Other Completed Projects (CSFS)
Map produced for the Southern Rockies Conservation Alliance by the
CENTER FOR NATIVE ECOSYSTEMS
Big Elk Meadows
Little Thompson
Meeker Park
Meeker Park
Wild Basin
Tahosa Valley
Wind River
Pickens
Jaudes
Brand
Allenspark
Ferncliff
Arrowood
Pine Valley
Dry Saint Vrain
Allenspark
Riverside
Raymond
Middle Saint Vrain
Balarat
Peaceful Valley
Peaceful Valley
Bark Ranch
Jamestown
7
72
7

CONCLUSION

WITH OVER 30,000 ACRES OF FOREST THAT HAS 100 YEARS' ACCUMULATION OF EXCESS FUEL, continued development, and increasing population, the task may seem overwhelming. However, with the entire community sharing in the urgent job of protecting our area from wildfire, we can make a difference.

A proven way to address big problems is to focus on priorities, simplify the job, and then get started. With what you've learned from this plan, now is the time for you to pick a project that fits your situation and that you can accomplish. Your efforts are critical to our community's success.

The CWPP working group expects to showcase examples of individual and neighborhood projects that demonstrate successful wildfire protection action. As more people see and understand the benefits of taking action, the momentum to do so throughout the community will increase.

Whole neighborhoods can pool together and come up with fire protection projects that fit their situation and comfort level. Because of the plan, grant eligibility is possible so that, for example, groups can hire a consultant to plan their neighborhood project, if a professional's help is needed to get things started. Sometimes all it takes is a well-informed neighbor to encourage others to action.

This plan mandates nothing! No properties are singled out. However, every private and public ownership in the community will benefit from wildfire protection action. This plan provides information to bring about understanding. It provides recommendations to help people protect themselves, their families, their property, and their neighbors. It is now up to all private property owners!

While managing vegetation to lessen fire danger may be a foreign concept to some, others have already taken that action and are pleased with safe results. Please join that segment of the community taking free-will action.

CWPP FUTURE SECTIONS

Additional fire-protection related subjects of community interest may be addressed over time, for example, watershed protection initiatives, wildlife habitat enhancement, citizen fire brigade training, sustainable forest restoration, prescribed fire introduction and management, etc. Completion of future plan sections will depend upon other members of the community taking responsibility for additional plan sections.

ACTIVITY RECORD OF THE CWPP

This plan is meant to be a work in progress, not a one-time document. As actions are completed to protect the community from fire, the Record Section will document accomplishments. Individuals can document plans and accomplishments with the County Clerk and Recorder's office as a permanent record.

Note: SEE sample Activity Record on following page.

SAMPLE ACTIVITY RECORD FOR YOUR CWPP COMMUNITY PROJECT

USE THIS SHEET TO RECORD your accomplishments or photocopy as necessary.

Location (unit & address):

CWPP Project Name:

Accomplishments:

Date Completed:

Condition of fuels after completion:

Date for follow-up maintenance:

Before and after photographs

SAMPLE ACTIVITY RECORD FOR YOUR CWPP COMMUNITY PROJECT

USE THIS SHEET TO RECORD your accomplishments or photocopy as necessary.

Location (unit & address):

CWPP Project Name:

Accomplishments:

Date Completed:

Condition of fuels after completion:

Date for follow-up maintenance:

Before and after photographs

CONTACTS

Rocky Mountain National Park

Fire Operations Supervisor, Matt Dutton	(970) 586-1436

USDA Forest Service

Canyon Lakes District, Dyce Gayton	(970) 295-6761
Boulder Ranger District, Mark Martin	(303) 245-6409

Colorado State Forest Service

Ft. Collins District, Boyd Lebeda	(970) 491-8660
Boulder District, Allen Owen	(303) 823-5774

Boulder County

Wildfire Mitigation, Eric Philips	(303) 441-3930

Larimer County

Emergency Services Specialist, Tony Simons	(970) 498-5303

Wilderness Society Conservation Alliance

Community Wildland Fire Planning Coordinator

John Chapman	(303) 650-5818 ext. 113

READING SUGGESTIONS

Additional resource information is available to those who seek it in the Resources section of the Allenspark CWPP website: **http://cwpp.allenspark.info/index.html**.

Some of the things you will find include wildfire protection, implementation, mitigation, wildfires & homeownership and long term management.

FOR SAFETY REASONS, before prescribed fire can be appropriate, many conditions must be met. With the present forest conditions of very high fuel accumulations, in many cases, some kind of mechanical treatment to remove fuel or isolate the area to be burned will be necessary first.

SAFEGUARDS AND PROCEDURES

Once an experienced fire manager sees that fuel levels are within a range of safe possibilities and there is a forest condition for safe prescribed fire use, the outline below gives a general description of necessary steps to develop and implement an Approved Prescribed Plan. "Approved Plan" means that someone with sufficient fire experience and authority approves and signs the prescribed fire plan document before planned actions can proceed. One or more of the approving authorities must be the landowner(s) if prescribed fire is to be used on private land.

NECESSARY STEPS FOR SAFE PRESCRIBED FIRE

1. Establish qualitative and quantitative objectives.
2. Determine the intended burning area or fire perimeter.
3. Conduct a terrain and fuels analysis and measure fuels (in tons per acre for example).
4. Describe the intended fire behavior and firing plan to achieve the objectives.
5. Determine the weather conditions (burning window) to achieve the desired behavior.
6. Establish behavior limits for (a) stopping ignition and or (b) initiate suppression.
7. Organize both an ignition and a suppression organization.
8. Confirm availability and commitment from a qualified Burn Boss.
9. Confirm availability of all necessary personnel and equipment.
10. Confirm communications, radio procedures, equipment, and public information.
11. Wait for the necessary weather conditions or predicted conditions.
12. Assemble the qualified fire organization and equipment on site.
13. Review the burn plan including communications, firing, and suppression procedures.
14. Conduct a test burn.If behavior meets predictions and weather holds, proceed.
15. Complete the burn, adjusting ignition and holding as necessary.
16. Activate the suppression organization, extinguish, and mop up the completed burn.
17. Patrol.
18. Monitor for a sufficient period and certify fire is out.

GLOSSARY OF WILDFIRE TERMS

THE TERMS BELOW have been compiled by Boulder County Wildfire Mitigation Services and include most of the terms used in this plan. If you can't find it here, refer to the US Forest Service glossary found at the Rocky Mountain Region's National Fire Plan website: **www.fs.fed.us/r2/nfp/glossary.htm**

A more extensive glossary can be downloaded from the National Wildfire Coordinating Group: **www.nwcg.gov/pms/pubs/glossary/pms205.pdf**.

CANOPY CLOSURE
The distance between the tree tops if one were to look straight up. If the canopy closure is very dense, then the spacing is very tight with very little sunlight able to pass through.

CISTERN
Water storage vessel.

DEFENSIBLE SPACE
A designated area around your home that is intentionally maintained so as to be free of any features that would tend to increase the risk of damage from wildfire.

DRY HYDRANT
A non-pressurized pipe system permanently installed in existing lakes, ponds, and streams that provides means of suction supply of water to the tank truck. The dry hydrant system gives the trucks access to the ponds and streams from the main road.

FINE FUEL OR "FINES"
Vegetation that quickly changes in moisture content to match surrounding air humidity. Examples are grass, dead pine needles, leaves, and small branches.

FIRE RESISTANT MATERIALS/CONSTRUCTION
Construction materials designed to resist the spread of fire. For detailed descriptions see the Uniform Building Code.

FUEL BREAK
An area, strategically located for fighting anticipated fires, where the native vegetation has been permanently modified or replaced so that fires burning into it can be more easily controlled. Fuel breaks divide fire-prone areas into smaller areas for easier fire control and to provide access for fire fighting.

LADDER FUELS
Materials which allow fire to move vertically from the ground up to the tops of trees (e.g., dead fuels to lower branches to other intermediate trees and shrubs to the upper tree canopies).

MITIGATION
To make or become less severe; an effort at reducing or eliminating the impacts of injury or damage from a hazard or disaster.

NONCOMBUSTIBLE MATERIALS
A material which, in the form in which it is used, is either one of the following: (1) Material of which no part will ignite and burn when subjected to fire, or (2) Material having a structural base of noncombustible material as defined in the previous item, with a surfacing material not over 1/8 inch thick, which has a flame-spreading rating of 50 or less (flame-spreading rating obtained to tests conducted in ASTM E 84-91a). Noncombustible does not apply to surface finish materials.

SHADED FUEL BREAK

An area of varying width and perimeter where fuel continuity is interrupted sufficiently to prevent or inhibit a wildfire crossing it, and which contains a limited number of trees to be attractive and to provide some shaded ground within the fuel break area. Shade can also be provided by trees retained on the fuel break's perimeter.

SLASH

The remnants of tree limbing, thinning, and ground fuel reduction (i.e., branches, limbs, deadwood).

WILDFIRE

A fire that spreads fast and is hard to control; an open fire which spreads unconstrained through the environment. If not quickly controlled, the result can be a fire storm, often termed a "conflagration," which destroys large amounts of property and threatens lives. Since prehistoric times, wildfires have been a natural force in shaping and changing Colorado's landscape. Many of the native tree, brush, and grass species have evolved into fire-dependent vegetation. Some are so fire dependent that their combustibility increases with age, thus assuring renewal and continuation of the species. Lightning provides the ignition for these naturally occurring fires. Human-caused fires may also become firestorms.

WILDFIRE HAZARD

As defined in the Colorado Land Use Act, it is a wildfire phenomenon which is so adverse to past, current, or foreseeable construction or land use as to constitute a significant hazard to the public health and safety or to property. The term includes but is not limited to slope and aspect; wildfire behavior characteristics; and existing vegetation types.

Wildfires are becoming more intense and frequent due to the last 100 years of fire suppression, which has resulted in an accumulation of live and dead fuels; and the increasing recreational use and human habitation. The continued growth of development and recreational activities in the areas of greatest vulnerability gives rise to increasing risks. In 1994, the nation, including Boulder County, experienced the most demanding wildfire year ever with over $1 billion dollars spent to put out 74,000 wildfires, 28 firefighters lost, and 4 million acres burned. Over the years 1990 to 1995, an average of 500 homes were consumed per year to wildfires. In Boulder County, the Black Tiger Fire of 1989 and the Olde Stage Fire of 1990 combined resulted in the loss of 66 homes and over 6,000 acres at a significant cost to the county.

WILDLAND

An area in which development is essentially non-existent, except for roads, railroads, power lines, and similar transportation facilities. An example of area in the County that conforms to this description is the North Saint Vrain River drainage.

WILDLAND URBAN INTERFACE

A term used to describe where homes and development encroach on the native vegetation such as the grass and forested covered slopes of the plains, the foothills and/or the mountain areas. This human encroachment into the wildland is an area at risk to wildland fires or wildfires.

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COMMUNITY WILDFIRE PROTECTION PLAN

ALLENSPARK, COLORADO

ALLENSPARK COMMUNITY WILDFIRE PROTECTION PLAN
359 BIG JOHN ROAD | LYONS, COLORADO 80540