



# Perry Park Community Wildfire Protection Plan

Perry Park Ranch  
Larkspur, Douglas County, Colorado

## INTRODUCTION AND ACKNOWLEDGEMENTS

The Perry Park Community Wildfire Protection Plan (CWPP) is a broad plan focused on the protection of residents, structures and scenic environment of Perry Park Ranch from wildfires. The CWPP represents a collaboration of United States and Colorado State Forest Services, Douglas County and Perry Park Metropolitan District service and professional agencies. The CWPP is intended as a *living document* and will be updated as wildfire mitigation and firefighting methodologies and support technologies change. The Perry Park CWPP is sponsored by the Perry Park Metropolitan District. This CWPP follows the guidelines set forth in the *Health Forest Restoration Act of 2003* (See Appendix A) and the *Colorado State Forest Service Minimum Standards for Community Wildfire Protection Plans* (See Appendix B).

### ACKNOWLEDGEMENTS

Special thanks for support and materials for this Community Wildfire Protection Plan go to:

- Larkspur Fire Protection District
- Douglas County Law Enforcement and Emergency Services
- Colorado State Forest Service
- United States Forest Service

Appreciation is also extended for information and support material to:

- Intermountain Rural Electric Association
- Perry Park Water and Sanitation District
- Perry Park *Sentinel*
- Perry Park Country Club
- Douglas County Board of County Commissioners
- Douglas County Departments: Public Works, Building, and GIS
- Douglas County Public Library
- Realty World
- Firewise Communities, USA

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## EXECUTIVE SUMMARY

The Perry Park Community Wildfire Protection Plan (CWPP) is sponsored by the Perry Park Metropolitan District for the safety of life and protection of property in Perry Park Ranch and its immediate vicinity. Participation in the establishment of this CWPP was a broad stakeholder group including Federal, Colorado State and Douglas County agencies. Development of this CWPP focused primarily on wildfire hazard identification, fuel mitigation and emergency response. The fuel mitigation focused on specific wildfire risk areas with heavy fuel densities and terrains that could be used for protection and wildfire prevention advantage, coupled with close attention paid to upholding ecological values.

Perry Park Ranch is no stranger to wildfires and the need for wildfire prevention and protection. The proximity to Perry Park of the Border and the Hayman wildfires of 2001 and 2002, respectively, emphasized the fact that wildfires “*can happen here!*” In 2000, the Perry Park Metropolitan District sponsored the *Firewise Program* and, since the establishment of that program, Perry Park has become recognized as one of the top *Firewise Communities* of the nation. In 2003 and 2004 alone, the Metropolitan District has spent over \$110,500 on mitigation efforts within Perry Park while residents have spent their time and effort in attending 282 hours of training and expending over 13,200 hours in mitigating their own private properties. Close work since 2000 with both the United States and Colorado State Forest Services and Larkspur Fire Protection District has led to joint mitigation planning and *Firewise* projects, culminating in the in a significant US Forest Services mitigation effort in the adjacent Pike National Forest area abutting Perry Park Ranch on its western border area that will occur in late Fall, 2005 or early Spring, 2006.

Perry Park has three significant areas outside of it's boundaries that could pose a potential wildfire fire threat to it's interior. These areas termed in total as the *Wildland Urban Interface* (WUI) area consist of: Bear Creek watershed entering Perry Park from the southwest; Spring Gulch watershed entering through Perry Park in the northwestern corner of the Perry Park boundary; and, the prairie, up-sloping ranch lands to Perry Park's southeast. With this CWPP care was taken to propose and provide mitigation within Perry Park to provide fuel breaks to lower the risk of spreading wildfire and to protect residents from potential wildfire intrusion from the various risk sections of the adjoining WUI. Thirty such areas of varying degrees of mitigation were identified within the Park. Mitigation for these areas will be reviewed annually for scheduling with full completion to take from seven to twelve years.

Three primary strategies are employed to achieve fuel mitigation: 1) PPMD and/or Douglas County providing fuel mitigation treatment to Perry Park Metropolitan District owned land and in identified areas that fall within Douglas County road rights of way; 2) Encouragement and support of private land owners doing their own wildfire fuel mitigation; and 3) Working with Douglas County and other stakeholder agencies to require developers of stand-alone, undeveloped areas within Perry Park to mitigate their land before building occurs. In addition to these three primary strategies, work with the United States Forest Service and landowners adjacent to Perry Park will be undertaken to explore the possibility of addition wildfire fuel mitigation in the wildland urban interface areas bordering Perry Park.

This CWPP identifies the response, both from professional agencies and volunteer groups, which may be employed for wildfire protection or fire suppression, arresting wildfires threatening areas within or the whole of Perry Park Ranch. Douglas County Law Enforcement and Emergency Services in conjunction with the Larkspur Fire Protection District (LFPD) have the primary responsibility for protecting life and property in Perry Park Ranch in the event of a wildfire incident. If a wildfire event is beyond their resource capability, the County (inclusive of LFPD) are parties to a mutual aid agreement for support being provided by outside of normal jurisdiction, by adjacent agencies; e.g., Castle Rock and El Paso County based resources.

Perry Park also has several volunteer groups within its boundaries (the Fire Patrol, the Block Captain program and the Perry Park Neighborhood Emergency Team – PPNET) that can be activated by Douglas County Emergency Services to provide assistance to professional response agencies if deemed necessary.

The Perry Park CWPP also details direct communication and informational efforts to notify residents and keep them apprised of emergency wildfire situations directly affecting them. Communication and support of the general public is available and determined by different intensities of identified emergencies.

The implementation of this plan takes place over multiple years, limited for the most part by the available funding that can be directed to the various efforts within the plan. Risk priorities as well development locations and densities will be reviewed annually and used in scheduling fuel mitigating events. Projects deemed to have the most significant wildfire prevention impact will be given priority. The current profile of the projects is depicted in Appendix J, *Hazard Reduction Mitigation Projects Data Matrix*. Projects scheduled to be address in 2006 can be found in Chapter 7, *Implementation Plan*, under the *Fuels Treatment* section.

This CWPP is a “*living*” document that will be evaluated and maintained annually as a responsibility of the Perry Park Metropolitan Board. Each individual project identified within this plan has a measured baseline; i.e., current condition description as well as photographs of it’s “*before*” profile that will be used to evaluate the effectiveness of any fuel reduction project performed on it during the plan year (See Attachment K, *Mitigation Area Descriptions and Baseline Data and Photographs*). Consequently, this plan may be amended and edited annually to assure that it stays viable and achieves its original intent. Annual meetings will be held with stakeholder agencies to review the progress and effectiveness of this CWPP. A general public meeting will also be conducted annually to review the progress of the CWPP and receive public input.

## **GOALS, PLAN COMPONENTS ON-GOING MAINTENANCE OF PLAN**

### **Primary Purpose**

The Perry Park CWPP was developed for the safety of life and protection of property from wildfire emergencies within Perry Park Ranch, boundaries of the Perry Park Metropolitan District and the adjacent surrounding areas while upholding the ecological values of the community.

The plan was developed by a broad stakeholder group identified in the *Foreword* section of this document. The Perry Park Community Wildfire Protection Plan addresses the areas of wildfire hazard mitigation and emergency response to the impact of widespread wildfires. The plan has three major focus areas: fuel mitigation, emergency response and the influencing and obtaining of federal grants. In addition, the plan contains administrative detail for plan implementation and monitoring and also sets forth tactics for amending the plan on an on-going basis as circumstances and changing conditions may require.

### **Goals and Objectives of the Plan**

#### *Fuel Mitigation:*

- To identify and categorize wildfire fuels and the prioritization of those fuels for mitigation across the landscape.

#### *Emergency Response:*

- To detail wildfire response, community preparedness and infrastructure protection.
- To outline professional and community volunteer communication linkages and response to widespread wildfire emergencies.
- To detail traffic egress/ingress for emergency residential evacuations and emergency equipment and professional services entry.
- To delineate community and public communication and information systems' usage for and during emergency events.

#### *Federal Grants:*

- To influence where and how federal agencies implement fuel reduction by proposing alternative locations and methods for treatment on federal lands in our watersheds.
- To assist in the acquisition of federal funds for Perry Park for wildfire hazard(s) mitigation and response related projects.

#### *Administration and Plan Maintenance:*

- Define implementation plans, schedules and implementation monitoring vehicle(s).
- Set forth on-going plan maintenance and plan updating strategies.

### **Plan Components**

The Perry Park Community Wildfire Protection Plan provides four primary sections plus reference information. Geographical and ecological background along with forest management and wildfire history is detailed in Chapter 3. Chapters 4 and 5 cover, respectively, hazards assessment and the resources for addressing wildfires. Chapter 6 identifies communication and information support for the residents in and around Perry Park in the event of a wildfire emergency. Finally, Chapter 7 is the implementation plan of the Community Wildfire Protection Plan, detailing public education, fuel treatment - mitigation priority, timeline and funding methods, and support systems additions and funding.

A wide variety of conservation, property mitigation, vegetation and services reference material can be found in the appendices of this document.

### **Maintenance of the Plan**

The overall goal of maintaining the Perry Park Community Wildfire Protection Plan is accomplished through annually monitoring plan-effectiveness and by adjusting the plan to account for changes in wildfire hazard conditions, response capabilities, technologies and ancillary circumstances. The Perry Park CWPP is meant to be a “*living document*” which is updated periodically to assure currency in both wildfire prevention and planned response to wildfire situations both in Perry Park’s wildland urban interface areas and inside Perry Park Ranch proper.

Each year, at the October meeting of the Perry Park Metropolitan District board, the board will formally request its *Emergency Preparedness Coordinator* to conduct an CWPP performance review to include both an overall plan evaluation of the CWPP for the past wildfire season as well as any proposed changes to the CWPP for the following year. The overall evaluation and recommended changes to the CWPP will be presented and addressed at the December PPMD board meeting. Changes will be formally incorporated into the CWPP and furnished to all stakeholders by April of the following year.

Between the aforementioned December PPMD board meeting and the formal updating of the CWPP each April, the PPMD board or its representative(s) will meet with key stakeholders representing primary professional forest management, fire prevention and emergency services management to review proposed CWPP changes and updates. Once the PPMD board and the key stakeholders are in agreement to the proposed changes and updates to the Perry Park CWPP, those changes and updates will be available for public perusal and comment at either a pre-announced public meeting or through the PPMD website.

Formal CWPP overall evaluation will consist of 1) implementation monitoring, 2) baseline monitoring, 3) effectiveness monitoring 4) validation monitoring and 5) trend monitoring. Implementation monitoring and trend monitoring are board assessments of the overall CWPP. Baseline, effectiveness and validation monitoring deal at the specific project or project grouping level and assess the degree of success of the individual project.

- 1) *Implementation Monitoring*: Will track the CWPP’s project(s) as laid-out for the year and assess the success level of execution;
- 2) *Baseline Monitoring*: Will be conducted in conjunction with *Effectiveness Monitoring*. Baseline data will be collected prior to each project’s implementation to characterize the existing conditions specifically for comparison to post project conditions and will provide a basis for effectiveness monitoring (See Appendix K, *Mitigation Area Descriptions and Baseline Data and Photographs*).
- 3) *Effectiveness Monitoring*: Will determine if the project activities scheduled during the year were effective in achieving the stated goals and objectives based on comparison of “pre” (baseline) and “post” project conditions. Effectiveness monitoring asks, “*Was the result of the project as we had planned?*”
- 4) *Validation Monitoring*: Determines if certain assumptions and data used in the development of the project were valid. If the assumptions were invalid, documentation as to why or how they were invalid should be undertaken to prevent future errors of assumption.
- 5) *Trend Monitoring*: Is designed to detect changes over time, and is useful for assessing how fuel mitigation and forest management activities occurring throughout the Perry Park targeted watershed areas are impacting wildfire reduction as well as the landscape.

Lessons learned from monitoring and data collection will be useful for modifying project plans to better meet CWPP goals and objectives.

## BACKGROUND AND HISTORY

### Geographic and Ecological Location

Perry Park Ranch is a 3840 acre Rocky Mountain Foothills' community 9.4 airline miles southwest of Castle Rock, 3.9 airline lines west of Larkspur. Located approximately thirty-five miles from the two major metropolitan areas, Denver to its north and Colorado Springs to its south, Perry Park's major residential development started in the late 1960s and has grown to its current configuration of 680 homes. Full build-out of Perry Park has the potential of 1,400+ homes. The south central portion of Perry Park accommodates a 320 acre golf course and an adjoining twenty-five acre, shallow stream-fed, manmade lake.

Perry Park Ranch is a classic wildland urban interface community abutting the South Platte Ranger District of the Pike National Forest on the west and privately-owned, heavily-forested ranch land on its southern border. To its east and north Perry Park slopes downward to high elevation prairie terrain. Perry Park's average elevation is approximately 6,600 feet, varying greatly from gentle zero to fifteen percent slopes associated with its eastern, southeastern-most sections ramping to more extreme slopes of thirty to one hundred degrees in its western areas. Vegetation consists of dense stands of Ponderosa pine with Gamble oak under story, Douglas fir and mountain juniper.

### History of Perry Park

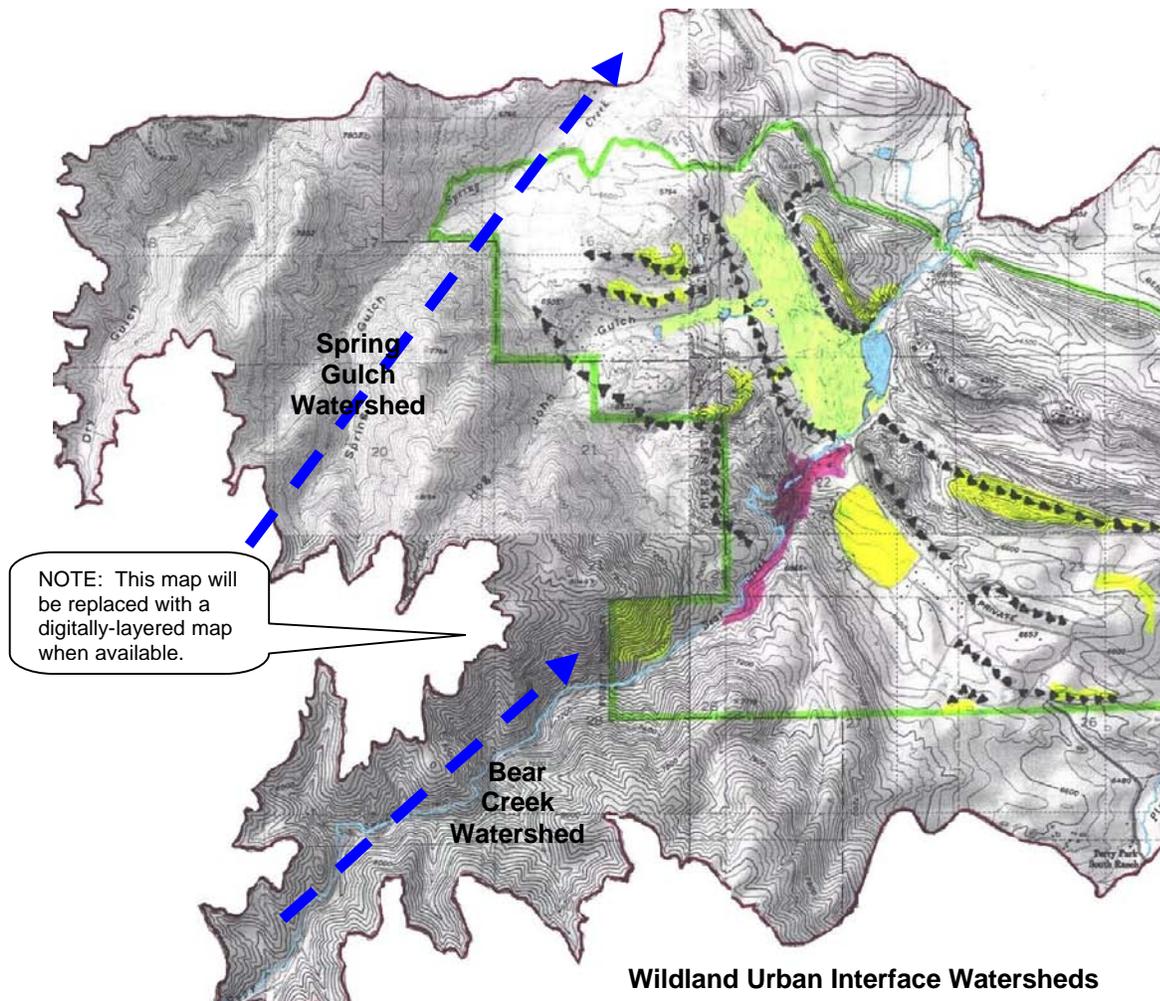
The area within the boundaries of Perry Park is predominantly a second-growth forest, logged in the late 1800s and early 1900s, with over 100 years of total fire suppression efforts. The Perry Park community, created in the late 1960s, has grown steadily with significant growth taking place over the last ten years.

The voters in the Perry Park Metropolitan District boundaries approved a \$25,000 bond issue in late 2000 to assist Douglas County in obtaining a secondary emergency access for the community. This action generated interest in emergency issues affecting Perry Park at the same time that funding was earmarked at the state and national level. The original bond issue has been leveraged over the last few years to obtain grant funding for following State Fire Assistance grant cycles under the National Fire Plan. The board of directors of Perry Park Metropolitan District has taken on the Wildfire Hazard Mitigation program and has made Perry Park a nationally recognized *Firewise Community*. Since 2001 and accelerated in the aftermath of the Hayman Fire in 2003, many Perry Park residents, encouraged by the Metropolitan District's Wildfire Hazard efforts, have performed fairly heavy fuel mitigation on their properties. During 2003 and 2004 alone, residents spent over thirteen thousand hours mitigating their private properties and the Perry Park Metropolitan District spent more than \$110,500 removing mitigated slash material and mitigating Metropolitan District owned-properties to establish ecologically pleasing fuel breaks. During the aforementioned two year period, 282 hours of wildfire mitigation education was provided to Perry Park residents.

In the late fall of 2000, the Perry Park Firewise Program was sponsored by the Perry Park Metropolitan District. This program was built on developing both partnerships and community support to sustain the Firewise program for decades. Starting October, 2000, major stakeholders, inclusive of both the US and Colorado Forest Services, started working toward a common Firewise program for Perry Park. In May, 2001, Perry Park Firewise committees were formed and heavy residential education and participation has resulted over the years in ever increasing property owner fuel mitigation within the Park. The extensive work with the United States and Colorado Forest Services is resulting in substantial fuel mitigation in Pike National Forest areas adjacent to Perry Park planned for Fall, 2005 or early Spring, 2006.

### Wildland Interface Impact Area (WUIs)

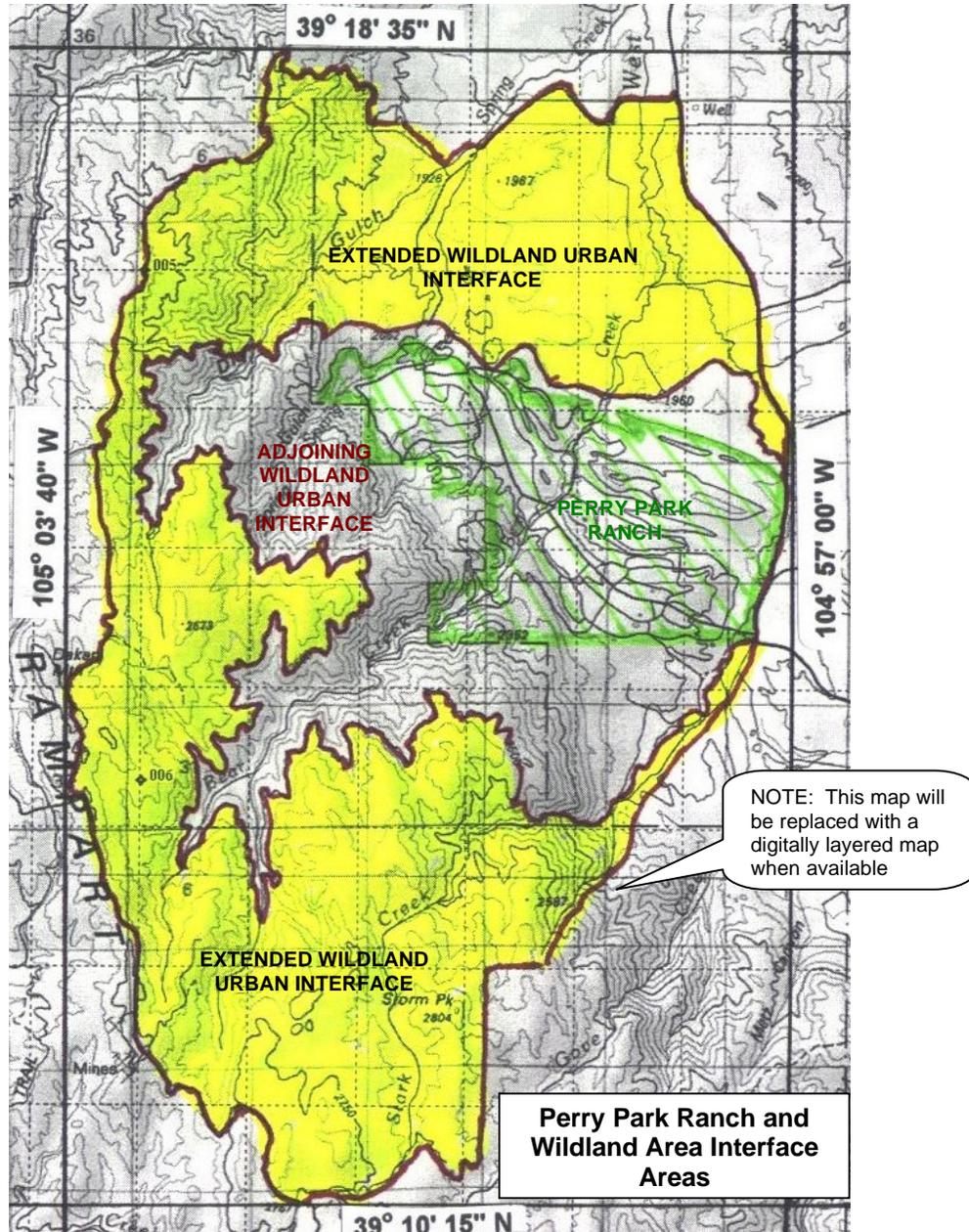
With the high potential of ground lightning ignition, the Pike National Forest land, defining two natural watersheds adjacent to Perry Park's immediate west and southwest, present the greatest wildfire threat to the Park's residential area. The Spring Gulch watershed belts Perry Park's western boundary and is densely covered in heavy Ponderosa pine and Douglas fir with heavy Gambel oak ground and ladder fuels. This watershed area extends from Perry Park's western boundary from a mile and a-half to two miles and down slopes to the northeast, intersecting the northwestern corner of Perry Park. The southwestern watershed impacting Perry Park starts approximately two miles southwest from the Park's southwestern corner boundary and follows its tributary, Bear Creek, about a half-mile on each side of the creek to the Park's southwestern boundary line. The Bear Creek watershed has fuels similar to those in the Spring Gulch watershed. Bear Creek continues through Perry Park on a southeastern to northwestern route, diagonally bisecting the Park and flowing through Lake Wauconda, the manmade lake referenced above.



In addition to the aforementioned watershed, the southeastern border area of Perry Park Ranch provides a hazard potential of wildfire entering into the park from fast-burning light fuels (prairie

grasses) from adjacent ranch lands. This southeastern area features these prairie grasses gently sloping west to northwest into heavy stands of Gamble oak, followed further to the west and northwest by significant up-sloping terrain into heavy Ponderosa pine forested areas.

Extending beyond the immediate wildfire threat posed by the adjacent National Forest land is a more distant fuel belt comprising National Forest land in the west and private property in the south and southeast. Basically, this fuel area is bounded by Dakan Road on the north, Rampart Range Road on the west, south to Fern Creek. From Fern Creek as its southernmost point this area extends diagonally to the northeast to Highway 105 that serves as the eastern border of the more distant fuel belt area.



### **Wildfire History**

In the last few years, Perry Park has escaped two wildfires in its proximity: the Border Fire, July 4, 2001 and the Hayman Fire of 2002. The Border Fire, started by lightning, was approximately three-quarters of a mile south of the southern boundary of Perry Park in the Plum Creek watershed feeding through the pond, off Highway 105 at the entrance to Perry Park Ranch. The Border fire consumed a half to three-quarters acres of fuel and was successfully suppressed by both air (helicopter) and ground forces. The burn area was in extreme terrain which had to be reached on foot. The 138,000 acre, human started Hayman Fire of 2002 had a significant impact on Perry Park even though fire fighting held it within nine miles southwest of the Park. During the height of the Hayman Fire, the fire's *Incident Command* evacuated the Park for the safety of its residents; consequently, the Hayman Fire had and has left a lasting impression on the residents of the Perry Park.

## WILDFIRE HAZARD ASSESSMENT

This section of the Community Wildfire and Protection Plan addresses the identification and the prioritization of fuel mitigation breaks for high risk wildfire hazards impacting Perry Park Ranch as well as a brief assessment of vegetation fuels currently within the proposed fuel break areas. The addressed wildfire hazard areas identify both developed areas in Perry Park and those areas both within and immediately outside of the PPMD boundaries in the Wildland Urban Interface areas described in Chapter 3, *Background and History*.

### Methodology and Strategies

The developed portion of Perry Park contains two major “safe zone” areas: the Perry Park Country Club and golf course and the stable area west of the Red Rock Drive/Perry Park Boulevard “Y.” In addition these two “safe zones,” the “Big ‘D’,” a 82.5 acre treeless plot, lies to the south of Red Rock Drive, east of the stable area. The “Big ‘D’” area has the potential of being a “safe zone” area but, for use as a “safe zone,” the fine fuel grasses would need to be removed by the Larkspur Fire Protection District during a wildfire emergency prior to use. These three aforementioned areas are congregated in the west center of the 3,840 acre Perry Park Ranch complex. Extending away from this locale are various mixtures of heavily developed areas and scattered undeveloped areas, both of these area types vary in the concentration of vegetation stands from significantly mitigated lots to dense stands of ground, ladder and crown fuels. The southwestern area of Perry Park Ranch, specifically land in the Upper Cheyenne and the Pawnee Road area is essentially undeveloped and is characterized as typical, untreated forest land with wildland grasses, heavy areas of Gamble Oak and dense ponderosa, Douglas fir and mountain juniper trees stands ...all of which is intermingled with dry, rotting tree fuel stock from beetle kill and other damage.

Two primary decision considerations were used in the methodology for identifying potential fuel breaks within the developed areas of Perry Park Ranch: established road (both paved and rough) rights of way and “connections”. For proposed fuel breaks tying to roads, mitigation widths of sixty (60) feet were considered for ease of use since that footage corresponded with road rights of way; i.e., thirty (30) feet either side of the centerline of the designated road. It should be noted that negotiations should be undertaken with private land owners adjacent to road right of way areas as well as private lands in general to build fuel breaks with widths as specified by the Colorado State Forest in its *Fuelbreak Guidelines for Forested Subdivisions* (See Appendix L). For ease of planning in this Community Wildfire Protection Plan, wildfire fuel breaks in unimproved areas such as ground trails or across solid stands of vegetation, were also preliminarily considered to be sixty feet wide for ease in estimating acreage and costs in these areas prior to baseline data studies of each of the areas. The length of the proposed fuel break, coupled with the width of the break and the density/types of vegetation in the break area were used to calculate the estimated costs of mitigation associated with each proposed fuel break / mitigation project area. An additional factor of ten percent was added to the acreage to account for measurement discrepancies.

“Connection” is a term for wildfire fuel breaks that is used with this Community Wildfire Protection Plan to describe fuel breaks that “connect” natural areas with light or no fuel content (e.g., rock ridges, riparian, etc.) or fuel breaks that “connect” more widespread thinned areas that have already had potential wildfire fuels mitigated. “Connection” breaks were proposed in areas of heavy home development/structures to assist in home area protection without destroying the environmental esthetics of the area. (See Appendix L, *Fuelbreak Guidelines for Forested Subdivisions*, for descriptions and rationale for building fuel breaks.)

For undeveloped areas within Perry Park Ranch, specific areas that are dense, untreated forest areas, potential mitigation would cover a much broader expanse of land than the wildfire fuel breaks considered for protecting developed properties.

For private land areas and National Forest land outside but directly adjacent to Perry Park Ranch, potential fuel breaks were identified that would complement potential fuel breaks within Perry Park Ranch to minimize the ingress of wildfire from Perry Park Ranch’s wildland urban interfaces.

**Quadrant Locating and Project Labeling**

This Community Wildfire Protection Plan divides Perry Park Ranch into four quadrants slaving-off of the 2001 work that Perry Park Metropolitan District did with the United States and Colorado State Forest Services. Within each quadrant, sub-compartment treatment areas and “connection” fuel breaks are prioritized by wildfire impact risk and assigned a label, identifying the quadrant area, the sub-compartment or connection break, the fire hazard class and the mitigation priority. The fire hazard class will use the five-classifications used by the Colorado State Forest Service (See Appendix D, *Fire Hazard Classes and Fuel Models*).

Quadrants are identified as A through D. Sub-compartment or mitigation projects will carry a lowercase alpha such as a, b, c, etc. Fire hazards will use five designations (0, X, A, B and C as outlined by the Colorado State Forest Service). Mitigation priority levels will range from the highest to lowest on a 1 (highest) through 4 (lowest) priority rating. Hence, a mitigation area with a designation such as: “AcX1” would mean the mitigation areas is within quadrant A; it is specifically project “c” within the quadrant having an “X” (Severe-Brush) fire rating; and, it is a project of the highest priority. The quadrant boundaries are shown by the topographical detail map below.



### Three Proposed Mitigation Strategies

The Perry Park Community Wildfire Protection Plan employs three strategies for effecting fuel mitigation for the identified and proposed projects. The application of a specific strategy is based upon the ownership and developed or undeveloped aspects of the property proposed for mitigation. The aspects forming the basis of these strategies are two-pronged: cost and legal.

#### Road Rights of Way and Perry Park Metro District Land

With properties on which either Perry Park Metropolitan District or Douglas County possesses rights of way or on properties directly owned by either of the aforementioned entities, mitigation work will be funded with one of three principals: Perry Park Metropolitan District, Douglas County or both entities jointly. This funding will either come from direct funding or through Federal grant monies applied for and received by PPMD or Douglas County.

#### Private Homeowner and Landowner Properties

Perry Park Metropolitan District neither has auspices nor declaration of use of private properties within its boundaries. Therefore, fuel mitigation on private properties, although highly encouraged by the Perry Park Metropolitan District and Larkspur Fire Protection District, is the responsibility of the property owner. However, Perry Park Metropolitan District will provide information and services to assist property owners in their mitigation efforts. This information and services will consist of reference and Firewise planning detail and planning guides, occasional Firewise training classes, mitigation slash pile removal from property roadside frontages and periodic provision of free mulch (See Appendices C and G, *Firewise Household Tips, Property Mitigation and Protection* and *Perry Park Metropolitan District Service Plan*.)

In private lands adjacent to Perry Park Metropolitan District land or a road right of way that has had fuel mitigation performed to form a fuelbreak, owners are encouraged to work with PPMD in “feathering” the mitigated fuelbreak into their private property to attain a wider fuelbreak as specified by Colorado State Forest Service (See Appendix D, *Fire Hazard Classes and Fuel Models*).

#### Undeveloped, Privately-owned Properties

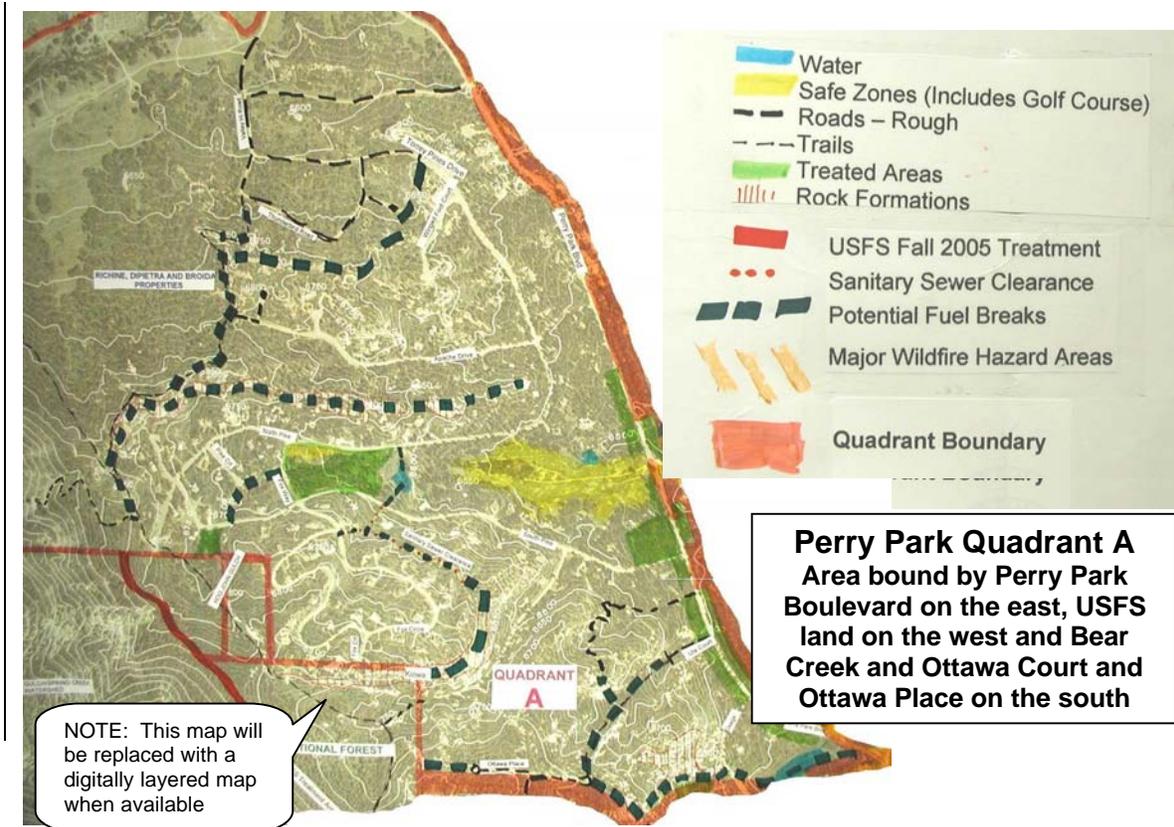
Perry Park Metropolitan District will work with Douglas County, State and Federal service agencies to encourage and potentially cause the Douglas County Board of Commissioners to enact ordinances to require property owners and land developers to *pre-build-mitigate* fuels on high risk wildfire properties to be developed. This *mitigation* is envisioned to be required prior to allowing the building of structures to proceed (See Chapter 7, *Implementation Plan*). There appears to be some degree of acceptance of developers to this community protection strategy since some developers have agreed in principle and have indicated such to the Larkspur Fire Protection District. Both the Perry Park Metropolitan District and Larkspur Fire Protection District will work to assess potential LIDs that may be planned in these currently undeveloped but prime focus areas (See Chapter 7, *Implementation*).

### Proposed Wildfire Fuel Break Areas

As indicated at the beginning of this chapter, Perry Park Ranch was divided into quadrants for the process of locating and defining potential wildfire fuel break needs. This information is shown below using quadrant maps for the reader to reference and detailed on a quadrant by quadrant basis using the four digit alphanumeric label (as specified in the second paragraph of this chapter) to designate project quadrant location, specific fuelbreak, fire hazard rating and mitigation priority. Also shown is the location description, estimated mitigation acreage of the proposed fuel break and broad, estimated cost of the project. By using the maps, the reader

should also be able to gain a sense of how firebreaks were laid-out to develop fire limiting compartments within the quadrant.

**Quadrant A**



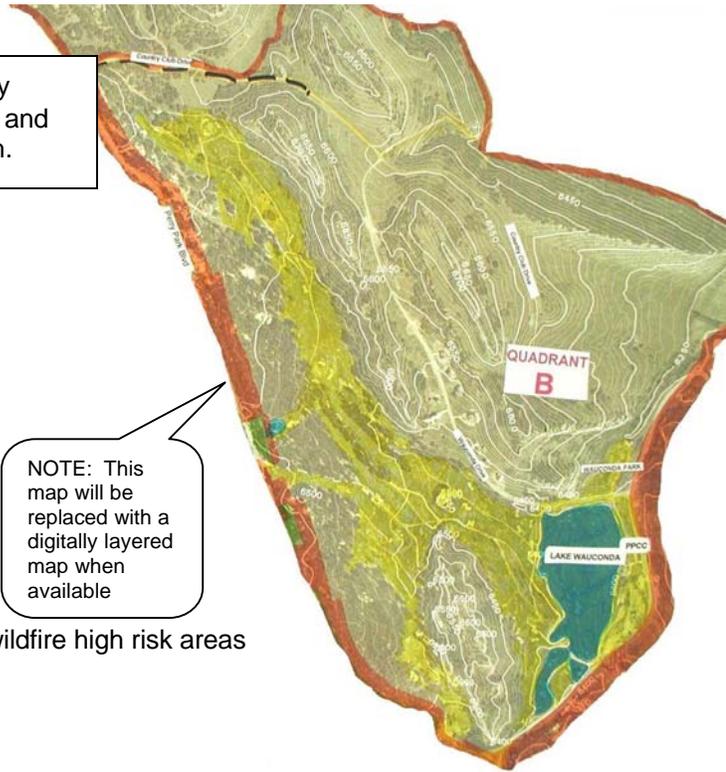
Perry Park Quadrant A Proposed Mitigation			
Compartment/Break Label	Location Description	Estimated Acreage of Mitigation	Estimated Cost
AaC1	Starting at <b>Red Rock Blvd/Perry Park Blvd "Y"</b> west along Bear Creek ridge connecting with the Seminole Trail proposed fuel break	5.05	\$3,535
AbC2	<b>Ute Court</b> cul de sac area (rough) southwest to Ottawa Court cul de sac area (rough) with midway break extension north to extend with rough trail	1.77	\$2,832
AcC1	<b>Ottawa Court/Ottawa Place</b> cul de sac areas (rough) from AbC2 (Ute Court extension break tie-in) west to border of National Forest (1600' total length/1050' rough road areas).	1.89	\$6,180
AdX1	Starting at trail entrance to the Pike National Forest off of <b>Kiowa</b> to the National Forest east and north along ridge to <i>sanitary sewer clearance</i> area between South Pike on the northeast and Fox Circle on the south	1.26	\$1,008
AeC1 <b>IDENTIFIED FOR 2006 MITIGATION</b>	<b>Fox Way</b> (midway between North Pike and South Pike west of <i>Gilloon Pond</i> mitigated area) west, curving to the south intersecting with South Pike Drive 650 feet west of Fox Way	0.88	\$2,499
AfB3	Rock formation ridge line between <b>Apache Drive</b> and North Pike southwest, tailing on the west end to trail area on the southern border of the northwest Perry Park Ranch panhandle, bordering the Pike National Forest	4.85	\$4,850
AgX2	<b>Valley Hi Road</b> (rough) south from Thunderbird Road (rough) to the Apache Drive/North Pike ridge proposed break	2.53	\$3,036
Ahx3	Ridge line east of Valley Hi Road 1,200 feet and then northwest 250 feet west of Winged Foot Court to <b>Torrey Pines</b>	3.00	\$3,600

**Quadrant B**

**Perry Park Quadrant B** bounded by Perry Park Boulevard on the west, south and east and Country Club Drive on the north.



NOTE: This map will be replaced with a digitally layered map when available



**NOTE:** Quadrant B currently has no wildfire high risk areas identified.

**Quadrant C**

**Quadrant C** bounded by Red Rock Drive on the south, PP Ranch boundary on the north, Perry Park Boulevard on the west and Plum Creek on the east.



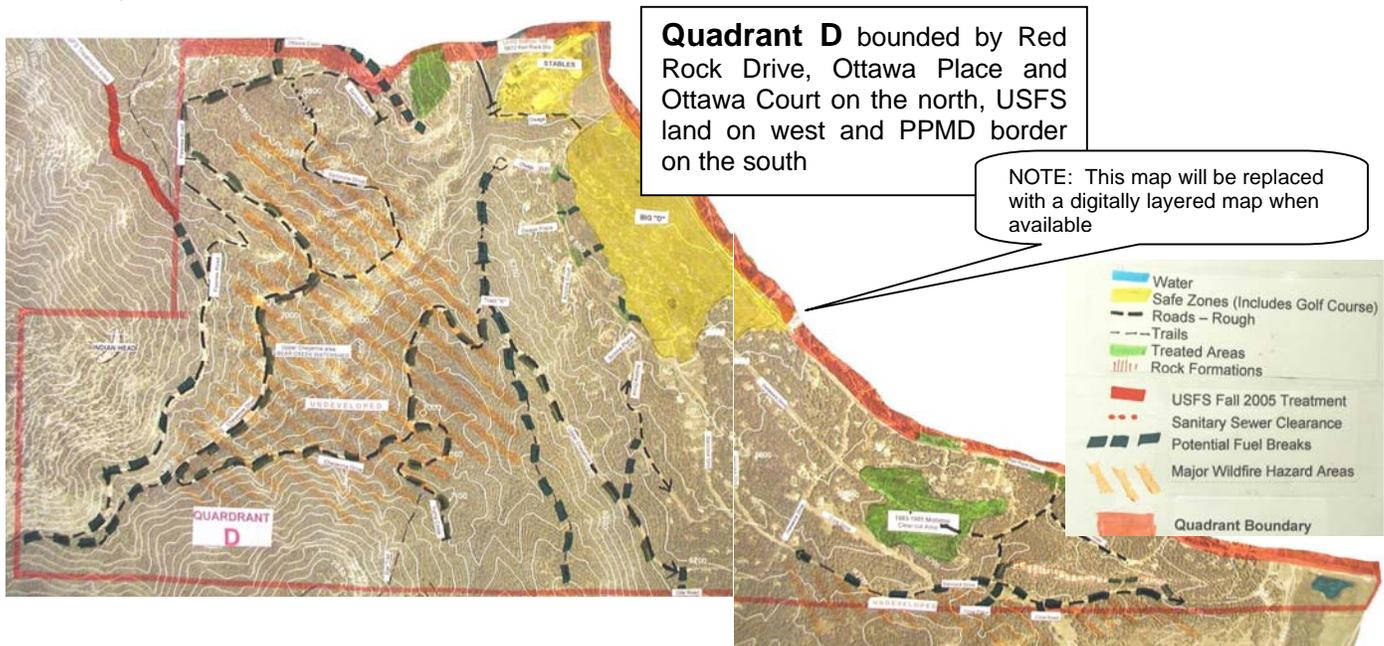
NOTE: This map will be replaced with a digitally layered map when available



Perry Park Quadrant C Proposed Mitigation			
Compartment/Break Label	Location Description	Estimated Acreage of Mitigation	Estimated Cost*
CaC3	Undeveloped area north of <b>Shoshone Drive</b> and south of <b>Cheyenne Drive</b> (rough)	53.00	\$42,400
CbX3	<b>Patrick Property</b> - agreed by owner to mitigate before development	70.00	\$56,000

\* Estimated cost for pre-build fuel mitigation work is estimated at \$800 per acre.

**Quadrant D**



Perry Park Quadrant D Proposed Mitigation			
Compartment/Break Label	Location Description	Estimated Acreage of Mitigation	Estimated Cost
DaC2*	<b>Bannock Drive</b> (rough) area on southeastern PPR guarding southern border with Haystack Ranch upslope area to the northwest from Crow Place East	2.27	\$10,386
DaC2 - Alternative Route <b>IDENTIFIED FOR 2006 MITIGATION</b>	From <b>Bannock Drive/Crow Place</b> intersection north-northeast to rock ridge formation, east 1,850' to end of rock ridge, then south to Bannock Drive	1.74	\$2,788
DbC1 <b>IDENTIFIED FOR 2006 MITIGATION</b>	<b>Bannock Drive</b> (rough) area on southeastern PPR guarding southern border with Haystack Ranch upslope area to the northwest from Crow Place West	2.27	\$10,386
DcB2	<b>Crow Road</b> (rough) from Bannock the north to southern border of Perry Park Ranch abutting the Haystack Ranch area	0.15	\$690
DdB1	<b>Crow Place</b> (rough) connecting Bannock to the north to the southern Perry Park Ranch border abutting the Haystack Ranch area	0.44	\$2,129

DeC3	South of Bannock Drive (rough) bordering Haystack Ranch area to the south	28.24	\$45,179
DfC2	<b>Gila Road</b> (rough) south of West Cheyenne Drive at gate, south to Perry Park Ranch border	0.40	\$1,175
DgC4	<b>Upper Cheyenne - Acoma Drive</b> down-slope starting 1,100 feet uphill from Upper Cheyenne gate/Gila Road point north to Acoma Drive	1.21	\$3,025
DhC1	<b>Tract "K" trail extension area</b> starting on west side of Osage Way cul de sac south by southeast to Upper Cheyenne	2.35	\$4,227
DiC3	<b>Tract "K" trail extension area</b> starting on west side of Osage Way cul de sac south by southeast to Perry Park Ranch border	4.55	\$8,182
DjX4	<b>Pawnee Road</b> (rough) east of <i>Indian Head</i> and Perry Park Metro District land area bordering National Forest southwest to Perry Park/National Forest border following ridge line, then back 1,600 feet east by northeast to Upper Cheyenne following ridge line on other side of draw.	5.80	\$24,240
DkC1	Area <b>northwest of Pawnee Road</b> (rough) connecting with United States Forest Service area west of Perry Park Ranch's western border	1.42	\$2,272
DIB2	Connecting area along rock formation east of <b>Seminole Trail</b> (rough), starting from Ottaway Court cul de sac area (rough) continuing southeasterly along ridge	1.64	\$2,624
DmX1 <b>IDENTIFIED FOR 2006 MITIGATION</b>	<b>Big "D"/Red Rock Circle</b> extensions of 2004 mitigation project, extending mitigated areas east and north of Red Rock Circle from Osage Way, Osage Place, Acoma Court and Acoma Place to the Big "D" grassland area on the north	1.26	\$1,008
DnC3	<b>Bear Creek Watershed</b> - southwestern Perry Park Ranch	400.00	\$640,000
DoC1	<b>Upper Cheyenne</b> from gate area northwest to Tract "K" extension fuel break (DhC1) intersection with Upper Cheyenne	3.43	\$13,634
DpC1	<b>Upper Cheyenne</b> DhC1 to Yuma Circle	4.87	\$19,349
DqC1	<b>Upper Cheyenne</b> from Yuma Circle (DpC1) to Bear Creek	2.65	\$10,527
DrC1	<b>Upper Cheyenne</b> from Bear Creek to National Forest on Perry Park western border	5.07	\$20,111
DsC1	<b>Pawnee Road</b> parallel with western Perry Park border, northeast by north to Ottawa Court	2.63	\$10,426

### Perry Park Ranch's Adjacent Wildland Urban Interface (WUI)

Two major areas exist impacting the potential of wildfire ingress into Perry Park Ranch from outside areas: the Pike National Forest to Perry Park's southwest and west and the ranchlands directly to the south of Perry Park, west of State Highway 105. Three potential fuel breaks have been identified in the WUI area that would significantly lower the risk of wildfire ingress to Perry Park Ranch. These three potential fuel breaks are depicted below (NOTE: The first listed area is a currently scheduled USFS project in the Pike National Forest for late Fall, 2005 – early Spring, 2006).

Perry Park Wildland Urban Interface Proposed Mitigation			
Area	Location Description	Estimated Acreage of Mitigation	Estimated Cost
Pike National Forest <b>Currently Proposed Fall, 2005-Spring, 2006</b>	<b>Pike USFS Proposed:</b> C Hazard area from Pawnee Road extension at Perry Park border northwest across Hog John Gulch upward across Spring Creek watershed to Perry Park border	27.08	\$45,283
Private Ranchland	From <b>Gila Road</b> at Perry Park border east by southeast across Haystack Ranch to opening in prairie area, dropping from 6,750 feet elevation to 6,625 feet elevation	15.53	\$24,848
Pike National Forest	From the extension of Pawnee Road at the southwest corner of Perry Park Ranch across <b>Bear Creek</b> watershed following the heavily treed ridge southwest between a half to a mile in length	28.46	\$48,475

## Fuel Reduction Project Prioritization

The risk priority associated with each of the mitigation projects proposed in this plan was established by basing the decision on balancing a number of factors.

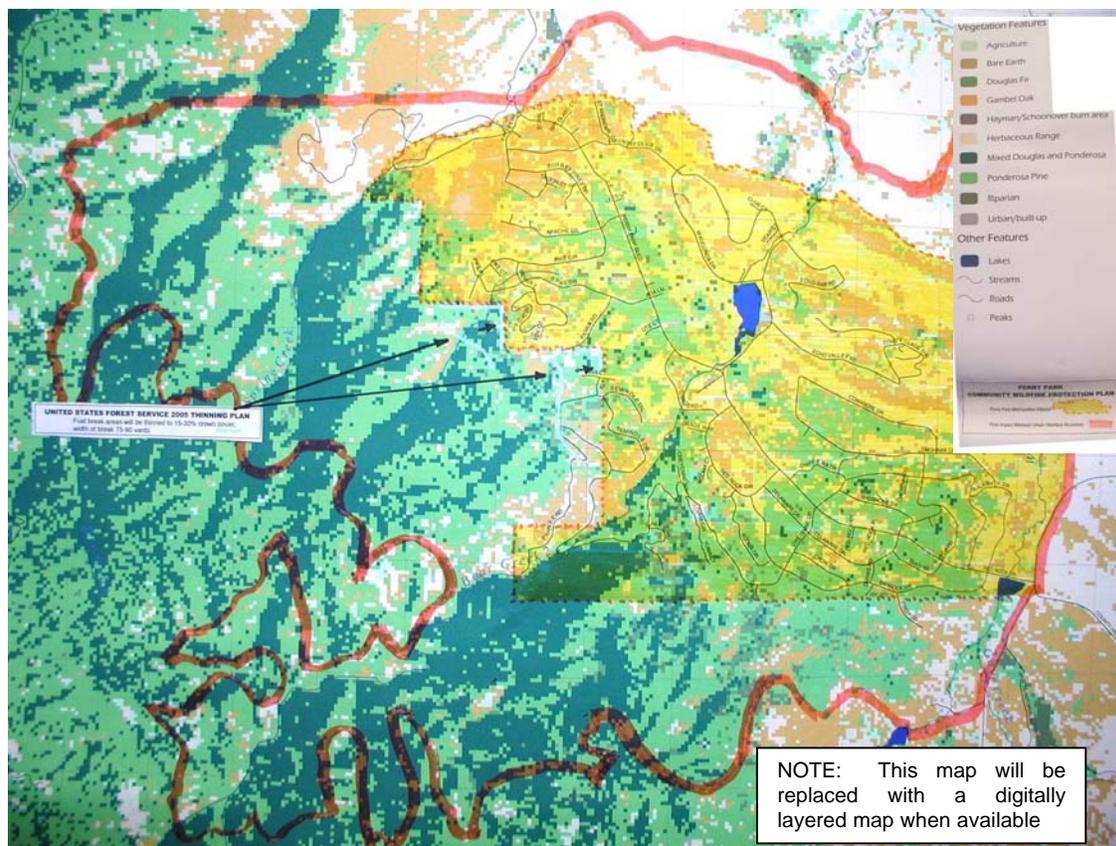
- 1) The individual areas and structures protected (Density of homes and structures);
- 2) Types and density of vegetation (Ignition and spread components);
- 3) Slopes of areas to be mitigated and slopes of areas to be protected (Spread component);
- 4) Position of areas to be protected in relation to significant wildland urban interface areas; i.e., abutting, heavily-treed National forest lands, fine fueled grasslands and privately owned ranch lands (Buffer zoning);
- 5) Wildfire characteristics of each area learned from experience of fire modeling;
- 6) Areas presenting early large impact in potential wildfire reduction;
- 7) Areas most impacted from lightning activity.

## Types of Mitigation Used for Projects

The types of mitigation or method of fuel mitigation deemed appropriate for a specific area will be chosen when the area is assessed and base-lined shortly prior to mitigation being effected. As indicated in Appendix L, *Fuelbreak Guidelines for Forested Subdivisions*, care will be closely given to assure environmental aesthetics of the immediate and surrounding area of mitigation projects.

## Vegetation Analysis

Current analysis of the density and varieties of vegetation is an integral part of the decision as to when to schedule projects. The 30 meter per pixel digital map below depicts the vegetation in Perry Park and its surrounding wildland urban interface from a 1999 photo flyover. Unfortunately this information is six years old and will be updated with 2004 flyover information prior to the final scheduling of a mitigation project.



Additional analysis and data collection support systems are currently under study by both Larkspur Fire Protection District and Perry Park Metropolitan District. Larkspur Fire Protection District is currently looking at data storage and collection software, such as RedZone® Systems, that would aid in their pre-wildfire field assessment, planning and use in developing fire fighting response to actual fire emergencies ...both vegetation and structural-wise. The Perry Park Metropolitan District is exploring various data gathering systems such as a Remote Automated Weather System (RAWS) to provide supportive weather information and early warning of potential emergency causing conditions as well as meteorological information for fire fighting in the event of a wildfire situation impacting Perry Park (See Chapter 6, *Public Notification, Communication and Support*, and Appendix F, *Perry Park Metropolitan District Communications Plan*, for further emergency supporting equipment and information systems).

### **Scheduling**

The scheduling for specific mitigation projects will be based on four factors and periodically reviewed by stakeholder agencies party to this Community Wildfire Protection Plan:

- 1) Hazard risk priority for the mitigation project;
- 2) Cost of the project and manner of funding to be used;
- 3) Environmental conditions required for mitigation; e.g., moisture levels, air quality management, etc.
- 4) Timing of “*tie-in*” projects impacting terrain identified for fuel reduction; e.g., development and LID activity and Perry Park Water and Sanitation projects.

The time schedule associated with imminent, planned fuel mitigation projects will be posted on the Metropolitan District’s website. Written notification will also be used and may take the form of announcements in the *Sentinel*, flyers, direct mailings or combinations of any of these mediums.

## SERVICES, INFRASTRUCTURES, WILDLAND FIRE RESPONSES

This section of Perry Park's Community Wildfire Protection Plan details professional and voluntary resources available to respond to emergencies associated with wildland fires impacting Perry Park's residents and structures. Professional responders are always Perry Park's front line in addressing wildfire, rescue and medical emergencies. Trained Perry Park-based voluntary neighbor emergency notification and first aid groups are available. However, these voluntary groups are only used when professional first responders cannot respond and then can only be activated by authorization of the Douglas County Emergency Services Manager or the Chief, Larkspur Fire Protection District.

### Professional Wildland Fire Response Services

For wildland fire emergencies endangering Perry Park the first line of professional responders is the Larkspur Fire Protection District (LFPD). If LFPD finds that the fire is beyond their capability to suppress, the Incident Commander on-scene will request additional assistance. Assistance will be available through Mutual Aid agreements from both within and outside Douglas County. Douglas County will coordinate and administrate those services.

### Douglas County Emergency Services

*Douglas County Sheriff's Office*, under the *Douglas County Emergency Services* division, provides the umbrella incident management and agencies coordination structure to the response and recovery from a wildland fire event(s) endangering Perry Park. Every wildland fire emergency incident that occurs in Douglas County utilizes the *Incident Command System (ICS)* during response and recovery activities, employing multi-agency operational structures as set forth in the *Douglas County Incident Management Guidelines and Standards*. The *Incident Management Guidelines and Standards* can be found in total at:

<http://www.dcsheiff.net/MAIN/DOCS/PDF/imgs.pdf>

In the emergency event of a wildland fire, Douglas County operates under a mutual aid agreement for providing equipment and personnel assistance, if able and available, among its fire fighting agencies. (See Appendix M, *Annual Fire Operating Plan for Douglas County*.) The agreement encompasses, in addition to Larkspur Fire Protection District, Castle Pines, South Metro Fire Rescue, County of Douglas, Franktown Fire, Jackson 105 Fire, City of Littleton, Mountain Communities Fire, Parker Fire, West Metro Fire, Tow of Castle Rock, Trumbull Fire and West Douglas Fire. Intra-county Mutual Aid response time to Perry Park and equipment resources are listed in Appendix I.

As resources begin to deplete and the situation is recognized to be one that could be disastrous, municipal and county officials will become involved. At that time, the Multi-Agency Coordination Group (MAC Group, reference: *Douglas County Incident Management Guidelines and Standards*) shall confer and determine what special provisions need to be made or what special action needs to be taken. Authorization for requesting the use of special use of aircraft, hand crews, strike teams, incident command teams heavy equipment, engines and personnel lies with the Douglas County Sheriff's office and offices listed on page 14 of Appendix M, *Annual Fire Operating Plan for Douglas County*. At this point of special provisioning, the need for the Emergency Operations Center (EOC) will be considered. EOCs locations for Douglas County are pre-established by the *Incident Management Guidelines and Standards*. The locations, in order of the listed priority, may change if the facility is not adequate for the situation. The EOC locations are shown in the following table.

**Emergency Operation Center Locations, Douglas County**

- |   |  |
|---|--|
| <p>1. Douglas County Sheriff's Office<br/>Robert A. Christensen Justice Center<br/>4000 Justice Way<br/>Castle Rock</p> <p>2. Park Meadows Center<br/>9350 Heritage Hills Circle<br/>Littleton</p> <p>3. Highland's Ranch Community Assoc.<br/>48 West Springer Drive<br/>Highlands Ranch</p> | <p>4. Parker Police Department<br/>19600 East Parkersquare Drive<br/>Parker</p> <p>5. Roxborough Park Metro District<br/>6222 North Roxborough Park Road<br/>Roxborough</p> <p>6. Larkspur Fire Station 161<br/>9375 South Spruce Mountain Road<br/>Larkspur</p> |
|---|--|

For wildland fire only, mutual aid from local government fire suppression resources can be requested through the Designated Dispatch Center from the on-scene Incident Commander. Requested fire suppression resources would be from entities within Douglas County or from Arapahoe, Elbert, Jefferson, Teller or El Paso counties. Out of county local government resources will be coordinated and placed by either the Colorado State Forest Service Fire Duty Officer and/or Douglas County Emergency Services.

The following is a list of commonly requested resources that are available through Douglas County:

MCP	Dump Trucks	Wildfire Cache	Transport	Sandbags
Dozers	Portalets	Trailers – Flat-	Vehicles	GIS Support
Graders	Event Tents	bed & Cargo	Portable	Barricades
Water Tenders	Radio Cache	Generators	Lighting	Feeding
Sheltering	Animal Rescue	Fuel Trucks	HazMat Trailer	Support
Support	Team	Snowmobiles	Message Signs	Cranes

Douglas County has four primary resource policies within the *incident Management Guidelines and Standards*: 1) Firefighting operations will be coordinated by the fire district or city department within their jurisdiction; 2) Mutual Aid from other than Douglas County fire agencies will be activated by on-scene Incident Command as necessary and out of county resources will be activated by the Emergency Services Division of Douglas County Sheriff's Office; 3) County Commissioners may request State assistance; and, 4) Local and State Civilian Fire Fighting Forces may be augmented by Federal Agencies.

**Larkspur Fire Protection District**

*Larkspur Fire Protection District* (LFPD) is the first responder to a sighted or reported wildland fire threatening the environs surrounding and the interior of Perry Park Ranch. LFPD has three stations: Station 161 located in the town of Larkspur; Station 162 located in Perry Park Ranch (5672 Red Rocks Drive); and, Station 164 located at Bald Mountain. The overall equipment resources of LFPD are shown below:

Equipment -	
Type 6X Engine	4
Type 5X Engine	1
Type 1X Engine	3
Type 3X Tender	1
Type 2X Tender	3

In the event LFPD personnel and equipment exhaustion, first reinforcement Mutual Aid calls are Jackson 105 (Station 143), Castle Rock Fire Department (Station 151) and El Paso County Wildfire Team (See Appendix I, *Mutual Aid Agencies / Perry Park Response Time and Equipment*).

LFPD's established first thrust strategy for fighting wildland fires endangering the Perry Park area is *direct suppression*. If suppression is not an option, then a defensive posture will be taken. Engines will be stationed at the most vulnerable structures first. Structure prep should include closing up structures, placing hose lines into use and removal of fuels around homes. Black lining (burning out) should be accomplished quickly and safely.

### **Water Resources and Safety/Staging Areas**

For direct suppression and wildfire defensive use within the "built" areas of Perry Park Ranch, inclusive of the Echo Hills Town Houses and the Echo Village Town Homes, 1000 gallon per minute water hydrants are on site. Echo Hills has four pressurized hydrants; Echo Village has three pressurized hydrants. Under widespread wildfire conditions, hydrant pressures will obviously vary. A secondary water supply exists in Wauconda Lake located in the central developed portion of Perry Park Ranch west of the intersection of Perry Park Boulevard and Echo Valley Road and bounded on the north by Wauconda Drive. Small, less than an acre, natural bodies of water exist during early and wet season conditions in the south and west areas of Perry Park Ranch but, during a wildfire event, would basically be considered useless because of size and accessibility.

Within the adjacent wildland-urban interface to Perry Park, formed by the Bear Creek and the Spring Gulch watersheds, early spring run-off streams exist. However, these streams would generally be considered as ineffective for any wildfire fighting usage other than possibly serving as a limited fuel break.

Within the boundaries of Perry Park two potential staging areas exist: the *Big "D"* bounded by Red Rock Drive and Red Rock Circle and the *"front of the Park"* at the intersection of Red Rock Drive and Colorado State Highway 105. Perry Park Country Club, located in the central area of Perry Park Ranch, presents a relatively large fuel break area and would be considered as a safety fallback area. To the north and east outside Perry Park boundaries are privately-owned, open and fenced prairie type terrain.

### **Emergency medical services**

LFPD provides first response emergency medical services to Perry Park. The list below is the breakdown of the current LFPD emergency medical resources and staff.

Equipment:	
ALS Ambulances	3
Medical Personnel*:	
EMT - Paramedic	9
EMT - Intermediate	19
EMT - Basic	2

\* Medical Personnel as of July 1, 2005

### **Internal Volunteer (Perry Park Residents) Services and Communications**

Perry Park Metropolitan District supports three volunteer groups that can be used in communication support or augmentation of professional first-responders within Perry Park in the event of a wildfire emergency: Block Captains, Fire Patrol and a Perry Park Neighborhood Emergency Team.

### **Perry Park Block Captains**

The Block Captains provide distribution of service or general awareness information and provide notification to residents of emergency circumstances that require residents to be prepared to take action. The residential area of Perry Park is divided into four quadrants. During an emergency event, such as a wildland fire, notification is effected by use of pre-established telephone “calling trees.” Authorization of Block Captain initiated residential notifications must come from *Douglas County Law Emergency Services*, a member of the *Larkspur Fire Protection District* or *Douglas County Law Enforcement* personnel. Specific information regarding the Block Captain program, authorizations, calling procedures, support tools and personnel can be found in Appendix F, *Communications Plan*.

### **Perry Park Fire Patrol**

Perry Park Fire Patrol was originally formed in 2001 in support of Perry Park’s *Firewise Community* effort. The Fire Patrol is comprised of 19 members that donate their time and effort in patrolling Perry Park and the adjacent forest area, either by four-wheel vehicle or on horseback, to identify potential or actual fire conditions. Upon discovery of a potential problem, the Fire Patrol does not directly intervene but notifies either *LFPD* or *Douglas County Law Enforcement*. Operations specifics and personnel can be found in Appendix F, *Communications Plan*.

### **Perry Park Neighborhood Emergency Team**

Perry Park has an eleven member Neighborhood Emergency Team (PPNET) that is trained for first aid administration and light search and rescue operations. This unique team has been trained under the Community Emergency Response Team (CERT) program developed for the *Department of Homeland Security*, the *United States Fire Administration* and the *Emergency Management Institute*. This group’s sole purpose is to provide on-scene first response to an emergency event only when professional first responders are unable to respond. The PPNET can be activated by only two individuals or their direct representatives: 1) *Douglas County Emergency Services Manager* or 2) Fire Chief, *Larkspur Fire Protection District*. In addition to first aid and light search and rescue activity, three members of PPNET are *FEMA* trained and certified as CERT trainers. Additional information on PPNET operations structure, authorizations and communications can be found in Appendix F, *Communications Plan*.

Additional communications information, operation *Safe Zones* and personnel contact information can be found in the Communications Plan, Appendix F.

### **Egress and Ingress Routes / Evacuation**

At present, Perry Park Ranch has only one route for vehicular egress and ingress to Perry Park, Red Rock Drive. Under this present road environment, an emergency event requiring both evacuation of Perry Park and potential simultaneous entrance into Perry Park for emergency response vehicles will pose significant safety and organization issues. All officially ordered emergency event evacuation of Perry Park residents will be directed and managed by *Douglas County Law Enforcement*.

Currently, under the auspices of the *Douglas County Board of County Commissioners*, alternatives for a secondary access route (as required by NFPA regulation 1144 and *Douglas County Comprehensive Master Plan 10B-18*) have been studied by an appointed Second Access Advisory Committee. The Second Access Advisory Committee’s recommendation has been passed to the *Douglas County Board of County Commissioners* and will be formally presented to the *Board of County Commissioners* in late October-early November, 2005.

## Critical Utilities

In the event of a wildland fire that would impact Perry Park, LFPD or DCEM Incident Command dispatcher would notify critical utilities for their support. Specifically, emergency involvement of utility support would focus on two areas: 1) Safety of the public and emergency response personnel and 2) Direct support of mitigating the emergency event.

### Public and Emergency Response Personnel Safety

Beyond the direct emergency event, event-damaged or event-threatened gas services and electrical distribution facilities can pose significant safety issues to the public and emergency response personnel. Direct intervention for disconnection, reconstruction or rerouting would be directed by:

Natural Gas Services: *Aquila*  
Emergency Service Telephone Number: (800) 303-0357

Electrical Power Services: *Intermountain Rural Electric Association*  
Emergency Service Telephone Number: (303) 688-3100

### Direct Support

Direct support for water and communication resources in support of an emergency event would be directly provided or directed by:

Water: *Perry Park Water and Sanitation Services*  
Emergency Service Telephone Number: (303) 681-2050

Wire-line Communications: *Qwest Communications:*  
Emergency Service Telephone Number: (800) 573-1311

*Comcast*  
Emergency Service Telephone Number: (303) 930-2000

Any communication for support by utilities in an area impacted by an emergency wildfire event must be authorized by the on-scene Incident Command. Any work performed in an impacted area can be requested only by on-scene Incident Command through the Designated Dispatch Center.

## PUBLIC NOTIFICATION, COMMUNICATION AND SUPPORT

Services communications to the general public are made to the Perry Park general public in two categories: 1) Warnings or emergency information broadcast to the public of specific hazards, such as single or multiple wildfires endangering the Perry Park area and 2) Informal informational services and event notifications under non-threatening conditions.

### Warnings and Hazard Notification to the General Public

Warning notifications concerning a specific wildfire or wildfires directly threatening the Perry Park area can be authorized only by the Larkspur Fire Protection District Chief, Douglas County Emergency Services Coordinator or the Douglas County Sheriff. Such a warning can be issued in a variety or combination of methods and will generally contain *action* information for residents. An *action* information or direction may contain preparatory information for residents concerning potential, upcoming evacuation of the Perry Park area or may be an immediate, “*act now*” request for evacuation due to a wildfire condition that is deemed to have imminent impact to the Perry Park area. Authorization, *official* warnings may come from:

- 1) Emergency Preparedness Network (AKA: Reverse 911)\*
- 2) Block Captain calling trees\*
- 3) 850 AM radio, KOA\*

\* See Appendix F, *Communications Plan*, for warning authorizations and execution detail.

### Services Communications and Support Systems

#### *Non-threatening Conditions*

Informational notification of Perry Park residents are done for public meetings, events and general services conduct or schedule information. Several mediums are used for general public informational notifications including Perry Park Metropolitan Board notice meeting at Perry Park’s gateway, general letter mailing, flyer posting and mailings, Perry Park Metropolitan Board website posting on <http://www.perrypark.org> and the *Sentinel* monthly newspaper.

#### *Wildfire Condition*

In the event of an actual wildfire impacting Perry Park updated residential wildfire event information will be posted periodically on the Perry Park Metropolitan Board website (<http://www.perrypark.org>) and updated information is generally available on messages recorded and made available on event-established, dial-up telephone line(s) by the Douglas County Sheriff’s Office. The telephone number(s) of phone line(s) for such use are specific event established with the numbers announced to the public via printed or announced on public broadcast mediums. Periodic updates regarding emergency events are also generally broadcasted via 850 AM KOA radio, the official emergency public broadcasted radio station for Douglas County.

Additional information regarding Public Informational Services can be found in Appendix F, *Communications Plan*, Section 6.

## IMPLEMENTATION PLAN

Chapter 7 provides a summary of actions of Perry Park's Community Wildfire Protection Plan. These actions are designed to address four broad subject areas to enhance residents' safety and diminish wildfire potential in Perry Park and its adjacent environs as identified in Chapter 4, Wildfire Hazard Assessment. The actions to be taken in the public education arena are intended to better prepare residents for helping themselves and nurturing their family's safety needs in times of crisis as well as providing them knowledge to reduce the structural ignition potential of their homes as well as those of their neighbors. The actions set forth in the Fuels Treatment category are both short term and long term. Based upon forestry and fire sciences, the Fuels Treatment actions address the mitigation of wildfire fuels in Perry Park Metropolitan District and adjacent privately owned ranch and United States Forest Service lands. The fuel mitigation areas identified for these high wildfire risk areas is to be based upon both on risk potential and funding available. The priorities associated with these wildfire risk mitigating areas can be found in Chapter 4, *Wildfire Hazard Assessment*, and Appendix J, *Hazard Reduction Mitigation Projects Data Matrix*. The third area addressed by this implementation plan is the communication, support and information services used to provide added knowledge and information to be used in planning for wildfires as well fighting them in the event one or more should occur in the Perry Park. The final broad focus area, Mitigated Areas Perpetuation, addresses maintaining fuel mitigated areas once the areas have had wildfire fuels initially reduced as well as on-going Perry Park Metropolitan District administrative actions associated with the Community Wildfire Protection Plan.

### Public Education

The Perry Park community has moderate residential turn-over and influx. Based upon average monthly real estate listings weighted against average home sale time period or "life on market," Perry Park experiences up to 8.3% change to its profile of residents during the year. Many of these "new" residents of Perry Park may not be initially familiar with living in a high wildfire risk area. The Public Education actions of this Communication Wildfire Prevention Plan are planned to educate these newcomers as well as increase the knowledge of the current Perry Park residential base in areas of family safety, *Firewise* strategies and construction and landscaping materials that are more resistant to ignition than wood or other commonly used building and landscaping products.

Ø Perry Park's Neighborhood Emergency Team<sup>1</sup> sponsored by the Perry Park Metropolitan District will annually appoint a training coordinator for a minimum of period of two years to coordinate the public education activities. These public education sessions are intended to be held quarterly at venues in or within Perry Park and led or conducted by professionals in the specific areas for which they are training or presenting information.

§ Topics for public education will vary depending on seasonal or wildfire risk conditions, input or requests from Perry Park's residential general public and the availability of qualified instructors or presenters. The public education topical areas may be but are not limited to:

- Structural construction materials or design considerations
- Home safety and home fire warning and fire suppression equipment
- Home risk self-assessment and structural wildfire risk reduction
- Residential fuel reduction strategies
- Landscaping for wildfire protection; xeriscaping
- Living adjacent to wildlands
- Home property fuel mitigation strategies and methods

§ Public Education programs will use professionally developed instruction collateral material developed from resources recognized for their experience and expertise including,

- National Firewise
- American Planning Service
- United States Forest Service
- Colorado State Forest
- Colorado State University Cooperative Extension
- Larkspur Fire Protection District
- Douglas County

§ Upon publication of the 2005 Community Wildfire Protection Plan for Perry Park, the training coordinator will develop an annual schedule that is published and periodically recapped in the *Perry Park Sentinel*. Also, see Appendix C, *Firewise Household Tips, Property Mitigation and Protection*.

Although several public meetings have been held to inform and/or assess the opinions of the general public on *Firewise* and wildfire issues (e.g., Reference Appendix E, *USFS Mitigation Impacting Perry Park*), the 2005 baseline for this implementation plan area is being considered zero. Annual performance assessment of public training will be based upon the public education training and informative session attendance as well as comments and reactions from the general public. For overall impact against the wildfire protection plan program, annual training session attendance should be summed and expressed as a percentage of Perry Park total residents. This percentage should be trended year after year for evaluation and public education course management purposes.

Footnotes: 1. Bob Owens, 303.681.2508 is the training coordinator for Public Education for the years 2005 and 2006

## Fuels Treatment

Earlier in Hazard Assessment, Chapter 4, potential wildfire fuel treatment areas were identified in three groupings: 1) *Road Rights of Way and Perry Park Metro District Land*; 2) *Private Homeowner and Landowner Properties* and 3) *Undeveloped, Privately-owned Properties*. The implementation actions set forth in this Plan address each of these individual areas separately.

### *Road Rights of Way and Perry Park Metro District Land*

Fuelbreaks provide quick, safe access for wildfire defensive positions and wildfire suppression; as such, they are necessarily linked with roads systems and, where possible, potential fuelbreaks proposed in this Plan have been connected with county-specified roads and time-established trails within Perry Park's less developed areas. The potential fuelbreaks will provide good access and defensive positions for firefighting equipment and support vehicles. In addition to creating defensive gaps of potential wildfire fuel and affording good access, potential fuel breaks are proposed in this plan to create "compartments" within Perry Park that break up large tracts of dense fuel, thus limiting uncontrolled spread of wildfire. The planned fuelbreaks and the "compartments" they enclose can be seen on the individual quadrant maps, Chapter 4, *Hazard Assessment*.

### Implementation Actions

Ø Mitigate existing and proposed road areas within the right of way associated with the road. Generally, in all established and planned roads within Perry Park, this action

creates a fuelbreak gap of 60 feet; i.e., 30 feet either side of the centerline of the road. Although Colorado State guidelines for fuelbreaks are generally 200 feet or greater, depending on fuel density and terrain slope, this Community Wildfire Protection Plan initially establishes a break of 60 feet since such can be addressed quickly within the road right of way, followed later by working with adjacent landowners to encourage widening the fuelbreak by encouraging “*feathering*” of the fuelbreak into their private land. The Perry Park Metropolitan Board will:

- § Work with Larkspur Fire Protection District, Douglas County Planning and Douglas County Emergency Services to assess and cooperate on joint fuel mitigation projects;
- § Review prioritization of fuel mitigation projects and schedule projects annually based upon funding and the identified risk priority of the projects;
- § Take action to establish a separate budgeting category (2006 and yearly beyond) to identify “*direct*” budgeted dollars to be directed at road right of way mitigation projects and mitigation projects associated with established and recognized trails and lands within Perry Park Metropolitan Board properties. Individual fuel mitigation projects are to be tracked at the sub-category or “*label*” level;
- § Detail and file for particular Federal grants awarded annually for fuel mitigation and wildland fire protection support;
- § Develop and update annually, a specific schedule of wildfire fuel mitigation projects for the next year and post the schedule on the Metropolitan District’s website for public access. All of the fuel mitigation projects identified in Chapter 4 should be completed in five to twelve years, based upon budget dollars available.

#### *Private Homeowner and Landowner Properties*

Wildfire fuel mitigation on private properties is the responsibility of the property owner. Having no authority over private lands, Perry Park Metropolitan District will provide information and services to assist property owners in their mitigation efforts. Land owners adjacent to Perry Park will be encouraged to work with PPMD in extending mitigated fuelbreaks into their private property. Such potential action is deemed to benefit both Perry Park and the individual landowner(s).

#### Implementation Actions

- Ø Perry Park Metropolitan District and/or Larkspur Fire Protection District will work with private property owners within the boundaries of Perry Park to support them in their mitigation efforts by:
  - § Provide resource and education help as indicated in the “*Public Education*” actions, above;
  - § Continue to track “*in kind*” private fuel mitigation work on private property;
  - § Fund certain support projects; e.g., periodic *slash* removal;
  - § Provide information distribution of wildfire planning or Firewise events or activity affecting the homeowner;
  - § Provide volunteer notification and limited assistance of homeowners during an emergency event.

#### Undeveloped, Privately-owned Properties

With only just over fifty percent of Perry Park lots developed, vast areas of undeveloped land (523 acres) lie to the south, southwestern and western portion of the Park area (See Chapter 4, *Hazard Assessment* and Appendix J, *Hazard Reduction Mitigation Projects Data Matrix*). These areas are heavily timbered with dense under-story brush and, in many situations, also present rough, dramatically up-sloping terrain, bordering to the west and southwest on the Pike National Forest. Consequently, these areas present huge fuel beds for wildfires and present Perry Park with its most significant ingress routes for wildfires.

The undeveloped, and generally privately-owned, areas require Perry Park to take unprecedented action in addressing fuel reduction.

#### Implementation Actions

- Ø Perry Park Metropolitan District and/or Larkspur Fire Protection District will work with private property owners of undeveloped and lands bordering on Perry Park to discuss, assess, and plan potentially joint mitigation efforts. Concurrently, PPMD will pursue collaboration with Douglas County agencies and Douglas County officials to assist and support efforts to reduce Perry Park wildfire exposure by addressing undeveloped areas. Such actions will include efforts to:
  - § Assess timing of LIDs in currently undeveloped areas and working with them, in conjunction with Douglas County, to effect guideline driven fuel mitigation on their targeted properties prior to structure construction;
  - § Encourage and stimulate Douglas County authorities to effect changes in ordinances and statutes to require developers to mitigate the areas being developed prior to any construction being effected;
  - § Initiate further discussion with owners of Haystack Ranch (to the southeast and south), Broida properties (to the northwest and west) and the United States Forest Service (with the Pike National forest to Perry Park's west and northwest) to assess potential individual and joint wildfire mitigation efforts on common interest areas.

### **Communication, Support and Information Services**

Communication, support and information services both with professional firefighting-emergency services agencies and with the general public is instrumental in nurturing wildfire preventive action as well as protection in the event of a wildfire emergency (See Chapter 6, *Public Notification, Communication and Support*, and Appendix F, *Perry Park Metropolitan District Communications Plan*). Actions designated below are targeted at raising public awareness, providing preventive and protection/fire suppression support, and recognizing efforts that have and will be taken relative to wildfire fuel mitigation in and around Perry Park.

#### Implementation Actions

- Ø Implementation actions are directed to:
  - § Notify public of wildfire preventive actions being taken by using the *Perry Park Sentinel*, the PPMD website, distributed flyers, direct mailing, or combinations of the aforementioned media.
  - § Recognize project executions in the *Sentinel* and on the PPMD website;
  - § Identify (PPMD), schedule and fund wildfire protection ancillary projects; e.g., Remote Automated Weather System (RAWS), improved communications and warning systems, signage, etc.

### **Mitigated Areas Perpetuation**

The focus of this broad section of the Implementation Plan is twofold: 1) to address the guidelines for assessing when maintenance of fuel areas that have already had fuel reduction efforts applied and 2) to set forth a checklist of administrative actions that need to be followed by the Perry Park Metropolitan District.

#### Implementation Actions

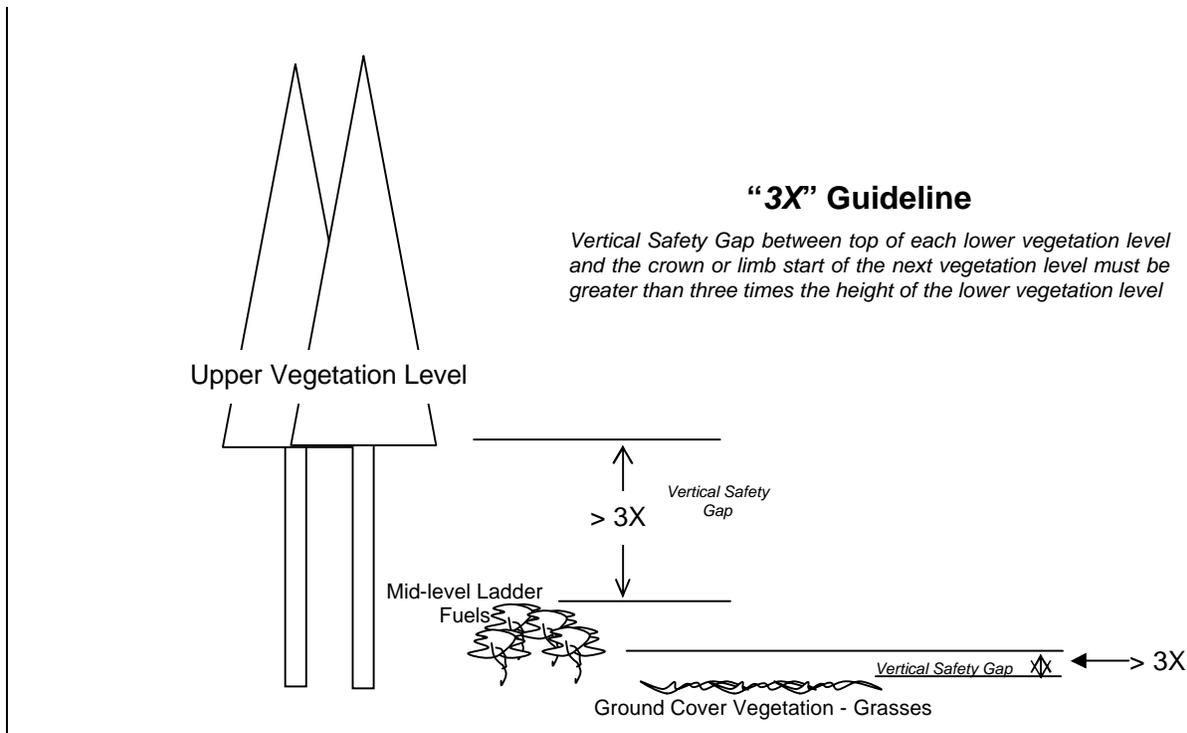
- Ø Existing wildfire fuel breaks and private land areas that have been mitigated need to be maintained to be effective. In order to evaluate effectively when maintenance of

mitigated areas is needed, a forestry “3X” guideline, described below, exists. This guideline is applicable to both private property and PPMD property. To maintain mitigated areas, private property owners and the PPMD board should:

- § Assess mitigated property periodically and determine the relationship of the property’s vegetation growth against the maintenance guideline for the mitigated property;
- § Apply trimming and cutting maintenance on the previously mitigated property if current vegetation growth falls below the “3X” guideline.

*Previously Mitigated Property/Fuelbreak Maintenance  
“3X” Guideline*

Three layers or vertical levels of growth generally constitute vegetation in a mitigated area: 1) Grasses which constitute the bottom or lower level of growth; 2) Brush or small tree stock that comprise the mid-level, commonly referenced as the primary “*ladder fuel*” level’ and, 3) Tree crowns, the upper or most vertical level of the mitigated area. The height of each respective level of vegetation is that level’s “X.” The gap between a lower vegetation level’s top and the start of the crown (or bottom limb) level of the next level of vegetation is the safety gap. Whenever the gap level closes to less than three times the height of the next lower level of vegetation (i.e., less than “3X”), maintenance trimming needs to be effected to bring the mitigated area back within the safety guidelines (i.e., more than “3X”).



- Ø The Perry Park Metropolitan Board will implement the following administrative actions:
  - § Establish a separate PPMD budget category, which denotes funds for CWPP planned actions (For ledgering and future financial analysis, sub-categories should underpin the category to track expenditures for PPMD property, privately owned property PPMD support functions and PPMD work with undeveloped parcels of privately owned land);
  - § Detail a chronological schedule for filing for Federal grants applicable to mitigation and Firewise work;

- § Budget specific PPMD funds for “*direct*” funded wildfire fuel mitigation on road/trail rights of way and PPMD owned property;
- § Manage contact and discussion with private property owners adjacent to Perry Park for potential individual and joint wildfire mitigation efforts on common interest areas;
- § Fund quarterly wildfire prevention training for Perry Park based general public;
- § Assess timing of and maintain a schedule of LID action in currently undeveloped areas;
- § Support Perry Park Second Access Advisory Committee recommendation to effect a second road for egress/ingress to Perry Park in accordance with Douglas County *Comprehensive Master Plan* 10B-18;
- § Schedule appropriate, periodic general public updates of CWPP planned work;
- § Continue to identify and schedule wildfire protection ancillary projects; e.g., Remote Automated Weather System (RAWS), improved emergency communications, emergency and wildfire protection signage, etc.
- § Establish and maintain baseline information for proposed areas of mitigation;
- § Evaluate planned CWPP projects for effectiveness and amend CWPP annually to keep plan and actions current and appropriate for changing environmental and development conditions.

**Appendix M**

**ANNUAL FIRE OPERATING PLAN**

**FOR**

**DOUGLAS COUNTY**

**2005**

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ANNUAL OPERATING PLAN

The Annual Operating Plan (AOP) is a working document compiled each year by the following participating agencies. This plan is generally considered attached to and part of the Interagency Cooperative Fire Protection Agreement (see Clause #12 of the Agreement).

**1. PLAN APPROVAL**

The parties below agree to the procedures contained in this Annual Fire Operating Plan. Refer to Section 14.B for Annual Review Procedure. Plan will be effective from May 1<sup>st</sup> to the following May 1<sup>st</sup> of each year.

DOUGLAS COUNTY SHERIFF'S OFFICE

By: \_\_\_\_\_ Date: \_\_\_\_\_

BOARD OF COUNTY COMMISSIONERS  
OF THE COUNTY OF DOUGLAS

APPROVED AS TO CONTENT:

By: \_\_\_\_\_  
Mike Maxwell  
Chairman

By: \_\_\_\_\_  
Douglas DeBord  
County Administrator

Date: \_\_\_\_\_

Date: \_\_\_\_\_

ATTEST:

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Mary Niblack  
Clerk and Recorder

By: \_\_\_\_\_  
Lance J. Ingalls  
County Attorney

ANNUAL OPERATING PLAN

The Annual Operating Plan (AOP) is a working document compiled each year by the following participating agencies. This plan is generally considered attached to and part of the Interagency Cooperative Fire Protection Agreement (see Clause #12 of the Agreement).

The party below agrees to the procedures contained in this Annual Fire Operating Plan. Refer to Section 14.B for Annual Review Procedure. Plan will be effective from May 1<sup>st</sup> to the following May 1<sup>st</sup> of each year.

COLORADO STATE FOREST SERVICE

By: \_\_\_\_\_ Date: \_\_\_\_\_

## ANNUAL OPERATING PLAN

The Annual Operating Plan (AOP) is a working document compiled each year by the following participating agencies. This plan is generally considered attached to and part of the Interagency Cooperative Fire Protection Agreement (see Clause #12 of the Agreement).

The party below agrees to the procedures contained in this Annual Fire Operating Plan. Refer to Section 14.B for Annual Review Procedure. Plan will be effective from May 1<sup>st</sup> to the following May 1<sup>st</sup> of each year.

### USDA FOREST SERVICE

By: \_\_\_\_\_ Date: \_\_\_\_\_

## **2. IDENTIFICATION OF THE PARTICIPATING AGENCIES OF THIS PLAN**

Colorado State Forest Service

Douglas County Sheriff's Office

Board of County Commissioners, Douglas County, Colorado

USDA Forest Service

## **3. AUTHORITY FOR THE PLAN -**

This Plan fulfills requirements in the latest "Interagency Cooperative Fire Agreement" between the State of Colorado and the USDA Forest Service, USDI National Park Service, Bureau of Land Management, Bureau of Indian Affairs, and Fish and Wildlife Service (ATTACHMENT H).

This Plan fulfills Section D-1 for the "Agreement for Cooperative Wildfire Protection" signed May 19, 1989 between Douglas County and the State Board of Agriculture, and hereby becomes part of that agreement as Attachment 3 (ATTACHMENT G).

This Plan fulfills Article I.2. of the "Emergency Fund Contract for Forest and Watershed Fire Control" between the State of Colorado and Douglas County and becomes Attachment B of that agreement (ATTACHMENT I).

This Plan fulfills Sections 2.B and 2.D for the "Fire Management Agreement" between the City and County of Denver (through the Denver Board of Water Commissioners) and the State Board of Agriculture (on behalf of the Colorado State Forest Service). This Fire Management Agreement remains in effect until December 31, 2005, unless terminated by either party as specified in the agreement.

This Plan fulfills Article I.2. of the "Emergency Fund Contract for Forest and Watershed Fire Control" between the State of Colorado and the Denver Board of Water Commissioners and becomes Attachment B of that agreement.

This Plan acknowledges the Douglas County Wildland Fire Management Agreement signed by participating Douglas County fire departments, Colorado State Forest Service, Douglas County Board of County Commissioners, and the Douglas County Sheriff's Office.

This Plan acknowledges 23-30-310, C.R.S., otherwise known as the Wildfire Emergency Response Fund.

## **4. PURPOSE OF THE PLAN**

This Annual Fire Operating Plan (AOP) is to set forth standard operating procedures, agreed procedures and responsibilities in order to implement cooperative wildfire management in Douglas County among the participating agencies of this agreement.

## 5. DEFINITIONS AND DESCRIPTIONS

### ***A. Fire Management Responsibilities***

The participating agencies in this agreement have wildland fire management responsibilities on certain lands in Douglas County.

Douglas County is responsible for private, state and county owned lands.

USDA Forest Service is responsible for USDA Forest Service lands.

Colorado State Forest Service is responsible for coordinating fire management actions and reimbursement procedures on Denver Water Board lands and in Denver Mountain Parks (Daniel's Park).

### ***B. Mutual Aid Dispatch Areas by Dispatch Levels***

The closest appropriate fire suppression and management resources will be dispatched to reported wildland fires.

### ***C. Mutual Aid Move-up and Cover Facilities***

Douglas County has taken steps to handle mutual aid responses and the coverage of response areas when resources are depleted. A comprehensive mutual-aid agreement is in effect between Douglas County and numerous other public safety agencies. This agreement provides for mutual response when available. In addition, Douglas County Dispatch has the ability to call in officials to monitor and recommend equipment coverage during emergencies.

### ***D. Special Management Considerations***

The U.S. Fish and Wildlife Service currently considers most areas that are within 300 feet of the 100-year flood plain to be potential habitat for the federally listed Preble's meadow jumping mouse. Necessary and reasonable emergency activities may be undertaken in these areas, however the Douglas County Planning Division and/or U.S. Fish and Wildlife Service should be notified of activity in these areas as soon as possible. The Douglas County Planning Division is responsible for coordinating with the U.S. Fish and Wildlife Service for Douglas County Government.

### ***E. Responsibility for Non-Wildland Fire Emergencies***

Non-wildland fire emergencies are the responsibility of the entity that is charged by statute or contract to fulfill obligations for mitigating that type of emergency.

### ***F. Repair of Wildfire Suppression Damage***

Each participating agency is responsible for repair and recovery of damage from wildland suppression activities. Modifications to this standard may be made through agreements at the time of fire close out to negotiate a different arrangement. Rehabilitation is not covered under EFF. However, the CSFS Line Officer may authorize it only when it is part of the Incident Action Plan during the EFF period.

## 6. FIRE MANAGEMENT RESOURCE LIST

See attachment A

## 7. PROTECTION AREA MAPS (see attachment B)

Jurisdictional Agency, Protection Unit, County boundary, Area of Responsibility.

Fire Protection facilities by agency and location.

Direct Protection Areas.

Mutual Aid Dispatch Areas.

Special Management Consideration Areas.

Date Effective.

## 8. FIRE READINESS

### A. Fire Planning

#### 1. PRE-SUPPRESSION ANALYSIS PLANS

Pre-attack plans have been developed for some subdivisions in Douglas County by the fire departments and/or fire districts that serve them. Comprehensive pre-suppression analysis plans for Douglas County have not been developed. Additionally, Denver Water Board has developed pre-suppression plans for areas where Denver Water has significant improved ownerships.

#### 2. TRIGGER POINTS FOR INCREASE/DECREASE IN STAFFING/READINESS

The following staffing class ratings outline the recommended complement of personnel and equipment available for wildland fire suppression based on the fire danger rating for the day.

Staffing Class I	=	Low
Staffing Class II	=	Moderate
Staffing Class III	=	High
Staffing Class IV	=	Very High
Staffing Class V	=	Extreme
Red Flag Alert	=	Red Flag Alert

For a description of the fire danger rating system, see Section 11.

#### 3. PREVENTION PLANS

See Section 11.

#### 4. PRESCRIBED FIRE PLANS

Agencies planning prescribed fires must report these activities to Douglas County Government Emergency Services and Douglas County Sheriff's Office Dispatch. Notification should take place a minimum of 72 hours prior to the start of the intended activity. In addition, a description of the unit being burned and resources utilized should be provided.

Escaped wildland fires resulting from a prescribed fire, which was ignited by or at the direction of one of the parties to this agreement, shall be the responsible party for costs associated with suppression of the escaped wildland fire. The Douglas County Emergency Response Mutual Aid Agreement will outline suppression costs for the first twelve hours of an escaped wildland fire. Parties external to this agreement may take suppression action within its jurisdiction when lands are threatened by wildland fire. Such suppression action may be taken on its own initiative or at the request of the responsible party, if other agreements permit.

### ***B. Wildfire Training Needs and Coordination***

Each participating agency shall be responsible for the training of its own personnel. Participating agencies will advise each other of planned training sessions and issue invitations to participate when appropriate.

Safety of personnel involved in incidents is critical. Therefore, it is advised that all personnel who may be involved in wildland fire management, suppression, or control receive training in the accepted standard wildland curriculum including: Basic Fire Suppression (S-130), Basic Fire Behavior (S-190), and Standards for Survival. Successful completion of these courses plus an annual physical fitness test is the national accepted standard for personnel to be qualified as a Fire Fighter Type 2 under the National Interagency Incident Management System. Fire Fighter Type 2 qualifications are required for assignment outside of Douglas County.

Suppression forces operating on federal lands or working beyond the mutual aid period, must be equipped with appropriate personnel protective equipment (PPE) and certified with a minimum Fire Fighter Type 2 qualification (red carded), as specified in the current federal policy FSM 5130.3 and 5135.1.

Each agency will be responsible for providing personal protective equipment for their personnel to include fire resistant clothing, a hard hat with eye protection, gloves and fire shelter. However, participating agencies may assist by providing specified equipment needed for an individual incident upon request.

### ***C. Inspection Schedules***

All State Agreement resources will receive a thorough inspection for roadworthiness annually by the Colorado State Forest Service or its designee. Federal agencies retain the right to inspect all equipment, regardless of ownership, prior to entering into an Emergency Equipment Rental Agreement for the equipment.

All Colorado State Forest Service cooperators engines and equipment subject to use on interagency teams will be inspected to ensure use and roadworthiness.

All engines dispatched to incidents outside of Douglas County shall be thoroughly cleaned, including the undercarriage, so as to remove noxious weed seeds and prevent them from being transported to or from an assigned incident.

## **9. WILDFIRE SUPPRESSION PROCEDURES**

### ***A. ICS Use***

The National Incident Management System's (NIMS) Incident Command System (ICS) will be utilized on all fires.

If a wildfire crosses or threatens jurisdictional boundaries and becomes a multi-agency fire, the responsible jurisdiction may request a Unified (shared) Command structure for any wildland fire situation. Where such Unified Command is not implemented, the responsible jurisdiction may reserve the right to designate an agency liaison capable of evaluating operational tactics and local resource availability. A Unified Command will be made up of representatives from the participating agencies involved in the incident. The purpose of a Unified Command will be to meet as a group and identify policies, objectives and strategy, resulting in one common set of objectives given to a single Operations Section Chief for tactical implementation. The Unified Command shall coordinate the release of all information to agencies and the media.

### ***B. Detection Standards***

Aerial detection flights should be coordinated through the Pueblo Interagency Dispatch Center when using federal resources.

### ***C. Relationship with Local Mobilization Guide***

If statewide mobilization procedures have been developed they can be found either with the Colorado Division of Homeland Security, Preparedness and Fire Safety or the Douglas County Emergency Operations Plan (also known as the Douglas County Incident Management Guidelines and Standards).

### ***D. Notification About Fires***

The participating agency responsible for wildland fire management must be notified of fires on or threatening lands within their jurisdiction as soon as the location has been determined by the arrival of initial attack forces.

For the purpose of this agreement, the designated dispatch centers in Douglas County responsible for dispatching fire management resources to a wildland fire are:

#### **Douglas County Sheriff's Office Dispatch Center**

#### **Pueblo Interagency Dispatch Center**

The appropriate dispatch center will immediately notify or dispatch the appropriate agency to respond to wildland fires.

In the Douglas County Sheriff's Office Dispatch Center, dispatch procedures and protocol from the United Fire Dispatch Authority will govern the response of fire departments and notification procedures of fire departments.

The Douglas County Sheriff's Office Dispatch Center shall be immediately notified of all wildland fire situations that occur within Douglas County, regardless of which jurisdiction has wildland fire management responsibility. The purpose of this procedure is to ensure that at least one point of contact is aware of wildland fire activity.

The Douglas County Dispatch Center will immediately notify the Colorado State Forest Service of all wildland fires in Douglas County, including all wildland fires that occur on Denver Water Board lands and properties owned by the City and County of Denver, including Daniel's Park. The Colorado State Forest Service Fire Duty Officer will make notification to the Denver Water Board regarding wildland fires threatening their lands. The Colorado State Forest Service Fire Duty Officer may request the Douglas County Dispatch Center notify the Denver Water Board representative. The Colorado State Forest Service will provide current contact information for Denver Water and the Colorado State Forest

Service Fire Duty Officer to the Douglas County Dispatch Center annually or whenever changes occur. The Fire Duty Officer will respond, at his/her discretion, to serve, as Denver's representative on the incident to facilitate reimbursement. The Colorado State Forest Service will not assume command of any fire unless requested by a participating agency of the Annual Operating Plan.

**E. Establishment and Revision of Mutual Aid Dispatch Areas**

In Douglas County, these reciprocal zones will be defined as intermingled federally and privately owned lands, plus all lands within one mile of accepted federal land boundary lines. These zones are for initial attack purposes only. A participating agency will assist another participating agency by implementing initial attack action on fires located within the reciprocal zone regardless of ownership.

Upon receiving a report of a fire near a reciprocal zone, the participating agency first receiving the report shall immediately notify the other participating agencies.

For fires within the reciprocal zones, each agency will assume responsibility for its own expenses during the **first twelve hours** from the time of dispatch for the requested resources regardless of land management boundaries.

After the **first twelve hours** the participating agency responsible for the wildland fire is responsible for the costs for wildland fire management actions. Reimbursable costs are limited by the amount annually appropriated for this purpose.

Once location and land management status has been determined, the participating agency responsible will assume the position of Incident Command. If the fire is threatening the lands under the management of another participating agency, a Unified Command will be established.

Each participating agency with land involved in a reciprocal zone boundary situation shall make a reasonable effort to send resources and/or a qualified representative to a wildland fire burning in the reciprocal zone. If a participating agency does not send a representative to a wildland fire and the fire has been determined to be under that agency's management then the assisting agencies may request reimbursement for costs incurred from the responsible land management agency.

The Incident Commander or Unified Commanders designated by the participating agencies will determine when and which resources will be demobilized.

Only resources from entities specifically ordered by the participating agency will be considered for reimbursement. All resources not specifically authorized or ordered by a participating agency will be demobilized from the fire at the participating agency's discretion.

**F. Initial Attack Dispatch Levels and Their Determination**

The following response guide will be used to determine minimum reimbursement to a cooperating agency prior to the arrival of the benefiting agency. Reimbursement may be adjusted upward according to site-specific fire conditions after consultation among participating agencies.

- Staffing Class I & II.....1 engine, 3 persons / tools
- Staffing Class III.....1 engine, 5 persons / tools
- Staffing Class IV.....1 engine, 8 persons / tools
- Staffing Class V.....2 engines, or engine & tender, 12 persons / tools

Initial response agencies should dispatch the most appropriate resources for the location and conditions of the fire.

**G. Dispatching and Resource Order Process**

Mutual aid from local government fire suppression resources in other counties will be requested through Douglas County Dispatch. County requests for state and federal fire resources will be made only by those authorized to do so (listed below) through Pueblo Interagency Dispatch Center. The Colorado State Forest Service Fire Duty Officer should be notified of all requests made to the Pueblo Interagency Dispatch Center as soon as possible. Request for state agency assistance, including requests for CSFS engines on loan to county fire agencies, will be made through the Colorado State Forest Service Fire Duty Officer.

Agencies not participating in this agreement may not order resources on behalf of a participating agency. A participating agency shall not be responsible for costs or liability incurred by a non-participating agency that requests or directly orders resources from their source for a wildland fire regardless of where it is burning.

**PERSONS AUTHORIZED TO ORDER STATE OR FEDERAL FIRE MANAGEMENT RESOURCES IN DOUGLAS COUNTY.**

This includes but is not limited to: aircraft, hand crews, strike teams, incident management teams, heavy equipment, engines, personnel and reimbursable local government resources.

**Douglas County Sheriff's Office**

Micheal L. Acree	Sheriff
David A. Weaver	Undersheriff
Michael D. Coleman	Division Chief
Ken Rost	Lieutenant

**Douglas County Government Administration**

Doug DeBord	County Administrator
Walter M. Maxwell	Commissioner
Melanie Worley	Commissioner
Steve Board	Commissioner

**Douglas County Emergency Management**

Jamie Moore	Emergency Management Manager
Tim Johnson	Emergency Management Coordinator

**Colorado State Forest Service**

CSFS Personnel Fire Duty Officer on active fires being considered for Emergency Fire Fund (EFF) activation.

**USDA Forest Service**

USDA Forest Service appointed Incident Commander (only for USDA supervised fires).

## **H. Reinforcements and Support**

Law enforcement agencies should provide traffic control during fire incidents. The Douglas County Sheriff's Office will provide overall coordination of traffic control to ensure that traffic management plans are being executed effectively. This will expedite the routing of vehicles and personnel to and from major fires and to exclude unauthorized personnel from the fire area.

It will be the responsibility of the agency upon whose land the fire is burning to take law enforcement action. All wildland fire management agencies will gather and preserve information and evidence pertaining to the cause of the fire.

## **I. Move-up and Cover Locations and Procedures**

Coverage procedures are determined by each participating agency and shall be coordinated and managed in accordance with in-house policies.

## **J. Interagency procurement, loaning, sharing, or exchanging and maintenance of facilities, equipment, and support services**

Non-federal participants in this plan may purchase fire suppression supplies from General Services Administration through Colorado State Forest Service. Any other loaning, sharing, exchanging, or maintenance of facilities, equipment, or support services will be considered on a case-by-case basis and must be mutually agreed upon by the concerned parties.

## **K. Interagency Sharing of Communications Systems and Frequencies**

All agencies signing this plan authorize the use of their radio frequencies by other agency personnel for emergency purposes only.

Whenever possible Cooperators wishing to communicate on USFS frequency's should have Narrowband capabilities and be P25 compliant on the narrowband side.

All Federal wildland firefighting agencies (USFS / BLM / NPS/ USFWS) have narrow banded as of December 31, 2004. This means that federal VHF systems have converted to 12.5 kHz bandwidth. After that date, any system still operating wide-band, 25 kHz, will be operating on a Non Interference Basis (NIB). This means that if you receive radio interference from any authorized federal user, you do not have the right to request relief. It also means that if you cause radio interference to any authorized user, you will have adjust your operation stop the interference to include shutting down your. (From USFS National Office)

\*Air to ground channels are managed by Pueblo Interagency Dispatch and may be used by the Incident Commander or designee as authorized for each incident by Pueblo Interagency Dispatch. See Attachment J- PSICC Radio Frequency List

AGENCY	CHANNEL	RECEIVE	RECEIVE TONE	TRANSMIT	TRANSMIT TONE
CSFS	Work channel	151.340	n/a	151.340	n/a
USFS	Pike Direct	*168.7250	n/a	168.725	n/a
* Narrow Band	Pike Work	*163.1000	n/a	163.100	n/a
	Devil Head Rpt	*168.7250	123.0	168.125	156.7

	Pikes Peak Rpt	*168.7250	123.0	168.125	167.9
	Badger Mtn Rpt	*168.7250	123.0	168.125	136.5
	*Air to Ground	*172.3750	n/a	172.375	n/a
	*Air to Ground2	Assigned by Rocky Mt. Coordination Center			
DOUGLAS COUNTY					
	FERN 1	154.280	n/a	154.280	n/a
	FERN 2	154.295	n/a	154.295	n/a
	FERN 3	154.265	n/a	154.265	n/a
	DISP 1	800 MHz	n/a	800 MHz	n/a
	DISP 2	800 MHz	n/a	800 MHz	n/a
	DEC	800 MHz	n/a	800 MHz	n/a
	MAC 1	800 MHz	n/a	800 MHz	n/a
	MAC 2	800 MHz	n/a	800 MHz	n/a
	MAC 3	800 MHz	n/a	800 MHz	n/a
	MAC 4	800 MHz	n/a	800 MHz	n/a
	MAC 21	800 MHz	N/a	800 MHz	N/a
	I-CALL	866.0125	156.7	821.0125	156.7
	I-TAC 1	866.5125	156.7	821.5125	156.7
	I-TAC 2	867.0125	156.7	822.0125	156.7
	I-TAC 3	867.5125	156.7	822.5125	156.7
	I-TAC 4	868.0125	156.7	823.0125	156.7
	Statewide TAC	868.7875	156.7	823.7875	156.7

**L. Wildland Fire Situation Analysis**

Federal agencies are required to complete a Wildland Fire Situation Analysis (WFSA in ATTACHMENT D) on all fires on federal land that escape initial attack. This procedure requires federal agency unit administrator participation.

CSFS requires an Emergency Fire Fund (EFF) Analysis Form (CSFS #108A attached as ATTACHMENT D) to be prepared on non-federal fires that have the potential to exceed

county control capabilities. The Sheriff should use this form to help determine if a fire might be eligible for EFF.

### **M. State Emergency Fire Fund (EFF)**

#### **1. INTENT**

The Emergency Fire Fund (EFF) may be used to assist cooperating counties and the Denver Water Board. The fund will be used only for approved wildfire suppression and control activities. The State Forester, or his representative, is the only person authorized to approve and implement the fund.

Douglas County and the Denver Water Board are participants in the EFF Agreement with CSFS. As a participant to this agreement, the State agrees to come to the aid of Douglas County and the Denver Water Board should suppression resource needs exceed county capability.

When EFF is implemented, CSFS assumes responsibility and authority for all suppression activity until the fire is returned to county responsibility; however, the county must maintain a minimum level of participation after EFF is implemented as outlined in section 9.M.5.b.

#### **2. FUNDING**

The EFF is funded by an annual assessment of member counties. It is based on a formula that considers the number of forested acres protected and the valuation of private lands within the county.

#### **3. ROLES**

##### **a. CSFS District Forester**

Acts for State Forester in the absence of an assigned Incident Line Officer; assist Sheriff in completing EFF Analysis Form CSFS #108A) for each shift; prepare CSFS Fire Funding Request (CSFS #164); assure Incident Line Officer is aware of local situations and procedures.

##### **b. Douglas County Sheriff**

Prepare EFF Analysis Form (CSFS #108A) for potential EFF fires; sign Assumption of Fire Control Duty Form (CSFS #168) for fires that the State Forester approves for EFF; serve as county representative on Unified Command group.

##### **c. Douglas County Commissioners**

Review and approve Assumption of Fire Control Duty Form (CSFS #168) for fires that the State Forester approves for EFF.

#### **4. UNIFIED COMMAND**

All EFF fires will utilize a Unified Command consisting of, at a minimum, Douglas County's official representative and a line officer from the Colorado State Forest Service. If land administered by another agency is threatened or involved, that agency may be requested to provide an agency representative to the Unified Command.

## **5. EFF ACTIVATION**

Implementation of the Emergency Fire Fund can be done only by the Colorado State Forester upon the recommendation of the local CSFS District Fire Duty Officer, following a request from the county. For this reason, it is important that the CSFS Fire Duty Officer be notified immediately of all wildland fires within the county. Should the fire surpass, or threaten to surpass, the ability of county resources to contain it, EFF implementation can occur only with a CSFS representative on scene.

### **a. CSFS Forms (ATTACHMENT D)**

\* 108A prepared by Douglas County Sheriff and CSFS District Forester.

\* 168 prepared by CSFS District Forester with input from Douglas County Sheriff.

\* WFSA prepared by Incident Line Officer with input from District Forester and Sheriff.

### **b. County Responsibility**

The minimum Douglas County commitment for an ongoing EFF fire will be:

- Request those forces from the Fire Protection District within which the incident is occurring, while still providing a minimal level of response for other, new incidents with that district.

- Request those mutual aid forces that are normally used by the Fire Protection District within which the incident is occurring, without jeopardizing the ability of the assisting agencies to mount a reasonable response within their own jurisdiction.

- Provide Douglas County equipment as may be available and as mutually agreed upon between Douglas County and the CSFS Line Officer, given the specific conditions and needs of the incident and to support or assist an assigned Incident Management Team (IMT).

- Provide traffic control and law enforcement as necessary. It is understood that if the tactics of a given incident do not require this resource commitment, it will not be required on scene.

### **c. Denver Water Board Responsibility**

Personnel and equipment from the local or other water districts that are qualified for wildfire suppression duties while still providing a minimal level of service to the local or other district operations. This may include resources such as road maintenance, water supply, transportation, communications, facilities, first aid, and other Denver Water Board-owned equipment and personnel as may be available and as mutually agreed upon between the county, Denver Water Board, and the CSFS Line Officer, given the specific conditions and needs of the incident.

### **d. EFF/CSFS Responsibility**

CSFS will provide a District Representative and an Incident Line Officer for each EFF fire. CSFS will act as the fund administrator for all EFF fires.

## **6. EFF DEACTIVATION**

CSFS will transfer control of an EFF fire back to Douglas County when fire spread is contained, the Line Officer's objectives have been met, and a written plan has been prepared for the next operational period.

### **a. Mop-up and patrol**

Douglas County will be responsible for fire monitoring and mop-up after an EFF fire has been transferred back to Douglas County from CSFS.

b. Reclamation

EFF monies may pay for the costs for constructing water bars and other erosion control mechanisms, provided this work is accomplished during fire suppression and mop-up activities during the EFF period and is supported by the Incident Management Team charged with management responsibility for the fire. Reseeding of the fireline is not authorized under EFF. Any reclamation work must be funded by individual landowners.

***N. Dispatch Centers or Other Incident Support Facilities***

The Pueblo Interagency Dispatch Center (PDC) will be the point of contact for all fires involving USDA Forest Service lands. In addition, PDC has also agreed to be the contact point if Colorado State Forest Service assistance is requested for wildland fires on state and private property. Pueblo Interagency Dispatch may be contacted at 719-553-1600.

***O. Post-incident Action Analysis***

Analysis of incidents will be conducted at a level commensurate with the complexity of the incident.

***P. Out-of-Jurisdiction Assignments***

**1. Standards**

Standards and Procedures for mutual aid assignments are outlined in section 9.E of this plan and in the Douglas County Emergency Operations Plan (also known as the Douglas County Incident Management Guidelines and Standards).

Non-federal personnel ordered as a single resource must be prepared to cover incidental expenses with funds or credit cards. Reimbursements will be made through the CSFS, based upon invoicing and supporting documentation.

Prior to being dispatched on interagency assignments, equipment and staffing must meet or exceed the current Rocky Mountain Area (RMA) standards found in the RMA Mobilization Guide (75.1) to qualify for incident use or full reimbursement. RMA has additional staffing requirements above NWCG standards for engine types 2-7. Staffing below RMA standards will result in reduction of reimbursement by appropriate personnel rate for missing personnel.

**2. Procedures**

Equipment and personnel will be dispatched only when a current Cooperative Resource Rate Form is on file with CSFS and availability status is current with Pueblo Interagency Dispatch Center.

Pueblo Interagency Dispatch Center may be able to obtain lowboy transports for equipment when requested for long distance travel assignments. Unavailability of lowboy transports may require driving the apparatus to fulfill assignment requests.

### **3. Participation on National, Regional, Zone and Local IMT's**

In keeping with the concept of cooperative fire management, federal and non-federal personnel are encouraged to support and join Incident Management Teams (IMT's) or Incident Management Groups (IMG's) within and outside the PIDZ.

Federal and non-federal personnel participating on National, Regional, Zone and Local IMT's or IMG's will be ordered through and tracked by their respective dispatch organizations.

Request for assistance outside of mutual aid areas described in this agreement must be through the appropriate dispatch centers for tracking and reimbursement. Personnel responding to a non-mutual aid incident must have been dispatched by their jurisdiction and have a resource order.

## **10. AVIATION PROCEDURES**

### ***A. Aviation Map and Narrative***

Federal agencies have mapped aviation issues in their fire management action plans.

- 1. HAZARDS**
- 2. SENSITIVE ZONES (urban-interface, aquatic, wilderness, etc.)**
- 3. HELISPOTS, DIP SITES**
- 4. AUTOMATIC DISPATCH ZONES (tied to preparedness planning)**
- 5. DETECTION ROUTES**
- 6. FOAM/RETARDANT RESTRICTION AREAS**

### ***B. Flight Following/Frequency Management***

There is a frequency plan developed for Colorado that identifies frequencies for specific areas of Colorado. This plan is located at Pueblo Interagency Dispatch center.

PDC will flight follow for aircraft ordered through them. If radio communication problems develop, PDC will coordinate with adjacent dispatch centers to provide flight following.

### ***C. Call When Needed (CWN) Aircraft, Tactical and Support Aircraft.***

CALL WHEN NEEDED (CWN) for the pre-positioning of Single Engine Air Tankers (SEAT) will be requested when the following criteria is met:

- When the fire danger rating is predicted to be Staffing Class IV or greater, based upon readings at an official "RAWS" (Remote Automatic Weather Station); and
- When five (5) wildland ignitions have been reported within the previous 24 hour period in the following mountain shrub, ponderosa pine, or mixed conifer; or
- When a single major wildland incident has occurred in these fuel types in excess of 10 acres within the previous 24 hours; or

- When a major holiday or other significant event is anticipated to bring numerous people into the interface and forest areas; or
- Some other combination of events and circumstances that create a situation warranting such action as agreed upon by Douglas County Emergency Services, USFS, and CSFS Franktown District. Such things as lightning activity or lightning ignitions, other extreme or unique weather occurrences, heavy air tankers not located in Colorado, etc., should be considered.

### **CALL WHEN NEEDED REQUEST PROCEDURES**

Movement of, and pre-positioning of aircraft shall be at Colorado State Forest Service expense subject to budget depletion.

When CALL WHEN NEEDED criteria have been met, the following procedures will be utilized to request aircraft.

1. An official representative from Douglas County Emergency Services and the Colorado State Forest Service shall jointly agree upon their request. The agreement shall consist of the specific criteria met that is prompting the request, the pre-position air base and the anticipated length of service.
2. Colorado State Forest Service Franktown District will forward this information to the CSFS State Office Contracting Officers Representative (C.O.R.) for action.
3. The State C.O.R. will respond as soon as possible to the Colorado State Forest Service Franktown District with the disposition of the request and aircraft type, capabilities, tail number, call signs, ETA to pre-position location, pilot name, pilot contact procedures
4. The Colorado State Forest Service will notify Douglas County Emergency Services and the Pueblo Interagency Dispatch Center of request for pre-positioned airtanker movement approval.

The procedure for dispatching the single engine air tanker to a wildland fire incident is the same as that for ordering aircraft. (See section 10.)

### ***D. Fixed Wing Base Management***

The Colorado State Forest Service Fire Duty Officer and Douglas County Emergency Services will jointly arrange for ground support and fixed wing base management.

### ***E. Single-Engine Tanker Bases***

Potential bases include:

- Air Force Academy
- Boulder County Airport
- Fremont County Airport
- Jefferson County Airport
- Pueblo Municipal Airport

## ***F. Leadplane / Air Attack Activation***

The determination to use a leadplane or air attack on an incident will be made by the interagency dispatch center that processes and implements the aviation resource request.

A lead plane, air attack supervisor or Air Tanker Coordinator will accompany air resources on the following missions:

- § When two or more air tankers will be over the fire at the same time.
- § If the air tanker pilot is not Initial Attack rated through the federal system or the wildland fire is burning in an urban wildland interface area.
- § Whenever any air tanker is operating within thirty minutes of sunset or sunrise at the nearest designated air tanker base.

**Air tankers are to be dispatched to arrive over a fire not earlier than thirty minutes after official sunrise and not later than thirty minutes before official sunset.**

## ***G. Aviation Requests And Operations***

### **1. Initial Attack**

Aircraft identified in section 6, may be available as initial attack resources. Aircraft are typically managed through a national contract; therefore orders may be filled with aircraft from out of state. Aircraft located out of state may incur additional costs at the expense of the requesting agency for transportation to and from the fire.

Requests for aviation resources are managed in accordance with Section 9.

### **2. Boundary Fires**

See Section 9, paragraph E.

### **3. Wildland Urban Interface**

See Section 9.

### **4. Mutual Aid Procedures**

See Section 9.

### **5. Air Space Restrictions**

If an aircraft management issue poses a hazard for fire air operations, the Incident Commander may request an air space restriction. The Pueblo Interagency Dispatch Center or Douglas County Sheriff's Office Dispatch will facilitate this request through the FAA.

## ***H. Inspection Schedules***

Fire suppression aircraft are inspected annually and certified for their capabilities by either the USDA, Forest Service or the Office of Aircraft Services.

## ***I. Aviation Dispatch Procedures***

The following information should be relayed to the dispatch center processing a request for aircraft:

Incident Name

Latitude and longitude of incident

Name of ground contact

Hazards located within the area (power lines, towers, other aircraft in the area)

Radio frequencies or talkgroups for air to ground communication

Specific type of resource being requested

### **Single Engine Air Tanker (SEAT) Dispatch Criteria**

A SEAT will be dispatched only to confirmed wildland fires. The SEAT will not be dispatched to smoke reports.

There must be personnel on the ground at the site of the fire with capability to communicate directly with the pilot on the frequency assigned by Pueblo Interagency Dispatch Center.

The use of a SEAT will be given priority to wildland fires burning in the urban wildland interface areas.

A SEAT may not be dispatched when military aircraft are in use on the same fire.

## **11. FIRE PREVENTION -**

### ***A. General Cooperative Activities***

Agencies participating in the Annual Fire Operating Plan for Douglas County will coordinate fire prevention activities through the Douglas County Fire Chiefs Association, Pikes Peak Wildfire Prevention Partners and other venues.

### ***B. Information and Education***

#### **1. Fire Danger Information**

Please refer to the Douglas County Wildland Fire Management Plan.

#### **2. Joint or Single Agency Press Releases**

Fire Danger Information: News releases on fire danger and prescribed burning will be coordinated and, when practical, issued jointly to newspaper, radio and television media by the participating agencies. This effort will reduce public confusion and direct attention to fire danger at all elevations and ownerships.

#### **3. Smoky Bear Program**

Smoky Bear prevention programs are occasionally presented to public groups in Douglas County. The Colorado State Forest Service coordinates this program.

#### **4. Red Flag Operations**

See Section 9.

## **5. Firewise and Firewise Communities Program**

The National Firewise organization conducts Firewise Communities Workshops throughout the United States. These workshops deal with strategies for protecting homes and communities from destruction by wildland fires. The main objectives of the workshop are:

1. To improve safety in the wildland/urban interface by sharing responsibility
2. To create and nurture local partnerships
3. To integrate Firewise concepts into community and disaster mitigation planning

For more information refer to the website: [www.firewise.org/communities](http://www.firewise.org/communities)

## **C. Engineering**

### **1. LAND USE PLANNING (WILDLAND URBAN INTERFACE)**

Douglas County zoning requires a hazard assessment on all proposed subdivisions. Douglas County has adopted a version of NFPA 299 to address development in the urban interface/intermix. Douglas County has also adopted a standard for water supplies for rural fire fighting into the building code.

### **2. DEFENSIBLE SPACE AND FUELS TREATMENT**

Douglas County enforces a minimum defensible zone around residential structures under new construction. Minimum defensible zones are determined in conjunction with a 1991 version of NFPA 299 as amended and adopted by Douglas County. Defensible space work needs to be completed to receive a Certificate of Occupancy. All building permits in a wildfire hazard area are subject to defensible space requirements.

### **3. RAILROADS AND UTILITIES**

No special considerations addressed.

## **D. Enforcement**

### **1. Issuing Open Burning and Special Event Permits**

Fire protection districts or established fire departments issue open area burning permits based on the safety risks of such a fire. Douglas County Public Works issues open area burning permits for areas outside of a fire protection district and not on USDA Forest Service lands or when fire restrictions are in effect. The USDA Forest Service has established regulations for open area burning on USDA Forest Service lands.

The Colorado Department of Public Health and Environment issues open burning permits for all areas of Douglas County concerning the environmental and health effects of open burning.

### **2. Restrictions and Closures**

The Board of County Commissioners, the State of Colorado and the USDA Forest Service have the authority to issue fire restrictions on lands within Douglas County. Due to the regional nature of fire restrictions and the benefit of working as a coordinated

region of counties and land management agencies, fire restrictions must be viewed as comprehensive, coordinated effort.

The Board of Directors of the Pueblo Interagency Dispatch Center will make recommendations on fire restrictions for the area served by the Pueblo Interagency Dispatch Center. Each agency will then determine whether or not adopt the recommendation. Fire restriction levels are generally fall into two different levels or stages, but may be slightly different in accordance with governmental regulations:

### **Stage I**

Fires are only permitted at designated campgrounds or picnic areas and are contained in a fire pit or metal fire grate designed for campfires. Adults must supervise fires and flame lengths must be monitored. The sale and use of fireworks is prohibited. Charcoal grilling and the use of gas fueled stoves and appliances are permitted.

### **Stage II**

Fires are not permitted at campground or picnic areas. Charcoal grilling is prohibited. The sale and use of fireworks is prohibited. The use of gas fueled stoves and appliances are permitted.

## **3. FIRE INVESTIGATIONS**

Each participating agency shall have responsibility for the investigation of fires.

All fires will be investigated to determine cause, responsible party, time of ignition, and all other pertinent information relating to the cause of the fire. Although an assisting agency may have a fire extinguished upon arrival of the participating agency's forces, the participating agency should discuss the fire with the assisting agency to aid in the investigation and take steps to:

- \* Preserve the point of origin
- \* Preserve all clues that may relate to the cause
- \* Fire cause determination is needed for EFF incidents and required for FEMA incidents.
- Note all suspicious vehicle traffic in the area and note vehicle descriptions and license numbers.

## **12. FUEL MANAGEMENT AND PRESCRIBED FIRE CONSIDERATIONS**

Any agency planning prescribed fires will report all prescribed fire activities to the Douglas County Sheriff's Office. A copy of the prescribed fire plan will be provided to Douglas County Emergency Services. In addition, Douglas County Dispatch maintains a current record of all authorized burning activities on private land in unincorporated Douglas County.

Wildfires resulting from escaped prescribed fires ignited by a party to this Agreement on lands it manages, shall be the responsibility of that party. The party responsible for the prescribed fire will reimburse other parties to this Agreement consistent with the terms and conditions contained herein for costs incurred in suppression of such fires.

If parties to this Agreement conduct a cooperative prescribed fire, details covering cost sharing, reimbursement, and responsibility for suppression costs, should it escape, shall be agreed upon and documented in the burn plan.

### **13. COST REIMBURSEMENTS**

#### ***A. Non-Reimbursable Items***

May be addressed in future plans.

#### ***B. Reimbursable Items***

Suppression costs will be determined on an operational period basis utilizing the Incident Action Plan (IAP), when a fire is accepted by the State as an EFF incident.

The Colorado State Forest Service, Franktown District Office will reimburse cooperators.

Participating agencies agree to consolidate all bills and send to the Colorado State Forest Service, Franktown District office within thirty days after the incident.

When called upon and available for an assignment, the participating agencies agree to a commitment up to 14 days excluding travel. Any desire by personnel or their department to rotate manpower or equipment before the end of these agreed upon time periods without prior approval from the Incident Commander or designee will be at the agency's expense.

Equipment use will be documented on an Emergency Equipment Shift Ticket (OF 297).

Any equipment that does not pass a pre-use inspection performed by the benefiting agency after arriving at an incident will be rejected, and the Cooperator will not be compensated for any time or mileage incurred.

Personnel time for single resources will be documented on a Crew Time Report (SF-261) or other document as specified in the Annual Operating Plan, and recorded on an Emergency Firefighter Time Report by the Incident Commander or designee.

Each participating agency using the Cooperative Resource Rate Form or participating at an AD rate will provide workers compensation insurance for personnel.

Temporary emergency hires or casuals shall be paid at the current Administratively Determined (AD) Fire Fighter rates (ATTACHMENT E). It is required that a Crew Time Report (Standard Form 261) be used to record hours for personnel on an incident. A USDA/USDI Fire Time Report (Standard Form 288) will be used for reimbursement. The hiring unit will provide each casual hire the opportunity to complete Federal & State income tax forms, provide each casual hire an information sheet on income tax withholding and forward these forms to the servicing Department of Interior Administrative Deciding Officer in a timely manner.

It is the individual firefighter's responsibility to ensure that the appropriate forms are completed and presented to the Incident Finance Section or next appropriate office. Finance officials are not tax consultants and shall not advise casual hires about tax laws or personal income tax liability.

Resources used must be equipped according to current Fireline Handbook standards. Each resource will have an officer in charge who is who is knowledgeable about current interagency fire reimbursement procedures.

Payment for Colorado State Forest Service state agreement fire vehicles on loan to a county or fire protection district, which are used on reimbursable federal fires, must be made to the Colorado State Forest Service. However, the operator should document fuel and oil costs and submit a documented invoice to the CSFS District Office for reimbursement.

CSFS will pay the cooperator \$50.00 per day for agency owned equipment on State engines when engine is in work status and documented on an Emergency Equipment Shift Ticket (OF297).

Payment will be made to CSFS for State engines assigned to a cooperator and staffed by the cooperator at the current rate (ATTACHMENT E). CSFS will reimburse cooperators all documented costs for fuel and oil for State engines assigned to reimbursable incidents.

The cooperator will maintain in force liability insurance coverage for each vehicle in amounts equal to or greater than \$150,000 each person/\$400,000 any one occurrence, or such higher amount as may be specified in the Colorado Governmental Immunity Act, 1973 C.R.S., 24-10-101, et. seq., as amended, for such acts as to which government immunity has been partially waived by statute or by resolution of the district, if any. Such insurance shall be obtained from a company licensed to do business in the state of Colorado or through statutorily approved self-insured program.

Damage claims will be made directly with the incident at the time they occurred and prior to demobilization.

Use rates for engines, personnel and specialized equipment are pre-determined on a Cooperative Resource Rate Form (CRFF). Rates must be approved by the Colorado State Forest Service prior to use. Appropriate and maximum acceptable rates are listed in "Guidelines for Engine/Tender Hourly Rates" (ATTACHMENT E).

### ***C. Wildfire Prevention***

See Section 11.

### ***C. Wildfire Readiness***

See Section 8.

### ***E. Wildfire Suppression***

The established operational periods listed in the Incident Action Plan (IAP) will be used as a basis for determining costs associated with wildland fire management.

#### **1. Dispatching**

Cooperators wishing to make their equipment available on interagency assignments must contact Pueblo Interagency Dispatch Center by email at [copbc@dms.nwccg.gov](mailto:copbc@dms.nwccg.gov) or by fax at 719-553-1616 by 9:00 A.M. each Monday with availability updates or follow other procedures as set forth by PIDC. The cooperator availability form may be obtained at [www.fs.fed.us/r2/fire/psc/index.html](http://www.fs.fed.us/r2/fire/psc/index.html).

The agency requesting equipment will pay cooperators for the time equipment is transported except when these conditions exist:

1. The equipment is not in safe operable condition.

2. The cooperator withdraws equipment and/or operator(s) prior to being released by the Incident. Cooperator shall bear all costs of returning equipment and/or operator(s) to the point of hire.
3. The equipment cannot be repaired or replaced within 24 hours from the time of breakdown or personnel shift change.
4. The equipment cannot be repaired or replaced and is released from the incident after which the personnel are entitled to their hourly rate for return to location of hire.

If personnel time is separate from the equipment rate, personnel en route to an incident are in work status. If personnel time is included in the equipment rate, then costs for personnel are included in both the equipment work rate and time guarantee rates.

CSFS may reimburse cooperators for reasonable travel expenses not provided by the incident. Per Diem rates cannot exceed current State rates, except when the Cooperator has existing established rates. Receipts are required for lodging. If personnel are paid actual meal expenses, receipts are required for each meal. Per Diem will not be reimbursed for time at the incident, unless previously approved in writing by the Incident Commander or designee.

## **2. Initial Attack**

Any costs incurred by assisting agencies, beyond the **first twelve hours**, whose personnel and/or equipment is requested by the participating agency, shall be considered reimbursable except as noted under reciprocal fire protection zones.

## **3. Mutual Aid**

An agency that provides a reasonable initial attack response within another participating agency's jurisdiction, due to that agency's inability to respond may, at its discretion, request reimbursement from the participating agency with jurisdiction over the fire.

## **4. Reinforcements**

Reinforcements will be utilized in accordance with each participating agency's regulations and applicable laws.

## **5. Aviation**

Reimbursement for use of aircraft and related aircraft support will be made only when prior approval for use on each fire has been obtained from the responsible official of the participating agency as listed in Section 15.

## **6. Cost Share Plan**

When a wildland fire occurs on lands of more than one participating agency and costs are incurred, one of the following options may be used to determine reimbursable costs for the agencies involved:

1. Each agency assumes its own costs.
2. Costs are shared based upon ownership and acreage percentages.

3. Another mutually agreed upon method by agency representatives. This shall be in writing and done as soon as possible after determining that multiple ownerships are involved.
4. EFF Fires- When a fire is accepted by the State as an EFF incident the Cost Share Principles agreed to by State and Federal Agencies will apply. See Attachment L.

This cost sharing may be established prior to the fire season as part of the operating plan review and added as a separate appendix, or agreed upon by both parties within a reasonable time after an incident.

## **7. Out of Jurisdiction Assignments**

Equipment transportation shall not be reimbursed if the equipment is not in a safe operable condition or if the cooperators withdraws equipment and/or operator(s) prior to being demobilized by the I.C. Under these conditions, the cooperator shall bear all costs of returning equipment and/or operator(s) to the point of hire. If equipment fails during use on an incident and the equipment cannot be repaired or replaced within 24 hours from the time of breakdown or personnel shift change, the equipment will be returned. If equipment cannot be repaired or replaced, personnel are entitled to their hourly rate for return to point of hire.

## **8. Billing Procedures**

All CSFS cooperators subject to CSFS reimbursement will have invoices sent to the CSFS district office by 30 days after incident resources are released. The CSFS state office will attempt to make payment as soon as possible after receiving the invoice. Invoices are required to have proper documentation supporting expenses before the process for payment can be completed.

Emergency hires will submit signed time documentation to their agency supervisor. It will be this person's responsibility to forward these documents to the financial center for payment.

For regular, paid fire personnel, the timekeeper or jurisdictional officer should provide the original of the FORM 288 to the employee. The employee should then turn in the time sheet to the fire protection district, county or other assisting agency. The agency, in turn, should create an invoice for its actual costs and present it along with the time sheet and any other documentation (shift tickets) to the CSFS office in Franktown for payment. (Special instructions for the use of this form on non-federal fires may exist. Check with the time keeping officer at the incident.)

Payment for reimbursable costs on lands owned by Denver (Daniel's Park and Denver Water Board Lands) requires that Colorado State Forest Service be notified by the participating agency. Failure to notify Colorado State Forest Service will jeopardize the opportunity for reimbursement.

Requests for reimbursement from the Denver Water Board should include:

Invoice memo addressed to the Denver Water Board on letterhead of the participating agency requesting payment for resources involved in wildland fire suppression on the incident located on Denver Water Board lands. Reference the fire dates and times; legal location; Denver Water Board land parcel name or location; size of fire; fire number (if assigned by Interagency Dispatch Center); and referring to the attached supporting documentation and costs verifications.

Supporting documentation for:

- \* Personnel time in the form of: Crew Time Reports; original of USDA/USDI Fire Time Sheets, Optional Form 288 for personnel from the Federal government (both regular employees and those hired under the AD Plan for Emergency Workers).
- \* Equipment Shift Tickets for all equipment; original of Emergency Equipment Rental Agreements or Equipment Use Invoices for equipment contracted; photocopies of all current Cooperative Resource Rate Forms (CRRF) that may apply to the equipment or personnel from the Participating agency. The equipment or personnel utilized should be highlighted or marked on the CRRFs for cross-reference to the supporting documents.
- \* Denver Water Board will reimburse the assisting agency for the actual costs of supplies and materials used for the fire effort. Complete requests on Form SF 95; Claims for Damage, Injury or Death, as revised.

The local CSFS Franktown District Office will review reimbursement requests for verification or correction of actual costs to be paid. When verified, the CSFS Franktown District Office will coordinate with the CSFS Special Projects Forester for Denver Water Board lands, and a recommendation for payment will be forwarded to the Denver Water Board. Payment will be made directly to the requesting agencies from the Denver Water Board. Subsequent payments from the agency or department to its personnel or contractors will follow that entity's internal policy.

Reimbursement requests should be documented with the USDA/USDI "Rental Equipment Use Record" signed by a representative of the participating agency.

Use rates for local government resources are pre-determined on a current Cooperative Resource Rate Form. Copies of Cooperator forms are included in ATTACHMENT F.

## **9. Resource Use Rates**

See Attachment E for rates.

## **14. GENERAL PROCEDURES**

### ***A. Periodic Program Reviews***

See Section 14 B.

### ***B. Annual Updating of Plans***

This Annual Operating Plan should be reviewed annually and must be executed prior to May 1 of each year. The Colorado State Forest Service is responsible for setting the annual date of the meeting.

This Plan becomes effective on the date signed by the last agency and shall remain in effect until jointly terminated in writing by all participating agencies.

Colorado State Forest Service will coordinate approvals and distribute this plan to all participating agencies. Non-participating agencies that wish to review a copy of this plan should contact the Colorado State Forest Service.

If no changes are made, a statement letter with signatures of all parties to the AOP will be distributed.

**C. Changes During Year (due to budget cuts or supplemental funding)**

Changes to this plan require the signature of all participating agencies. CSFS will coordinate approvals and distribute official changes of the plan to all participating agencies.

**D. Resolution of Disputes Procedure**

Any and all disputes will be resolved by a meeting of all participating agencies signatory to this agreement. When a participating agency to this plan has a dispute, that agency should notify, in writing, the Colorado State Forest Service, Franktown District office (CSFS) of the specific concerns involved in the dispute. The CSFS office will schedule a meeting of all the participating agencies to resolve the dispute.

At the request of any participating agency a disinterested mediator, acceptable to all parties, shall be obtained for resolution of a dispute when situations warrant.

**E. Duration of Agreement**

The term of this Agreement shall commence for each participating agency upon the date of their signatures below and shall continue for five years, unless terminated earlier. Any participating agency shall have the right to terminate this Agreement upon thirty days written notice to all parties.

**15. DIRECTORY OF AUTHORIZED AGENCY REPRESENTATIVES**

**A. Bureau of Land Management**

No BLM lands in Douglas County

**B. Colorado State Forest Service**

Business: 303-660-9625 Fax: 303-688-2919

Fire Duty Officer Pager: 303-851-5606

Mike Bahm: Pager: 303-855-6522; (H) 303-660-9230; cellular phone 303-726-7292

Eddie Patton: Pager: 303-208-1766

Fire Duty Officer Schedule for 2005 to be completed and distributed to the participating agencies prior to May 1st of each year.

**C. USDA Forest Service**

Pueblo Interagency Dispatch Center: 719-553-1600 (24-hour)

Pikes Peak Ranger District: 719-636-1602

South Platte Ranger District 303-275-5610

**D. Bureau of Indian Affairs**

No lands in Douglas County

**E. National Park Service**

No lands in Douglas County

***F. Fish and Wildlife Service***

No lands in Douglas County

***G. Douglas County***

Board of County Commissioners: 303-660-7401

Sheriff's Office Dispatch: 303-660-7500

Douglas County Sheriff's Office Emergency Services Lieutenant: 303-660-7518

Douglas County Government Emergency Services: 303-660-7589

Douglas County Planning Division: 303-660-7560

***H. Fire Departments***

Fire departments are covered under a separate agreement. Douglas County Dispatch can contact or dispatch fire departments that operate in Douglas County.

***I. Denver Water Board***

Emergency Dispatch: 303-628-6801

Kevin Keefe: 303-628-6355 Fax: 303-628-6853 Pager: 303-903-9176 Mobile: 303-947-8456

## Appendix L

### Fuelbreak Guidelines for Forested Subdivisions

(NOTE: This appendix is not the complete document but only selected excerpts for the original document that are pertinent the Perry Park Community Wildfire Protection Plan)

#### Fuelbreak Guidelines for Forested Subdivisions

by Frank C. Dennis  
Colorado State Forest Service  
Colorado State University, 1983

#### *Fuelbreak vs. Firebreak*

Although the term “fuelbreak” is widely used in Colorado, it is often confused with “firebreak.” The two are entirely separate and aesthetically different forms of fuel modification.

A firebreak is an area, 20 to 30 feet wide (or more), in which **all** vegetation is removed down to mineral soil. It is reworked and maintained each year prior to fire season.

A fuelbreak (or shaded fuelbreak) is an easily accessible strip of land of varying width (depending on fuel and terrain), in which fuel density is **reduced**, thus improving fire control opportunities. The stand is thinned, and remaining trees are pruned to remove ladder fuels. Brush, heavy ground fuels, snags, and dead trees are disposed of and an open, park-like appearance is established.

#### *Fuelbreak Limitations*

Fuelbreaks provide quick access for wildfire suppression. Control activities can be conducted safely due to low fuel volume.

Strategically located, they break up large tracts of dense timber, thus limiting uncontrolled spread of wildfire.

They can greatly aid firefighters by slowing fire spread under normal burning conditions. However, under extreme conditions, even the best fuelbreaks stand little chance of arresting a large fire, regardless of firefighting efforts. Such fires can drop firebrands 1/8 mile or more ahead of the main fire, and may continue until there is a major change in weather conditions, topography, or fuel type.

In spite of these somewhat gloomy limitations, fuelbreaks have proven themselves effective in Colorado...

#### *Slope*

The rate of fire spread increases as the slope of the land increases. Fuels are preheated by the rising smoke column, and a “ladder” effect may be created in the adjoining timber (spreading fire from the ground to tree crowns).

At 30 percent slope, rate of fire spread doubles compared to rates at level ground, drastically reducing firefighting effectiveness...

#### *Topography*

Certain topographic features influence fire spread and should be evaluated. Included are fire chimneys, saddles and V-shaped canyons. They are usually recognized by reviewing standard U.S.G.S. quad maps.

*Chimneys* are densely vegetated drainages on slopes greater than 30 percent. Wind tends to funnel up the drainage, rapidly spreading fire upslope.

*Saddles* are low points along a main ridge or between two hills. Like chimneys, they also funnel winds to create a natural fire path during an uphill run and act as corridors – spreading fire into adjacent valleys and drainages.

*V-Shaped valleys* can ignite easily due to heat radiation from one side to the other. For example, a fire burning on one side of a valley dries and preheats fuels on the other side until the fire “flashes” over. The slope effect then takes over and fire spreads rapidly uphill on both side of the valley...

### *Fuelbreak Locations*

An effective fireline is connected or anchored to natural or artificial fire barriers. Such anchor points might be rivers, creeks, large rock outcrops, wet meadows, or a less flammable timber type.

Similarly, proper fuelbreak construction takes advantage of such barriers to eliminate “fuel bridges.” (Fires often escape control lines with the aid of fuel bridges.) Since fuelbreaks provide quick, safe access to defensive positions, they are necessarily linked with roads systems. Connected with county-specified roads within subdivisions, they provide good access and defensive positions for firefighting equipment and support vehicles. Cut-and-fill slopes of roads are an integral part of a fuelbreak, as they reduce the amount of fuel modification needed.

Preferably, fuelbreaks are located along ridge tops to help arrest fires at the end of their runs. However, due to home site locations and resource values, they **can** be effective when established at the base of slopes. Mid-slope fuelbreaks are least desirable, but under certain circumstances and with modifications, these too can be valuable.

Fuelbreaks are located so that the area under management is broken into small, controllable units. Thus, a fire remains small, and when it reaches modified fuels, defensive action is more easily taken. As an example, Larimer County recommends that fuelbreaks break up continuous forest fuels in units of 10 acres or less. This is an excellent plan, especially if thinning for forest management is accomplished in addition to fuelbreak construction.

When located along ridge tops, continuous length as well as width is a critical feature. extensive long-range planning is essential in positioning this type of fuelbreak. Much of the work can be accomplished through commercial timber sales at little or no cost.

Improperly planned fuelbreaks adversely impact an area’s aesthetic qualities. Careful construction is necessary when combining mid-slope fuelbreaks with roads involving excessive cut-and-fill.

Care must also be taken in areas which are not thinned throughout for fuel hazard reduction. In such cases the fuelbreak sticks out like a “sore thumb” due to contrasting thinned and un-thinned portions of the timber stand (especially noticeable are areas above road cuts.)

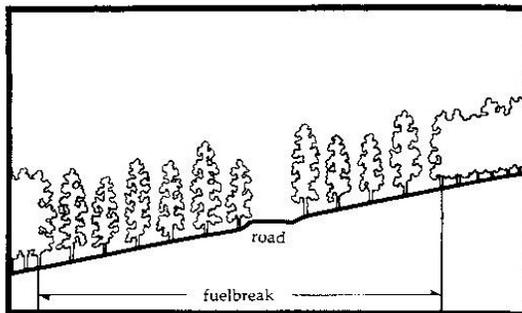
These guidelines are designed to minimize aesthetic impacts. However, some situations may require extensive thinning and thus result in a major visual change to the area.

Constructing the Fuelbreak

**Fuelbreak Width and Slope Adjustments**

**Note:** Since road systems are so important to fuelbreak construction, the following measurements are from the toe of the fill for downslope distances and above the cut for uphill distances.

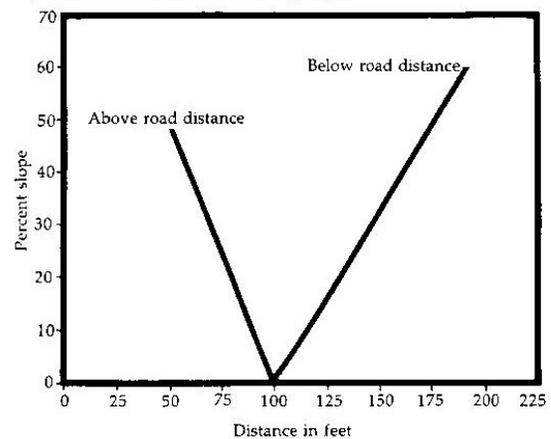
The **minimum** recommend fuelbreak is approximately 200 feet. Since fire activity intensifies as slope increases, the overall fuel break widths must also increase. However, to minimize the aesthetic impacts, the majority of the increase should be taken from the bottom of the fuel break below the road cut.



Typical cross-section of fuelbreak built in conjunction with road.

**FUELBREAK WIDTH PRESCRIPTION**

- 1) Below road distance:  
Distance (ft.) = 100 + [(150%)(slope %)]
- 2) Above road distance:  
Distance (ft.) = 100 - slope%
- 3) Fuelbreaks which pass through chimney or saddle areas should have distances increased by at least 50%.
- 4) Ridgetop fuelbreaks should be thinned on both sides of road based on below road distance prescription.
- 5) All distances are measured along slope.



Widths are also increased when sever topographic conditions are encountered. Guidelines for fuelbreak widths on slopes greater than 30 percent are given below.

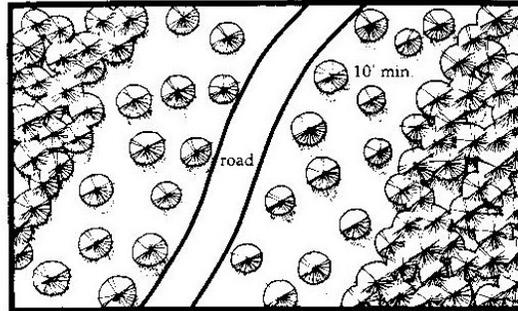
**Fuelbreak Width/Slope**

Percent Slope (%)	Uphill Distance (ft)	Downhill Distance (ft)	Total Width of Modified Fuels (ft)*
0	100	100	200
10	90	115	205
20	80	130	210
30	70	145	215
40	60	160	220
50	50	175	225
60	40	190	230

\* As slope increases, total distance for cut-and-fill for road construction rapidly increase, improving fuelbreak effective width

## Stand Densities

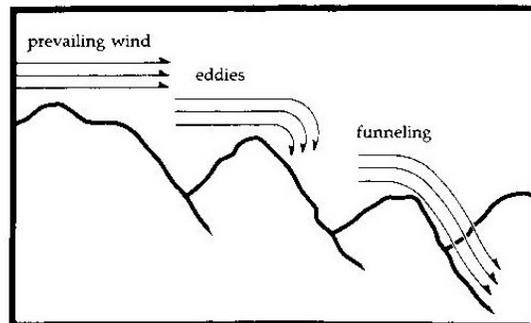
Crown separation is a more critical factor for fuelbreaks than a fixed tree density level. A minimum 10 foot spacing between the edges of the tree **crowns** is desirable. Small, isolated groups of trees may be retained for visual diversity.



*Plan view of fuelbreak; shows minimum distance between crowns.*

A fuelbreak thinning is classified as a heavy “sanitation and improvement” cut from below. Trees which are suppressed, diseased, deformed, damaged, and of low vigor are removed along with all ladder fuels. Remain trees are the largest, healthiest, most wind-firm trees from the dominant and co-dominant species of the stand.

Because such thinning is quite heavy for an initial entry into a stand, prevailing winds, eddy effects, and wind funneling are carefully evaluated. It may be necessary to develop the fuelbreak over several years to allow the stand to “firm-up.”



*Topography affects wind behavior – an important consideration during fuelbreak construction*

Area-wide forest thinnings are recommended for **any** subdivisions. They will not be as severe as fuelbreak thinnings, but should be completed to fuelbreak specifications along the roads...

## Appendix K Mitigation Area Descriptions and Baseline Data and Photographs

The information herein provides four pieces of pre-mitigated, baseline information for areas to be fuel mitigated. This information will be used for annual evaluation comparisons at the end of each year. Currently, only those areas within Perry Park Ranch targeted for mitigation in 2006 are detailed.

### Area Labels and Descriptions

#### *DaC2 (alternative route), Bannock Drive & Crow Place*

This area extends from the eastern edge of the unimproved section of Bannock Drive, west northwest to a red rock ridge, along the ridge paralleling Bannock, across a short forested section, along a second red rock ridge paralleling Bannock, to a very short forested section that runs into Crow Place. The forest on either side of the ridge is fairly dense ponderosa pine and Douglas fir with Gambel Oak mixed in. The terrain along the ridge rises from east to west. The drop off to the south of the ridge is moderately to very steep. The drop off to the north is mild, with some houses coming fairly close to the red rock formations. The formations are mostly moderately undulating with some fairly sharp spires.

#### *DbC1, Bannock Drive (rough)*

This segment of Bannock starts at Crow Place in the east and runs generally westward to Cheyenne Drive. It is gently to moderately steeply rolling. The vegetation is mostly ponderosa pine and Douglas fir mixed with Gambel oak, moderately to very dense.

#### *DmX2, Big "D"/Red Rock Circle Extensions*

This area is a fringe of forest on the western edge of the Big "D" long grass open space. The forest is primarily Gambel oak with some ponderosa pine and a few Douglas fir. The forest area has been mitigated somewhat. What is sought are corridors into the Big "D" as extensions of the short streets that tee into Red Rock Circle. The forest terrain is fairly flat.

#### *AeC1 Fox Way*

This is a very densely forested area with a few very small grassy areas. Hog John Creek runs through the northern edge of the area, with fairly steep banks. The balance of the area is fairly flat. The forest is a mixture of Gambel oak, with some Douglas fir, and a few ponderosa pine and mountain juniper mixed in. Much of the Gambel oak is dead or overmature.

### GPS Information and Photographs

This information will be found on a DVD disk labeled Pre-mitigation Photographic Baseline and GPS Location Information. Each of the areas has a folder of images. The folder names correspond to the area labels. Each of the photographs in the folder ends with a number followed by a lower case letter. The number is the number of the waypoint from which the photo was taken. The lowercase letter indicates the sequence of the pictures taken at that waypoint. The GPS information in the Excel spreadsheet on the disk indicates the latitude and longitude for each waypoint.

## Appendix J Hazard Reduction Mitigation Projects Data Matrix

Label Sub-Compartment No	Priority	Quadrant	Location Description	Ownership RR: Rd Rt-Way P: Private M: Metro U: P-Undeveloped R: Ridge Area	CO State Forest Svc Hazard Class	Length of Mitigation Span (feet)	Estimated Total Acreage	Estimated Acreage for Mitigation**	Mitigation Cost Per Acre	Centerline Survey Cost Per 100 Feet	Proposed Mitigation Estimated Cost
DaC2*	2	D	<b>Bannock Drive</b> (rough) area on southeastern PPR guarding southern border with Haystack Ranch upslope area to the northwest from Crow Place East	RR	C	2,250	3.10	2.27	\$1,600	\$300	\$10,386
* DaC2 Alternative Route	2	D	From <b>Bannock Drive/Crow Place</b> intersection north-northeast to rock ridge formation, east 1,850' to end of rock ridge, then south to Bannock Drive	P	C	3,000 Total Break, 1,150 Mit	4.13	1.74	\$1,600		\$2,788
DbC1	1	D	<b>Bannock Drive</b> (rough) area on southeastern PPR guarding southern border with Haystack Ranch upslope area to the northwest from Crow Place West	RR	C	2,250	3.10	2.27	\$1,600	\$300	\$10,386
DcB2	2	D	<b>Crow Road</b> (rough) from Bannock the north to southern border of Perry Park Ranch abutting the Haystack Ranch area	RR	B	150	0.20	0.15	\$1,600	\$300	\$690
DdB1	1	D	<b>Crow Place</b> (rough) connecting Bannock to the north to the southern Perry Park Ranch border abutting the Haystack Ranch area	RR	B	475	0.65	0.44	\$1,600	\$300	\$2,129
DeC3	3	D	South of Bannock Drive (rough) bordering Haystack Ranch area to the south	U	C	Undevel Area (LID)	28.24	28.24	\$1,600		\$45,179
DfC2	2	D	<b>Gila Road</b> (rough) south of West Cheyenne Drive at gate, south to Perry Park Ranch border	RR	C	225	0.60	0.40	\$1,250	\$300	\$1,175
DgC4	4	D	<b>Upper Cheyenne - Acoma Drive</b> downslope starting 1,100 feet uphill from Upper Cheyenne gate/Gila Road point north to Acoma Drive	P	C	800	1.10	1.21	\$2,500		\$3,025
DhC1	1	D	<b>Tract "K" trail extension area</b> starting on west side of Osage Way cul de sac south by southeast to Upper Cheyenne	P	C	1,550	2.13	2.35	\$1,800		\$4,227
DiC3	3	D	<b>Tract "K" trail extension area</b> starting on west side of Osage Way cul de sac south by southeast to Perry Park Ranch border	P	C	3,000	4.13	4.55	\$1,800		\$8,182
DjX4	4	D	<b>Pawnee Road</b> (rough) east of <i>Indian Head</i> and Perry Park Metro District land area bordering National Forest southwest to Perry Park/National Forest border following ridge line, then back 1,600 feet east by northeast to Upper Cheyenne following ridge line on other side of draw.	RR - P (Physically Inaccessible)	X	4,600	6.31	5.80	\$1,800	\$300	\$24,240
DkC1	1	D	Area <b>northwest of Pawnee Road</b> (rough) connecting with United States Forest Service area west of Perry Park Ranch's western border	P	C	940	1.29	1.42	\$1,600		\$2,272

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DIB2	2	D	Connecting area along rock formation east of <b>Seminole Trail</b> (rough), starting from Ottawa Court cul de sac area (rough) continuing southeasterly along ridge	P	B	1,300	1.79	1.64	\$1,600		\$2,624
DmX1	1	D	<b>Big "D"</b> /Red Rock Circle extensions of 2004 mitigation project, extending mitigated areas east and north of Red Rock Circle from Osage Way, Osage Place, Acoma Court and Acoma Place to the Big "D" grassland area on the north	M	X	1,000	1.37	1.26	\$800		\$1,008
DnC3	3	D	<b>Bear Creek Watershed</b> - southwestern Perry Park Ranch	U	C		400.00	400.00	\$1,600		\$640,000
DoC1	1	D	<b>Upper Cheyenne</b> from gate area northwest to Tract "K" extension fuel break (DhC1) intersection with Upper Cheyenne	RR	C	3,400	4.68	3.43	\$1,000	\$300	\$13,634
DpC1	1	D	<b>Upper Cheyenne</b> DhC1 to Yuma Circle	RR	C	4,825	6.65	4.87	\$1,000	\$300	\$19,349
DqC1	1	D	<b>Upper Cheyenne</b> from Yuma Circle (DpC1) to Bear Creek	RR	C	2,625	3.62	2.65	\$1,000	\$300	\$10,527
DrC1	1	D	<b>Upper Cheyenne</b> from Bear Creek to National Forest on Perry Park western border	RR	C	5,015	6.91	5.07	\$1,000	\$300	\$20,111
DsC1	1	D	<b>Pawnee Road</b> parallel with western Perry Park border, northeast by north to Ottawa Court	RR	C	2,600	3.58	2.63	\$1,000	\$300	\$10,426
AaC1	1	A	Starting at <b>Red Rock Blvd/Perry Park Blvd "Y"</b> west along Bear Creek ridge connecting with the Seminole Trail proposed fuel break	P	C	1,000 200' width	4.59	5.05	\$700		\$3,535
AbC2	2	A	<b>Ute Court</b> cul de sac area (rough) southwest to Ottawa Court cul de sac area (rough) with midway break extension north to extend with rough trail	P	C	1,375	1.94	1.77	\$1,600		\$2,832
AcC1	1	A	<b>Ottawa Court/Ottawa Place</b> cul de sac areas (rough) from AbC2 (Ute Court extension break tie-in) west to border of National Forest (1600' total length/1050' rough road areas).	RR-P	C	1,600	2.20	1.89	\$1,600	\$300	\$6,180
AdX1	1	A	Starting at trail entrance to the Pike National Forest off of <b>Kiowa</b> to the National Forest east and north along ridge to <i>sanitary sewer clearance</i> area between South Pike on the northeast and Fox Circle on the south	R - P	X	1,250	1.72	1.26	\$800		\$1,008
AeC1	1	A	<b>Fox Way</b> (midway between North Pike and South Pike east of <i>Gilloon Pond</i> mitigated area) west, curving to the south intersecting with Fox Circle 650 feet west of Fox Way	P	C	700	0.96	0.88	\$2,840		\$2,499

APPENDIX J

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AfB3	3	A	Rock formation ridge line between <b>Apache Drive</b> and North Pike southwest, tailing on the west end to trail area on the southern border of the northwest Perry Park Ranch panhandle, bordering the Pike National Forest	R - P	B	4,800	6.60	4.85	\$1,000		\$4,850
AgX2	2	A	<b>Valley Hi Road</b> (rough) south from Thunderbird Road (rough) to the Apache Drive/North Pike ridge proposed break	P	X	2,000	2.75	2.53	\$1,200		\$3,036
AhX3	3	A	Ridge line east of Valley Hi Road 1,200 feet and then northwest 250 feet west of Winged Foot Court to <b>Torrey Pines</b>	R - P	X	2,380	3.28	3.00	\$1,200		\$3,600
		B	CURRENTLY NO HIGH PRIORITY WILDFIRE HAZARD AREAS IDENTIFIED								
CaC3	3	C	Undeveloped area north of <b>Shoshone Drive</b> and south of Cheyenne Drive (rough)	U	C		53.00	53.00	\$800		\$42,400
CbX3	3	C	<b>Patrick Property</b> - agreed by owner to mitigate before development	U	X		70.00	70.00	\$800		\$56,000
		B	CURRENTLY NO HIGH PRIORITY WILDFIRE HAZARD AREAS IDENTIFIED								
CaC3	3	C	Undeveloped area north of <b>Shoshone Drive</b> and south of Cheyenne Drive (rough)	U	C		53.00	53.00	\$800		\$42,400
CbX3	3	C	<b>Patrick Property</b> - agreed by owner to mitigate before development	U	X		70.00	70.00	\$800		\$56,000
		B	CURRENTLY NO HIGH PRIORITY WILDFIRE HAZARD AREAS IDENTIFIED								
CaC3	3	C	Undeveloped area north of <b>Shoshone Drive</b> and south of Cheyenne Drive (rough)	U	C		53.00	53.00	\$800		\$42,400
CbX3	3	C	<b>Patrick Property</b> - agreed by owner to mitigate before development	U	X		70.00	70.00	\$800		\$56,000
		B	CURRENTLY NO HIGH PRIORITY WILDFIRE HAZARD AREAS IDENTIFIED								

APPENDIX J

Label Sub-Compartment No	Priority	Quadrant	Location Description	Ownership RR: Rd Rt- Way P: Private M: Metro U: P- Undeveloped R: Ridge Area	CO State Forest Svc Hazard Class	Length of Mitigation Span (feet)	Estimated Total Acreage	Estimated Acreage for Mitigation**	Mitigation Cost Per Acre	Centerline Survey Cost Per 100 Feet	Proposed Mitigation Estimated Cost
CaC3	3	C	Undeveloped area north of <b>Shoshone Drive</b> and south of Cheyenne Drive (rough)	U	C		53.00	53.00	\$800		\$42,400

SITUATION ANALYSIS	Total Acres Impacted	Total Proposed Mitigation Acres	Average Cost Per Acre w/ CL Survey Costs	Average Cost Per Acre w/o CL Survey Costs	Total Cost
<b>Total All Properties .....</b>	630.62	616.62	\$1,554	\$1,408	\$958,299
<b>Total Undeveloped Properties .....</b>	523.00	523.00		\$1,498	\$783,579
<b>All Proposed Properties w/o Undeveloped .....</b>	107.62	93.62	\$1,866	<b>\$904</b>	\$174,720
<b>All Proposed Properties w/o Undeveloped and Upper Cheyenne .....</b>	82.19	74.97	\$1,342.79	<b>\$881</b>	\$100,674

NOTES: 1. \*\* The proposed acres of fuel mitigation have a 10% margin of area built into the reflected acreage  
 2. Cost of acreage of breaks are rough estimates only since they use 60 feet width consideration on all break line areas because of rights of way of roads; breaks on private lands will be negotiated and aligned with Fuelbreak Guidelines for Forested Subdivisions, Perry Park CWPP, Appendix L.

Wildland Urban Interface Area Data Matrix on page 86

### Wildland Urban Interface Area (WUI Directly Adjacent to Perry Park Ranch)

Priority	Quadrant	Location Description	Ownership RR: Rd Rt- Way P: Private M: Metro U: P- Undeveloped R: Ridge Area	CO State Forest Svc Hazard Class	Length of Mitigation Span (feet)	Estimated Total Acreage	Estimated Acreage for Mitigation (10% Leeway)	Mitigation Cost Per Acre	Estimated Average Slope (Percent)	Proposed Mitigation Estimated Cost
1	Pike National Forest	<b>Pike USFS Proposed:</b> From Pawnee Road extension at PP border northwest across Hog John Gulch upward across Spring Creek watershed to PP border	Federal <b>(Currently Proposed)</b>	C	4,875	24.62	27.08	\$1,600	40	\$45,283
1		From <b>Gila Road at PP border</b> east by southeast across Haystack Ranch to opening in prairie area, dropping from 6750 feet elevation to 6625 feet elevation	P	C	4,500	14.12	15.53	\$1,600	10	\$24,848
1	Pike National Forest	From extension of Pawnee Road at the southwest corner of Perry Park Ranch across <b>Bear Creek</b> watershed following the heavily treed ridge southwest for between a half to a mile	Federal	C	4,900	25.87	28.46	\$1,600	60	\$48,475
		<b>TOTAL MITIGATION PROPOSED ADJOINING WUI:</b>				64.61	<b>71.07</b>			<b>\$118,607</b>
NOTE: 1. Acreage of proposed areas for fuel mitigation was developed using length of area using mitigation widths that vary with slope as contained in CSFS's Fuelbreak Guidelines for Forested Subdivisions (Appendix L).										

## Appendix I Mutual Aid Agencies / Perry Park Response Times and Equipment Roster

Agency	Response Time (Minutes)	Brush	Structure	Tender	Station Number or Location
Castle Rock Fire Department	15	2	4	1	151
Jackson Fire Protection District	15	4	2	3	143
Palmer lake Fire Department	20	1	2	1	2000
Tri-Lakes Fire Protection District	20	3	2	1	2000
Woodmoor / Monument FPD	20	1	2	0	2300
Franktown Fire Protection District	25	3	3	3	181
Colorado State Forest Service	30	1	0	0	Franktown
U.S. Forest Service	35	Helitac	And Hand On		Monument
Parker Fire Protection District	40	4	6	2	Pinery
South Metro Fire Protection District	40	4	15	2	
U. S. Forest Service	45	5	0	0	Buffalo Creek
West Douglas Fire Protection Dist	45	4	2	2	Sedalia
El Paso County Wildland Team	60	2	Type 2 hand	crew	Colorado Springs

## Appendix H

### Common Terms - National Fire Danger Rating System (NFDRS)

**Ignition Component (IC)** - Related to the probability of a firebrand producing a fire that will require suppression action. It is mainly a function of the 1 hour time lag (fine fuels) fuel moisture content and the temperature of the receptive fine fuels. IC has no units. A percentage of probability from 1-100.

**Spread Component (SC)** - A rating of the forward rate of spread of a head fire. It integrates the effect of wind, slope, and fuel bed and fuel particle properties. The daily variations are caused by the changes in the wind and moisture contents of the live fuels and the dead fuel time lag classes of 1, 10, and 100 hr.

**Energy Release Component (ERC)** - Based upon the estimated potential available energy released per unit area in the flaming zone of a fire. It is dependent upon the same fuel characteristics as the spread component (SC). The day to day variations of the ERC are caused by changes in the moisture contents of the various fuel classes, including the 1000 hour time lag class. ERC is derived from predictions of the rate of heat release per unit area during flaming combustion and the duration of the burning. Expressed in BTU's per square foot.

**Burning Index (BI)** - A measure of fire intensity. BI combines the Spread Component and Energy Release Component to relate to the contribution of fire behavior to the effort of containing a fire. BI has no units, but in general it is 10 times the flame length of a fire.

**Fire Load Index (FL)** - A rating of the maximum effort required to contain all probable fires occurring within a rating area during the rating period. It is the cumulative index of the NFDRS. It is designed to combine the projections of fire occurrence and behavior into a single number that can be related to the total fire suppression job. The meaning of FL has been left to the user. By itself, it does not tell the user much about the nature of the fire management problem. One needs to examine the individual components and indices that are the basis for the FL. It ranges over a scale of 1-100 and has no units.

**Staffing Level (SL)** - A component of the NFDRS relating to the level of fire management staffing. Staffing levels are from 1-5 with 1 being the lowest and 5 the highest.

**Adjective Rating (R)** - A public information component of the NFDRS specific to the rating of fire danger. Adjective ratings are: low(L), moderate(M), high(H), very high(V) and extreme(E).

**Keetch-Byram Drought Index (KBDI)** - A number between 0-800 representing the amount of moisture in the top 8 inches of soil. Zero is saturated, 800 is maximum drought stress. It is calculated from recent precipitation measurements in relation to the average annual precipitation. It is important to note that the KBDI is customized for each geographic area and that often the scale shows less of a range in variation.

**Fire Danger Rating** - A fire management system that integrates the effects of selected fire danger factors into one or more qualitative or numerical indices of current protection needs.

**Haines Index** - A national fire-weather index based on the stability and moisture content of the lower atmosphere and their direct relationship to the growth of large fires. The index is from 1-6 with 1 being the lowest potential for large plume-dominated fires, while 6 is the highest potential for plume-dominated fires.

**Lightning Activity Level (LAL)** - A numerical rating from the lowest of 1 to the highest of 6, keyed to the start of thunderstorms and the frequency and character of cloud-to-ground lightning

forecasted or observed on a rating area during a rating period.

National Fire Danger Rating System (**NFDRS**) - A multiple index system developed to provide information about current and predicted fire danger conditions.

Remote Automated Weather Station (**RAWS**) - A special remote fire weather observation station which takes timed measurements of the various weather factors used to calculate fire danger and behavior. These stations usually transmit data via satellite telemetry to the National Interagency Fire Center for distribution to fire managers nation-wide.

## **Appendix G Service Plan Perry Park Metropolitan District**

### **ROADS**

- Payment of bond issue to pave remaining PP roads approved by Metro District voters in 1997. Scheduled for payoff by PPMD taxpayers in 2015.
- Interface with DC for issues on County right-of-way (paved) roads.
- Electric power for streetlights, speed signs, and speed sensors.
- Interface with DC for determination and funding of second full-time access road.
- Potential bond issue to fund PP share of second access road costs.
- Previous roads activities:
  - § Bringing gravel roads up to DC standards for paving;
  - § Incremental paving of roads as budget would allow;
  - § Maintenance of unpaved roads
  - § Snowplowing of unpaved roads
  - § Provided 1997 initiative to complete paving in collaboration with DC

### **FIRE MITIGATION**

- Provides initiative to pursue grant funding for mitigation projects
- Initiates PP mitigation projects in concert with the US Forest Service, Colorado State Forest Service, Larkspur Fire Protection District, and Douglas County. Including ingress/egress corridor thinning; planning and implementation of fire boundaries; mitigation training classes and information publication
- Provides for the annual “slash pickup” program thru grant funding and/or District dollars depending on funding availability
- Provides “free mulch” to residents for landscaping
- Mitigates PPMD owned tracts and open spaces

### **EMERGENCY PREPAREDNESS**

- Interface with LFPD, DC, CSFS, and USFS regarding emergency planning for Perry Park
- Organizes a citizen fire patrol to provide for the early detection of emerging fire threats
- Supports a Block Captain and Neighbor Emergency Team (NET) programs to respond to emergencies in situations where the LFPD has not yet arrived or requires added assistance
- Preparing a Community Wildfire Protection Plan (CWPP) as per Federal specifications in collaboration with LFPD and DC. This provides the pre-planning of actions to be taken for resident safety in the event of a wildfire and fulfills a pre-requisite for qualifying for future State and Federal grants.

### **OPEN SPACE**

- Acquire, preserve, and maintain open space tracts and parcels within PP boundaries. This includes xx tracts/parcels owned by the PPMD such as the Big D and the recently acquired Gateway property at the front of the Park (approved by PPMD voters in 2001). The bond issue to pay for the Gateway acquisition is included in the indebtedness package referenced above under “Roads” which is scheduled to be paid off by PPMD taxpayers in 2015.

### **PARKS & RECREATION**

- Maintain and enhance Wauconda Park. Includes recent and ongoing improvements in the playground, access road, and grounds usefulness.

**(PARKS & RECREATION continued)**

- Support the annual July 4<sup>th</sup> fireworks display on a cost share basis with the PPCC and other contributors.
- Support the Mother's Co-Op Annual Easter Egg Hunt.
- Maintenance and recent improvements to the Park entry monuments and parking area

**PEST & WEED CONTROL**

- Interface with DC for weed control along paved right-of-ways in PP.
- Coordinate weed control measures in the Big D
- Facilitate weed control in PPMD owned properties and un-developed roads

Date: June, 2005

## GMRS / FRS RADIO OPERATION INSTRUCTIONS

*Information and operation highlights specifically for use by Perry Park's Neighborhood Emergency Team, Block Captains and Fire Patrol*

### Background Information

GMRS (General Mobile Radio Service) and FRS (Family Radio Service) are UHF radio systems operating in the 462 and 467 megahertz band ranges. There are numerous brands of GMRS/FRC radios; the two most popular manufactures of GMRS/FRC are *AudioVox* and *Motorola*. Both the manufacturers' hand-held transmitter-receivers operate at .5 watts on their FRS channels and low power settings and at 3 watts on their full GMRS channels and high power settings. High power operation provides transmission up to 5 miles, line-of-sight operating range, although *AudioVox* markets some of their units with an "Up to 7 Miles" claim. The *AudioVox* units are less expensive than the *Motorola* which generally is considered "*top of the line*." The *Motorola* units are high quality and provide better weather resistance than the less expensive *AudioVox* units; however, the *AudioVox* units are just as efficient for usage in Perry Park. Note: Some of the channel assignments between the different manufactures units don't map with each other (i.e., channel number to channel number). When using multiple brands of GMRS radios in a group exercise or in an emergency, the owners manuals among the various manufactures of the units should be checked to determine appropriate channel line-up. A number of the GMRS/FRC units sold today also are equipped with the capability to receive the NOAA weather channels.<sup>3</sup>

### Basic Operation for Perry Park NET, Block Captain and Fire Patrol Use

*(See Section 4, Subsection b for GMRS channel assignments for emergency use)*

1. Turn unit on;
2. Go to your group's designated channel assignment; *(PPNET: Channel 15;*  
*Fire Patrol: Channel 20; and, Block Captains: Channel 22)*
3. Utilize the Push To Talk (PTT) button to transmit ...<sup>2</sup>
  - a. Call the party you wish to call by saying the party's name or identification you are calling and then your name or designation; e.g., "*Smith, Jones*" (As a team member, your surname as your identifier is recommended). It is suggested that once your calling party has stopped talking, you wait three seconds before responding to prevent "talking-over" each other.
  - b. Upon response, first provide your name or designation, location and immediate need, followed by clarification on informational details (This protocol is meant to provide the most important information first in the event your unit's batteries or transmitter signal diminishes).  
**ALL RADIO CONVERSATIONS SHOULD BE CONCISE, PROFESSIONAL AND PROVIDE COMPLETE INFORMATION!** Remember, these units are not cell phones or toys.
4. Upon communication conclusion, complete your transmission by transmitting you designation, "clear" and your call sign; e.g., "*Jones clear, WPZT286.*"<sup>1</sup>

### Footnotes

1. The FCC requires that GMRS radios operating on the "*high*" power transmitter setting be operated with a license ...available from the FCC over the Internet. (Your GMRS "Owner's Manual" provides the FCC website information and procedures.) Legend: "*Low*" Power:" 0.5 watts transmitting power; "*High*" Power:" 2 watts to 5 watts transmitting power, depending on unit manufacturer. Under FCC regulations, on single long, high-power "open" channel segments, your call sign needs repeating ever 15 minutes; it is recommended that if you have the channel "open" for monitoring purposes that you repeat your call sign every 10 minutes.
2. When operating your GMRS radio in a NET Team situation, "*ring*" and "*end of transmission*" tones should be disabled (check your owner's manual for procedure for your specific GMRS unit.)
3. Most GMRS/FRC units are equipped with multiple features that vary in operation and activation by manufacturer. Please read your owner's manual to determine how to activate and de-activate the NOAA weather channel, scanning capability, "*hands-free*" operation, tone controls, etc. for your specific unit.

## PERRY PARK EMERGENCY USAGE CHANNEL ASSIGNMENTS GMRS / FRC Radios

### All GMRS and FRS Channel Frequencies<sup>1</sup>

Channel / Type	Frequency (MHz)
1 GMRS/FRS	462.5625
2 GMRS/FRS	462.5875
3 GMRS/FRS	462.6125
4 GMRS/FRS	462.6375
5 GMRS/FRS	462.6625
6 GMRS/FRS	462.6875
7 GMRS/FRS	462.7125
8 FRS	467.5625
9 FRS	467.5875
10 FRS	467.6125
11 FRS	467.6375

Channel / Type	Frequency (MHz)
12 FRS	467.6625
13 FRS	467.6875
14 FRS	467.7125
15 GMRS	462.5500
16 GMRS	462.5750
17 GMRS	462.6000
18 GMRS	462.6250
19 GMRS	462.6500
20 GMRS	462.6750
21 GMRS	462.7000
22 GMRS	462.7250

### GMRS Channel Assignments for Emergencies in Perry Park

All assigned channels for emergency use are GMRS, High Power channels and require an FCC GMRS radio license (See footnote 1, Section 4, Subsection a). No FRS or combined GMRS/FRS channels are assigned for emergency use since, during an emergency event, the FRS and GMRS/FRS channels will likely be active with Perry Park resident activity. If additional channels are required for emergency use channels 1 through 7 and channel 21 may be assigned at will.

GMRS Channel No.	Freq (MHz)	Designated Emergency Channel Assignments (Perry Park) <sup>2</sup>
15	462.5500	PPNET "Meet Channel" – Monitored at LFPD Station 2, "Base"
16	462.5750	PPNET Operations Channel
17	462.6000	PPNET Logistics and Plans Channel
18	462.6250	Reserved for LFPD and PPNET emergency communications use
19	462.6500	Emergency Traffic Direction channel
20	462.6750	PP Fire Patrol channel
21	462.7000	
22	462.7250	PP Block Captain channel

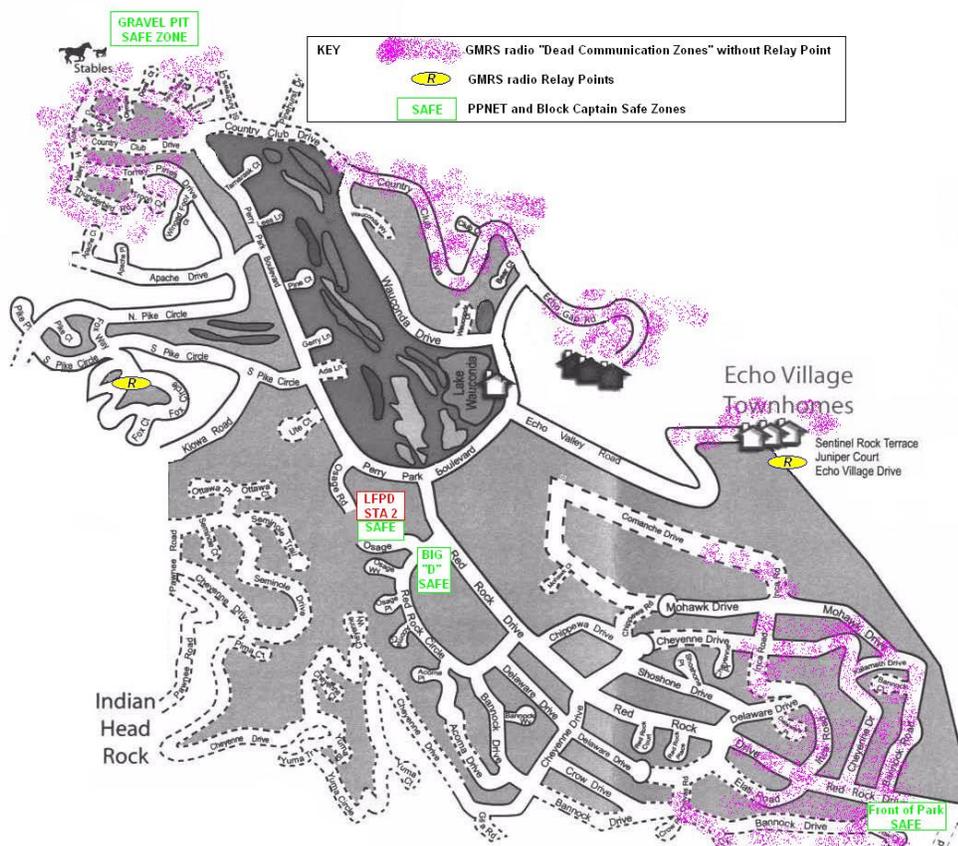
In the event of an emergency impacting a significant portion or all of Perry Park's geographic area, PPNET's GMRS base will be the Perry Park Fire Station (LFPD Station 2). In order to achieve Perry Park-wide GMRS radio communication coverage, manned GMRS radio relay points will be required to be established (See Section 4, Subsection c). Manning Perry Park's designated two primary relay points will cover all of the PPNET "SAFE Zone" areas as well as all areas with housing in the current (2005) residential Park.

#### Footnotes:

1. All twenty-two GMRS/FRS channel frequencies map to AudioVox GMRS handheld radio transmitter/receiver units.
2. All emergency channel assignments are full GMRS, high power output channels requiring a FCC GMRS license for usage.

### GMRS RADIO COVERAGE AND MANNED RADIO RELAY SITES Within the Boundaries of Perry Park

In the event a Park-wide emergency and the Perry Park Neighborhood Emergency Team (PPNET) is deployed, the Perry Park Fire Station (LFPD Station 2) will be used as the GMRS radio communications “base” for PPNET. GMRS radio communication between the “Base” Station all points within the current residential area of Perry Park and four “SAFE Zones” for volunteer group assembly is not possible without the establishment of manned *GMRS Radio Relay Sites*.



The violet areas in map above designates the “Dead Zone” areas with no GMRS communication with the LFPD Station 2 base. In order to provide full GMRS radio communication coverage between the base all current residential areas of the Park as well as the PPNET four “SAFE Zone” areas, two manned relay points should be established:

1. Fox Circle Relay Site: Fox Circle “down” from 7065 Fox Circle, at north-side guardrail beside a stand of Gamble oak, between 7065 and 7091 Fox Circle
2. Sentinel Road Terrace Relay Site: At top (westernmost) of Sentinel Rock Terrace, on southwest side of Echo Village Townhomes.

If circumstances are that only one of these relay sites can be manned, the Fox Circle site should be the primary choice with the Sentinel Rock Terrace site designated as alternate or “fall-back.” The relay point locations are shown on the above map of Perry Park.

The areas within Perry Park that cannot have communications between *Base* and the relay station if only one GMRS relay station is manned, is shown on the following matrix.

### GMRS Radio Relay Sites

No GMRS Communication Location if only:	Fox Circle is Manned	Sentinel Road Terrance is Manned
Valley Hi Road and Crestview Court1		•
Torrey Pines and Country Club Drive1		•
Area around 4290 Elati	•	

**GMRS EMERGENCY BASE STATION  
PERRY PARK FIRE STATION (LFPD Station 2)**

Section 4, Subsection d will ultimately contain manning and operating instructions for the 50 watt GMRS base station planned to be installed at Perry Park Fire Station (LFPD Station 2). The purchase of GMRS base station will be held until the Perry Park Community Wildfire Protection Plan is complete and approved for distribution by the Perry Park Metropolitan Board.

The GMRS base station is the command center (LFPD Station 2), dispatch unit, for any of the activated Perry Park citizen volunteer groups: PPNET, Block Captains or Fire Patrol (See Section 2, Communications Plan for activation authorizations of volunteer units in the event of an emergency). The command center will be equipped with communications system(s) linkages to professional agencies as well (See Section 5 for complementing communication systems).

For the Perry Park GMRS base station, ICOM, MAXON, or TEKK, Inc. are recommended since these manufactures provide the best balance of GMRS quality systems generally in the most economical price range. Listed below is a table of illustrative GMRS radio base station components that will be required for the base station operation. The prices are based upon March, 2005 advertised prices for ICON and MAXON components.

**Minimum Recommended GMRS Radio Base Station Components**

<b>GMRS Radio Base Station Component Description</b>	<b>Comments</b>	<b>Estimated Component Price</b>
50 Watt 440 to 475 mHz Transceiver (Base Station)	ICON Appears Best Value	\$950.00
Back-up DC Power Supply (1 Hour NormOP)	PPMD IS and Base Station could share same back-up power supply as computer system and should be considered in the buying decision for whichever system (IS or GMRS) is purchased first	\$150.00 (GMRS back-up only)
Microphone	Price at right reflects two microphone units which is recommended for base operation (1 primary unit; 1 back-up)	\$100.00
Ground Plane Antenna	Recommend pole-based or building mounted	\$149.00 \$350.00 Install- ed with Mountings
Looped Tape Back-up Recorder	Optional if required for liability or after the fact information recreation	\$300.00

**NOTE:**

If it is ultimately determined that the base station operation should link with county law enforcement and fire protection district via the 800 mHz frequency band, a base station covering both the GMRS frequencies as well as the county's and LFPD's frequency bands could be purchased. These wider frequency radio systems operating between 360 and 850 mHz range between \$1600 to \$3000, depending on options. The back-up power supply, microphones and antenna system to support 360 to 850 mHz would be considerably more expensive than the GMRS estimated prices reflected above.

**PERRY PARK COMMUNICATIONS PLAN  
LINKAGES WITH PROFESSIONAL  
EMERGENCY SERVICES ENTITIES**

**PPNET Incident Command Linkages:**

**a. Emergency Services: Larkspur Fire Protection District and Douglas County Emergency Services Management / Sheriff's Office**

**1) VHF Scanner of DC Fire Dispatch Communications:**

This is an optional unit that would monitor Douglas County Fire dispatch transmissions. A scanner would provide early notification or warning of response to an incident but would require full-time monitoring to be effective. During an emergency, a scanner would also assist in supplying a broader view of an incident. However, the purchase of a VHF scanner should be considered low priority for PPMD.

**2) Douglas County Cell / Pager:**

A Douglas County cell phone or pager should be considered only as a unit for linkage with the Douglas County Emergency Services Manager and would be used to authorize PPNET for emergency operation (See Section 2). However, since this unit would need continuous monitoring to be effective and since reception is, at best, spotting within the boundaries of Perry Park, a cell or pager unit should not be acquired unless provided by DCEM. A DC pager has a one time price of \$250 with approximately \$50 per month recurring cost.

**3) 800 megahertz VHF Radio:**

PPMD should consider purchasing an 800 MHz radio system for emergency, base station use for coordinating volunteer emergency response work with county professional agencies and receiving update information during times of emergency events. 800 MHz usage by PPMD would require approval of both DCEM and LFPD. An 800 MHz radio would run approximately \$3000.00 plus additional costs for ancillary equipment such as microphones and antennas. An 800 MHz would be located at the base station in conjunction with PPMD's information system (computer operation). If the decision is made to move forward in purchasing an 800 MHz system, consideration should be given to a wideband system to also cover volunteer GMRS communications. This would require purchasing a system capable of operating in megahertz ranges between 450 and 850 MHz. GMRS radios operate in the 462 and 467 megahertz bands. The decision to purchase an 800 MHz system should be held until after the CWPP for all hazards is completed.

**4) GMRS radios for LFPD:**

If LFPD does not purchase GMRS radios for their personnel to interact with Perry Park volunteer units in the event of an emergency where volunteer units are dispatched, PPMD should consider purchasing two (2) units and a charger for LFPD Station 2 for professional fire fighter use in communicating with Perry Park volunteer units. Cost of two GMRS units and charger would be approximately \$75 current retail prices (March, 2005).

**5) NEXTEL Telephone:**

Potential alternative to LFPD purchasing GMRS radios ...LFPD personnel carry Nextel cellular telephones.

**b. Authorizations and Transfer of IC Responsibility**

1) In accordance with Douglas County Emergency Services Management and the operating specifications set forth by FEMA in the *Citizens Emergency Response Team* manuals, authorization for activation of emergency response teams for emergency work (*specifically the Perry Park Neighbor Emergency Team, PPNET*) can only come from either by the offices of the Douglas County Emergency Services Management or the LFPD Fire Chief.

2) Authorization of the Perry Park Neighborhood Emergency Team may be done by either a Perry Park Metropolitan District board member or the one of the Perry Park Neighborhood Emergency Team In-Charges for non-emergency work.

3) Professional agency in-charge responsibility on-site always overrides volunteer in-charge. Upon arrival on-site of any professional agency team member, IC is transferred from the volunteer group IC to the professional agent.

## PERRY PARK COMMUNICATIONS PLAN GENERAL PUBLIC COMMUNICATIONS

### General Public Communications

#### a. Emergency Notification Systems

##### 1) Telephone Notification Strategy

Each Block Captain area is divided into two, “*pre-designated*” or Block Captain agreed sections for calling. Each Block Captain will begin establishing an informal calling tree by using the Perry Park directory to call residents by street; e.g., Chippewa. As soon as the Block Captain reaches someone at home, the Block Captain will ask that person to continue calling residents on their street. The Block Captain would then move to the next street in their sector. Block Captains will leave messages until an at-home person is reached. *It is very important when calling a resident, in the event of a Perry Park impacting emergency, that the resident be informed that each household needs to notify the Larkspur Fire Department or the Douglas County Sheriff’s Department of people in their home with special needs, including children home alone who cannot drive or do not have access to a vehicle.*

##### 2) Website Manning and Posting

The Perry Park Metropolitan District website, [www.perrypark.org](http://www.perrypark.org), will be used to post emergency notification messages during emergency events. Maintaining the website is the responsibility of the webmaster, currently Michael Medberry, and the assistant webmaster, currently P. Robert Owens. They each have the authority and ability to edit the Web page content. Upon notification of an emergency each will attempt to contact the other and compose and post the message. If one of them has been notified and cannot reach the other, he will compose the text and post it. The website is maintained on Yahoo! servers. Yahoo! personnel perform all backups of the website content.

In addition to the Metropolitan District website, there is a Metropolitan District server located in the Perry Park firehouse which has on it an ArcView geographical information database of Perry Park which will be of use for emergency services personnel. This database is accessible to authorized personnel remotely using PC Anywhere through a wireless connection or via the Internet as well as directly at the Perry Park firehouse. The database will be maintained by a database administrator, currently John Matyjasik. It is planned that several members of the Metropolitan District Board of Directors familiarize themselves with the ArcView application and database to be able to back up the administrator in the event he is unavailable. The server will be backed up weekly by the webmaster or the assistant webmaster.

##### 3) Remote Automated Weather System (RAWs):

A RAWS unit will be used to provide value early warning and wildfire fighting information for Perry Park. Although a couple of private weather systems are in operation in Perry Park they are currently not providing full 24-7 real time information that can be managed to provide a fire fighting offensive. A RAWS should be considered for purchase by the PPMD; other beneficiaries may help in purchasing a RAWS unit. Cost of a RAWS unit is approximately \$2,600 to \$3,000. The information that is provided by RAWS is listed below and was copied from the national RAWS website, <http://www.fs.fed.us/raws>

*Wind Speed* – Current wind speed is measured. Ten-minute average and maximum wind speed are also recorded.

*Precipitation* – *Duration* and amount are measured in increments of .01 for each hour.

*Solar Panel* – Most stations operate on a battery which is inside the data collection platform (DCP) or data-logger case. This battery is charged by a solar panel. Other stations operate on AC power.

*Barometric Pressure* – The station may also be measuring barometric pressure every hour. If the sensor is present, it is not visible, but contained inside the DCP/data-logger case.

*Fuel Moisture and Temperature* – Fuel moisture and temperature are measured on some stations.

*Soil Moisture* – Soil moisture is measured on some stations.

*Wind Direction* – Current wind direction is measured. The direction of the maximum wind speed is also recorded.

*Air Temperature/Relative Humidity* – Current air temperature and humidity are measured.

*GOES Satellite Antenna* – Data is transmitted to the Geostationary Operational Environmental Satellite during a specific “window” of time – either every hour or every three hours.

*Data Collection Platform (DCP) or Data Logger* – Data from all of the sensors are stored here. The system also holds the program that determines how often and when data are measured.

- b. Emergency Preparedness Network (EPN) or Reverse 911 - Parameters and Authorizations - EPN is a system used for emergency notification to Douglas County hard-line phones. There is currently no way to initiate notification to cell phones. The system can and does make notification via TDD for the deaf and hearing impaired. If people have a block on their phone of any kind (for example no solicitation where the caller has to dial 1 to be put through), EPN will not work. EPN will leave a voice message on message machines although some older devices have trouble receiving the complete message.

EPN is used in a number of situations; evacuations, notifications to stay inside such as with SWAT calls, Amber Alerts, etc. It is not used to make public announcements like notice of a town meeting.

An EPN launch has to be approved by a Sheriff's Office employee with the rank of Lieutenant or higher. An EPN launch can also be authorized by Jamie Moore with County Emergency Management.

## EMERGENCY CONTACT NUMBERS

<b>PERRY PARK BLOCK CAPTAINS, FIRE PATROL &amp; TRAINED NET TEAM MEMBERS</b>								
HOUSEHOLD	MEMBER <small>BC=Quadrant Block Capt; FP=Fire Patrol; N=NET Trained)</small>	ADDRESS	NAME(s) ( <b>Bold</b> designates member)	HOME PHONE	CELL PHONE	WORK PHONE	EMAIL HOME	EMAIL WORK
BACHMAN	<b>FP</b>	4745 CHEYENNE DRIVE	<b>Jay Carol</b>	303-681-3544			<a href="mailto:jcrea5@msn.com">jcrea5@msn.com</a>	
BERMON	<b>#3BC N</b>	6925 FOX CIRCLE	Tim <b>Trish</b>	303-681-9503	303-506-3824		<a href="mailto:tortonfox@yahoo.com">tortonfox@yahoo.com</a>	
BLANEY	<b>FP</b>	6305 APACHE DRIVE	<b>Chuck Karen</b>	303-681-2259	303-579-5126		<a href="mailto:kblaney@douglas.co.us">kblaney@douglas.co.us</a>	
BROGAN	<b>#2BC FP N</b>	8090 S BANNOCK DR	<b>John Joan</b>	303-681-3644			<a href="mailto:jbro317@msn.com">jbro317@msn.com</a>	
BROWN	<b>FP N</b>	4989 RED ROCK DR	<b>Rod Laurie</b>	303-681-2565	303-981-0548	303-681-3205	<a href="mailto:rod55goal@yahoo.com">rod55goal@yahoo.com</a>	
CRAIG	<b>#1BC N</b>	5131 RED ROCK DR	<b>Rosemarie</b>	303-681-3257			<a href="mailto:rose.craig@worldnet.att.net">rose.craig@worldnet.att.net</a>	
FRUEH	<b>FP</b>	4389 DELAWARE DR	<b>Kent Judy</b>	303-681-3412	303-981-0548		<a href="mailto:Kent.Frueh@PCISYS.net">Kent.Frueh@PCISYS.net</a>	
GNAM	<b>#4BC</b>	6616 WAUCONDA DRIVE	Lou <b>Jan</b>	303-681-3794			<a href="mailto:lgnam@aol.com">lgnam@aol.com</a>	
GREYSON	<b>FP</b>	6238 SOUTH PIKE DRIVE	<b>Mark Patty</b>	303-681-9513	303-919-1452		<a href="mailto:mgreyson@comcast.net">mgreyson@comcast.net</a>	
HAMLING	<b>#1BC FP N</b>	4969 RED ROCK DR	<b>Dave Danna</b>	303-681-3738	303-912-7609		<a href="mailto:davedanna@netzero.net">davedanna@netzero.net</a>	
HAVERKATE	<b>FP</b>	4856 CHEYENNE DRIVE	<b>Dave Tim</b>	303-681-3600	303-887-3112		<a href="mailto:dhaverkate@wideopenwest.com">dhaverkate@wideopenwest.com</a>	
JONES	<b>#3BC</b>	7097 PERRY PARK BLVD	John <b>Carolyn</b>	303-681-0163	303-349-1130		<a href="mailto:jonescar@msn.com">jonescar@msn.com</a>	
LAWS	<b>FP</b>	7088 KIOWA ROAD	<b>Will</b>	303-681-0289	720-272-4279		<a href="mailto:don_laws@msn.com">don_laws@msn.com</a>	<a href="mailto:dlaws@villagehomes.com">dlaws@villagehomes.com</a>
LUCAS	<b>FP</b>	4945 DELAWARE DRIVE	<b>Tony Melissa</b>	303-681-9055	303-807-5576		<a href="mailto:tlucas4945@comcast.net">tlucas4945@comcast.net</a>	
MARTIN	<b>FP</b>	7131 KIOWA ROAD	<b>Jeff Jane</b>	303-681-3503			<a href="mailto:jmartin358@aol.com">jmartin358@aol.com</a>	
MEDBERRY	<b>FP</b>	5150 BANNOCK WAY	<b>Mike Jean</b>	303-681-3374	303-525-64041		<a href="mailto:michael@medberry.com">michael@medberry.com</a>	
MILDREXLER	<b>FP</b>	4593 CHEYENNE DRIVE	<b>Craig Linda</b>	303-681-3697			<a href="mailto:craigmildrexler@earthlink.net">craigmildrexler@earthlink.net</a>	
OWENS	<b>N</b>	6198 S PIKE DR	<b>Bob</b>	303-681-2508			<a href="mailto:PRobertOwens@msn.com">PRobertOwens@msn.com</a>	
PERCONTI	<b>FP</b>	4286 MOHAWK DRIVE	<b>Tony Sherri</b>	303-681-2581	303-919-1996		<a href="mailto:tperconti@earthlink.com">tperconti@earthlink.com</a>	

HOUSEHOLD	MEMBER BC=Quadrant Block Capt; FP=Fire Patrol; N=NET Trained)	ADDRESS	NAME(s) ( <b>Bold</b> designates member)	HOME PHONE	CELL PHONE	WORK PHONE	EMAIL HOME	EMAIL WORK
ROMAN	#2BC N	8186 RED ROCK PLACE	Bruce <b>Sharon</b>	303-681- 9211	303-689- 0481	303-681- 3284	<a href="mailto:s.l.roman@att.net">s.l.roman@att.net</a>	<a href="mailto:broman@larkspurfire.org">broman@larkspurfire.org</a>
RUCH	FP	4010 CHEYENNE DRIVE	<b>Carl</b> Linda	30-681- 3468			<a href="mailto:carl@cdfinancial.com">carl@cdfinancial.com</a>	
SCHLUPP	N	4839 W CHEYENNE DRIVE	<b>Larry</b> Julia	303-681- 3537	Larry (303-881- 8522) Julia (303- 437-1537)	Larry (303- 681- 0165)	<a href="mailto:jschlupp@comcast.net">jschlupp@comcast.net</a> (Larry); <a href="mailto:jschlupp@comcast.net">jschlupp@comcast.net</a> (Julia)	
SHERICK	FP	4875 CHEYENNE DRIVE	<b>Jeff</b> Bev	303-681- 2391			<a href="mailto:Jsherick1@aol.com">Jsherick1@aol.com</a>	
WARD	FP	6894 PIKE COURT	<b>Pete</b> Marcia	303-681- 3228	303-349- 1141		<a href="mailto:pw1018@yahoo.com">pw1018@yahoo.com</a>	
WOOD	FP	8017 SO BANNOCK DRIVE	<b>Gary</b> Pamela	303-681- 4950			<a href="mailto:rodeodoc@yahoo.com">rodeodoc@yahoo.com</a>	
WILLIAMS	BC <sup>Mo Upd</sup> N	7240 KIOWA ROAD	<b>Barbara</b> Don Korinek	303-681- 0847	303-898- 2033	303-643- 3350	<a href="mailto:barbara.williams38@gte.net">barbara.williams38@gte.net</a>	<a href="mailto:barbara.i.williams@citigroup.com">barbara.i.williams@citigroup.com</a>
WORLEY	FP N	7377 OSAGE RD	<b>Keith</b> Barbara	303-681- 3485	720-530- 6527; 719- 499-7599 Nextel#19 109	303-681- 2492	<a href="mailto:forestredev@aol.com">forestredev@aol.com</a>	
ZWAHLEN	#4BC	4461 SENTINEL ROCK TERR	<b>Jack</b> & Carolyn	303-681- 3142			<a href="mailto:oilyjack@ecentral.com">oilyjack@ecentral.com</a>	

FIRE AND EMERGENCY SERVICES CONTACTS								
SURNAME	POSITION	ADDRESS	NAME	HOME PHONE	CELL PHONE	WORK PHONE	EMAIL HOME	EMAIL WORK
BUMGARNER	CHIEF	9375 SPRUCE MTN RD	Jimmy			303-681-3284		<a href="mailto:jbumgarner@larkspurfire.org">jbumgarner@larkspurfire.org</a>
JOHNSON	F MARSH	5621 OSAGE WAY	Randal	303-681-2650		303-681-3284		<a href="mailto:rjohnson@larkspurfire.org">rjohnson@larkspurfire.org</a>
<b>LARKSPUR FD</b>	EMT-FIRE	9375 SPRUCE MTN RD				303-681-3284 (Non-Emrg); 303-660-7500		
MILLS	EMS CHIEF	9375 SPRUCE MTN RD	Stuart			303-681-3284		<a href="mailto:smills@larkspurfire.org">smills@larkspurfire.org</a>
MOORE	DC ESC	3030 INDUSTRIAL WAY CASTLE ROCK	Jamie			303-660-7589 Ext 6102		<a href="mailto:jmoore@douglas.co.us">jmoore@douglas.co.us</a>
ROMAN <sup>1</sup>	EMT-FIRE	8186 RED ROCK PLACE	Bruce	303-681-9211		303-681-3284	<a href="mailto:s.l.roman@att.net">s.l.roman@att.net</a>	<a href="mailto:broman@larkspurfire.org">broman@larkspurfire.org</a>
SUTTON	EMT-FIRE	4306 RED ROCK DR	Larry	303-681-6721		303-681-3284	<a href="mailto:puddles4306@earthlink.com">puddles4306@earthlink.com</a>	<a href="mailto:lsutton@larkspurfire.org">lsutton@larkspurfire.org</a>
WALDEN <sup>1</sup>	EMT-FIRE	7804 INCA RD	Charles	303-681-0164		303-681-3284		<a href="mailto:cwalden@larkspurfire.org">cwalden@larkspurfire.org</a>
<sup>1</sup> First Aid & CPR Trainers								

PERRY PARK METROPOLITAN DISTRICT								
SURNAME	Position	ADDRESS	NAME	HOME PHONE	CELL PHONE	WORK PHONE	EMAIL HOME	EMAIL WORK
HAMLING	President	4969 RED ROCK DR	Dave	303-681-3738	303-912-7609	NONE	<a href="mailto:davedanna@netzero.net">davedanna@netzero.net</a>	
MEDBERRY	Vice-Pres	5150 BANNOCK ROAD	Michael	303-681-3374			<a href="mailto:Michael@medberry.com">Michael@medberry.com</a>	
<b>METRO DIST</b>	Contact Nos					303-681-0522		<a href="http://www.perrypark.org">http://www.perrypark.org</a>
OWENS	Secretary	6198 S PIKE DR	Bob	303-681-2508			<a href="mailto:prowens@gbronline.com">prowens@gbronline.com</a>	
SCHLUPP	Treasurer	4839 W CHEYENNE DRIVE	Larry	303-681-3537	303-881-8522	303-681-0165	<a href="mailto:lschlupp@comcast.net">lschlupp@comcast.net</a>	
WORLEY		7377 OSAGE RD	Keith	303-681-3485	720-530-6527; 719-499-7599 Nextel#19109	303-681-2492	<a href="mailto:forestreedev@aol.com">forestreedev@aol.com</a>	

## Appendix F COMMUNICATIONS PLAN

### INDEX OF SECTIONS

**NOTE:** The contents of this document primarily focus on the communications plan for the Perry Park Neighborhood Emergency Team (PPNET), emergency notification information and call-out schemes are included for the Perry Park Block Captain group and the Perry Park Fire Patrol. This plan is a subtext to the response portion of the Perry Park Community Wildfire Protection Plan and documents linkages with the Larkspur Fire Protection District (LFPD) and the Emergency Services Management for Douglas County (DCESM).

- Section 1:       **Plan Narrative**
- Section 2:       **Perry Park Volunteer Groups:   Emergency “Call-out” and Notification Plans**
- a.       Perry Park Neighborhood Emergency Team
  - b.       Block Captains
  - c.       Fire Patrol
- Section 3:       **Emergency Contact Information**  
*(Perry Park Neighborhood Emergency Team members, Block Captains, and Fire Patrol members ...plus, Larkspur Fire Protection District and Douglas County Emergency Services)*
- Section 4:       **PPNET Operations Communications**
- a.       GMRS/FRC Radio Basic Operating Instructions
  - b.       GMRS Channel Assignments for Emergency Use GMRS
  - c.       GMRS Radio Coverage and Manned GMRS Radio Relay Sites
  - d.       GMRS Base Station
- Section 5:       **PPNET Incident Command Linkages**
- a.       Emergency Services: LFPD and DCESM
    - 1) VHS Scanning of DC Fire Dispatch Communications
    - 2) Douglas County Cell / Pager
    - 3) 800 megahertz Radio – LFPD Linkage
    - 4) GMRS radios for LFPD
  - b.       Authorizations and Transfer of IC Responsibility
- Section 6:       **General Public Communications**
- a.       Emergency Notification Systems
    - 1) Telephone Notification Strategy
    - 2) Website Manning and Posting
    - 3) Remote Automated Weather System
  - b.       DCESM Reverse 911 Parameters and Authorizations

## COMMUNICATIONS PLAN NARRATIVE

The Communications Plan for Perry Park was developed to assist professional and volunteer responders in communications both within and among their specific response group(s) during emergency event(s) impacting Perry Park. This document was developed under authorization of the Perry Park Metropolitan District board and written generally from the perspective of the various Perry Park volunteer emergency prevention and emergency response teams.

The intent of the Perry Park Communications Plan is to provide a profile for understanding of dispatch and operating details of volunteer emergency prevention and response groups and communication methodologies of volunteer group(s) and their interaction with professional agencies. Note must be taken that volunteer emergency response groups can be activated for emergency response work *only* by the offices of the Douglas County Emergency Services Coordinator or the LFPD Fire Chief. In addition to the communications operations, this Communication Plan is intended to identify areas of emergency information support for both emergency response groups and the general public.

This document is not all-inclusive of communication support equipment, inter-agency equipment and communications protocol. However, it sets forth a basic foundation and plan that will be updated periodically and when communications methodologies and/or equipment are changed or added.

The Communications Plan is distributed to Douglas County Emergency Services, the offices of the Larkspur Fire Protection District, the Perry Park Metropolitan District board members and volunteer members of the Perry Park prevention and emergency teams. The document also is available to the general public through the Perry Park Metropolitan District website, <http://www.perrypark.org>.

## PERRY PARK NEIGHBORHOOD EMERGENCY TEAM (PPNET) CALL-OUT PROCEDURES

The **PPNET** notification calling tree is designed so that most **PPNET** members in the calling tree will have to contact no more than three fellow **PPNET** members. In the event that an emergency activation also requires notification of the **Block Captain** group and/or the Perry Park **Fire Patrol**, the **PPNET** Operations Chief will need to start the **Block Captain** call tree, the **PPNET** Logistic Chief will need to begin the call-out of the Perry Park **Fire Patrol**.

### Activation Authorization

Activating **PPNET** for **emergency services** in or external to the boundaries of Perry Park Metropolitan District can only be authorized by two professional officials:

1. Douglas County Emergency Services Manager (*Primary*)
2. Larkspur Fire Protection District Chief

Activation of **PPNET** within the boundaries of Perry Park Metropolitan District only, for **non-emergency activity only**, may be authorized by either a **PPNET** IC or by the Perry Park Metropolitan Board president or vice-president as proxy for the full Perry Park Metropolitan Board.

### PPNET Command Structure

#### PPNET Command Area

**In-Charge**  
**Operations Chief**  
**Logistics Chief**  
**Plans Chief**  
**Communications Officer**

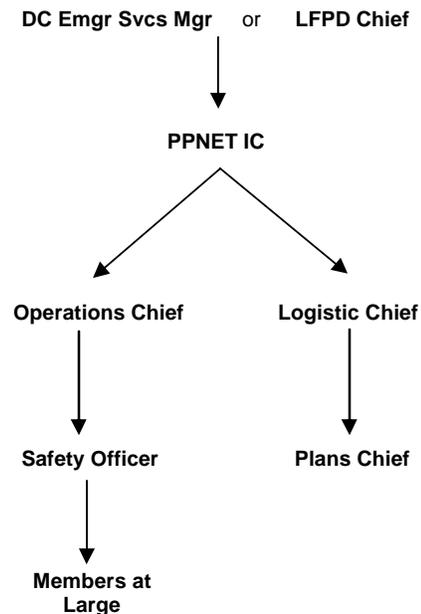
#### Current Command

**Holder** (First: Named Holder; Following: Alternate(s))

**Bob Owens, Larry Schlupp, Keith Worley**  
**Danna Hamling, Trish Bermon**  
**Rod Brown, Kelsey Nakhjovani**  
**Keith Worley, Rosemarie Craig**  
**Larry Schlupp (*temporary*)**

### PPNET Callout/Notification Procedure<sup>1</sup>

1. Activation of **PPNET**  
(Jamie Moore, DCESM, or Jamie Bumgarner, LFPD Chief to PPNET IC)
2. **PPNET** IC receiving activation call notifies Ops and Log Chiefs and alternate ICs  
(IC, Owens, Schlupp or Worley, calls Hamling, OC, and Brown, LC, and other two alternate ICs)
3. Operations Chief notifies Safety Officer and Ops alternate  
(Hamling, OC, calls Barb Williams, SO, and Bernom, alternate OC ...may need to start BC notification calling tree if required)
4. Logistics Chief notifies Plans Chief and Log Chief alternate  
(Brown, IC, calls Worley, PC, and Nakhjovani, LC alternate ... may need to start Fire Patrol notification calling tree if required)
5. Plans Chief notifies Plans Chief alternate  
(Worley, PC, calls Craig, PC alternate)
6. Safety Officer notifies Members at Large  
(Williams, SO, calls Brogan and Roman, Members at Large)



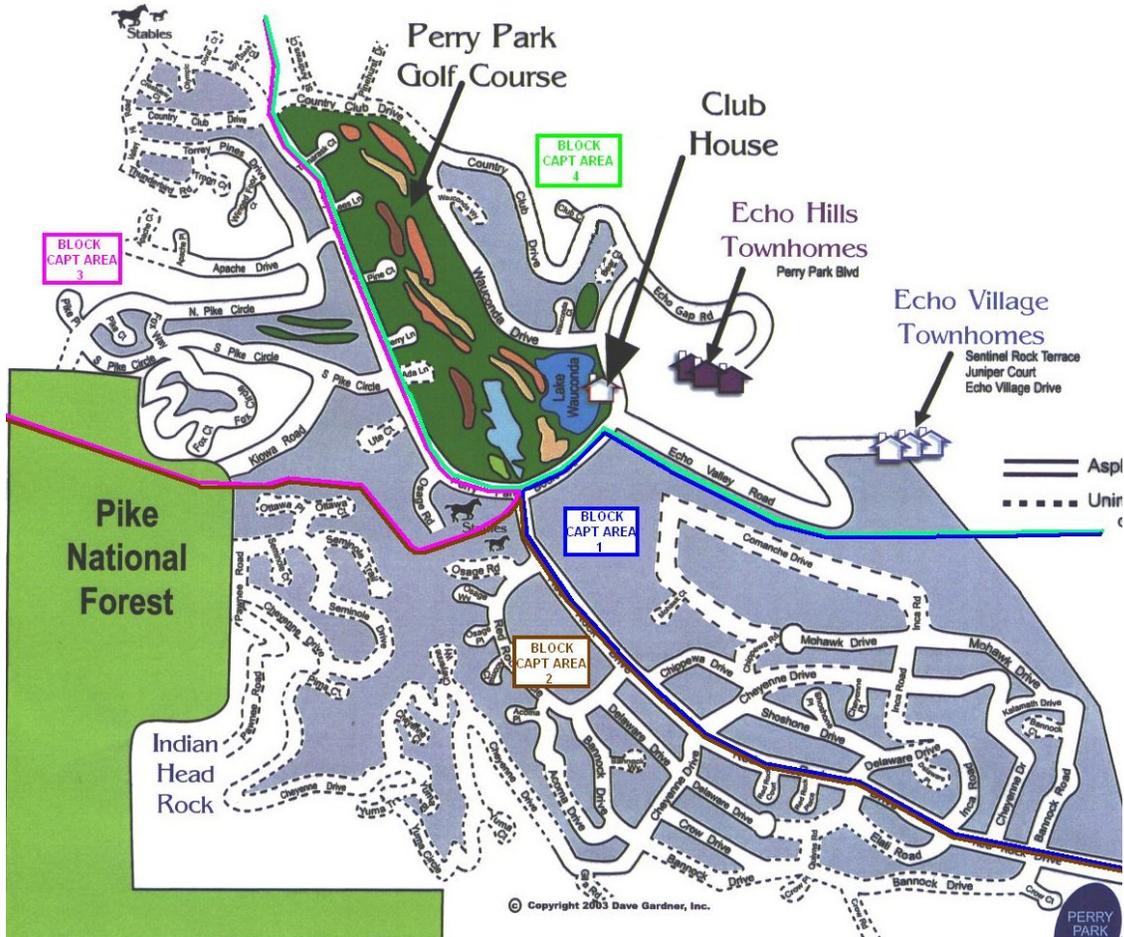
### Footnote

1. Refer to EMERGENCY CONTACT NUMBERS matrix, Section 3, for specific individual telephone or cell numbers

## PERRY PARK BLOCK CAPTAIN CALLING-PROGRAM PROCEDURES

### PROGRAM DESCRIPTION

Perry Park is divided into four Block Captain notification or calling areas depicted by the Perry Park map below. Each of the Block Captain areas has two Block Captains. In the event that telephone notification of the area's residents is required, each of the two Block Captains will initiate telephone calling in his or her pre-designated portion of their area to establish an informal calling tree (See "CALLING PROCEDURES," next page). Block Captain calling of residents may occur for notification of Perry Park residents of emergency situations or for the distribution of general service information.



### AUTHORIZATION

Block Captain calling of Perry Park residents may occur in to two situations: 1) Distribution of service or general awareness information and 2) Notification of an emergency circumstance that requires the residents to be prepared or take action. Authorization to initiate a Block Captain tree calling program for the distribution of service or awareness information to the general residents will come from a member of the Perry Park Metropolitan Board. Authorization to notify residents of potential actions to address an emergency event impacting Perry Park must come from Douglas County Emergency Services or a member of the Larkspur Fire Protection District or Douglas County Law Enforcement. Authorization will be given to the Block Captain Coordinator

who will notify the Block Captains in each of the four Block Captain areas to initiate a residents calling program.

### CALLING PROCEDURES

Each Block Captain area is divided into two, “*pre-designated*” or Block Captain agreed sections for calling. Each Block Captain will begin establishing an informal calling tree by using the Perry Park directory to call residents by street; e.g., Chippewa. As soon as the Block Captain reaches someone at home, the Block Captain will ask that person to continue calling residents on their street. The Block Captain would then move to the next street in their sector. Block Captains will leave messages until an at-home person is reached. *It is very important when calling a resident, in the event of a Perry Park impacting emergency, that the resident be informed that each household needs to notify the Larkspur Fire Department or the Douglas County Sheriff’s Department of people in their home with special needs, including children home alone who cannot drive or do not have access to a vehicle.*

### SUPPORT TOOLS

In the event of an emergency calling program Block Captains may want to reference support tools: 1) Perry Park Metropolitan District website (<http://www.perrypark.org>); 2) Perry Park Metropolitan District telephone (303.681.0522...a recorded, looped message may provide additional or updated information) and 3) KOA 850 AM radio ...official “*Emergency Radio.*”

### BLOCK CAPTAINS

Block Captain Coordinator:	Danna Hamling	(303.681.3738)
Area 1:	Danna Hamling Rose Marie Craig	(303.681.3738) (303.681.3257)
Area 2:	Joan Brogan Sharon Roman	(303.681.3644) (303.681.9211)
Area 3:	Trish Bermon Carolyn Jones	(303.681.9503) (303.681.0163)
Area 4:	Jan Gnam Jack Zwahlen	(303.681.3794) (303.681.3142)

#### Footnote:

1. Refer to the Emergency Contact Numbers matrix, Section 3, for specific individual telephone or cell numbers and email addresses.

## **PERRY PARK FIRE PATROL NOTIFICATION PROCEDURES**

In the event of a potential or impending Park-wide emergency, the PPNET Logistics Chief will initiate notification of the Fire Patrol if necessary.<sup>1</sup>

**PPNET  
Logistics Chief and  
Fire Patrol Chief**  
(Rod Brown)

**Fire Patrol  
Second in Command**  
(Don Laws)

**Footnote:**

1. Refer to the Emergency Contact Numbers matrix, Section 3, for specific individual telephone or cell numbers.

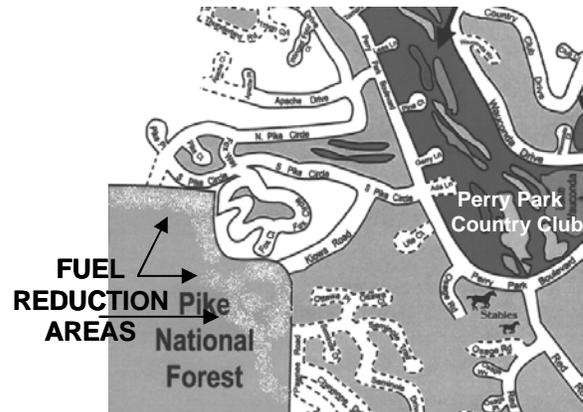
## Appendix E

# UNITED STATES FOREST SERVICE FUEL REDUCTION

In the fall (2005), the United States Forest Service will be performing a fuel reduction project in the Pike National Forest to create defensible wildfire space adjacent to residential areas of Perry Park. The specific areas for planned fuel reduction are shown on the map below.

### LONG TERM PLANNING EFFORT

This fuel reduction project culminates almost three years of identification and joint planning work among the Perry Park Metropolitan District, the Firewise Team and both the United States and Colorado State Forest Services. On March 5, 2005, the U S Forest Service, in a meeting at Perry Park Country Club, presented it's fuel reduction plan to the residents of Perry Park and received a firm vote of support.



### FUEL REDUCTION INFORMATION

- ü A 60 to 130 feet buffer zone will be established consistent with defensible space work within the Perry Park community.
- ü Visual screening of heavier mitigated areas will be maintained around adjacent private property in accordance with minimum defensible area standards.
- ü USFS will work closely with landowners on fuels removed.
- ü The National Forest lands adjacent to Perry Park have a mixture of Ponderosa pine, Douglas fir and Gambel oak. Forest fuel reduction work will retain 10-15% of the Ponderosa pine cover and 25-35% crown cover for Douglas fir. Gambel Oak will be mostly eliminated with the exception of clumps kept for wildlife.
- ü No large trees (over 9 inches in diameter) will generally be removed.
- ü Reduction will consist of timber removal, piling of non-chipped material and chipping of most of the smaller trunk and limbed material. The timber removed is estimated at approximately thirty semi-truckloads of material. Non-chipped, piled material will be burned during winter months.

### FUEL REDUCTION ESTIMATED TIME TABLE

- ü March, 2005: Project approval by Perry Park community
- ü April – June, 2005: Project layout and final planning
- ü Fall, 2005: On-ground fuel treatment
- ü Winter, 2006 – 2007: Pile burning
- ü After April, 2007: Broadcast burning

## Appendix D Fire Hazard Classes and Fuel Models

### Fire Behavior Vegetation Characterizing Fire Hazard Classes\*

HAZARD CLASS	EXPECTED FIRE BEHAVIOR	VEGETATION (FUELS)
0	None	None (Open water, bare rock, cultivated fields etc.)
X Severe Hazard (Brush)	Flames 5-20' high, of brief duration; high spread rates, at least 40 acres/hr; humans can not safely pass through flames but can occupy burned area within about 15 minutes; short range spotting from blowing embers common.	Dense to moderately dense flammable vegetation <= 10' high, including Gamble Oak, Big Sagebrush, conifer reproduction; abundant litter and/or herbaceous fuel, scattered conifer stand may be present.
A Low Hazard	Flames <= 5' high, higher flare-ups rare; duration of highest flames brief; fire spread slow to fast, 1-40 acres/hr; humans can usually run through flames without serious injury and can occupy just-burned areas; spotting generally rare short range.	Grass, weeds, brush <= 1' high, dead wood in contact with ground; open conifer stand may be present; includes aspen, cottonwood, willow, grasslands, brush other than oak, sage or ceanothus.
B Moderate Hazard	Intermittent flare-ups occurring up to many feet above tree tops; short and medium range spotting common; behavior between flare-ups as in Class-A; passing through fire front sometimes possible but chancy; parts of burned area can be occupied within half hour.	Medium density conifer stands; surface fuel mainly herbage and litter; some patches of reproduction and dead wood; becomes Class-C if slash is present.
C Severe Hazard (Trees)	Flareups higher than tree tops frequent to continuous; spread rates of up to several hundred acres per hour possible; fire front impassable; spotting several hundred yards common, possibly up to 1 mile or more; just burned areas untenable for >= an hour.	Dense conifer stands with any surface fuel; medium density stands with Class-X fuels or much dead wood from blowdown. Insect activity, or logging.

0 Hazard = No Hazard or Limited Hazard

X Hazard = Severe Wildfire Hazard (Brush)

A Hazard = Low Wildfire Hazard for Grass, Timber and Brush

B Hazard = Moderate Wildfire Hazard for Grass, Timber Brush

C Hazard = Severe Wildfire Hazard (Trees)

\* Courtesy of the *Colorado State Forest Service*

### National Fire Danger Rating Fuel Models

Each weather station can have up to four fuel models that represent the vegetation in the area of the station. A total of twenty fuel models are available to choose from. It is unlikely that more than two or three models will be appropriate for any one station.

Fuel Model	Description
A	Represents grasslands vegetated by <u>annual</u> grasses and forbs. Some brush or trees may be present but occupy a small portion of the area. [Cheatgrass]
L	Represents grasslands vegetated by <u>perennial</u> grasses and forbs. Species are coarser and amounts heavier than those in fuel model A. Some shrubs and trees may be present but occupy a small portion of the area. [Fescue, Wheatgrass]
S	Represents alpine tundra or deep layer of lichens and moss. Some grasses and low shrubs may be present. Fires are low intensity, but difficult to extinguish.
C	Represents open pine stands. Perennial grasses, needle litter and branch wood significantly contribute to the fuel loading. [Longleaf, Ponderosa, and Sugar Pine]
T	Represents shrubs that burn easily and are not dense enough to shade out grasses and other herbaceous plants. The shrubs must occupy at least one-third of the site. [Sagebrush]
N	Represents the sawgrass prairies of south Florida.
B	Represents mature, dense brush 6 feet or more in height. Much of the aerial fuel is dead. Foliage burns readily. Fires are typically intense and fast spreading. [Chaparral]
O	Represents dense, brush-like fuels of the Southeast. Most of the aerial fuel is live. Typically over 6 feet tall. Burns actively except during growing season. [Pocosin]
F	Represents mature oakbrush stands.
Q	Represents Alaskan black spruce. Forest floor is a deep layer of moss and lichens. Also contains some needle litter and branch wood, with nonflammable shrubs.
D	Represents the palmetto-gallberry understory, pine overstory association of the southeast coastal plains. Has a high moisture of extinction. [Southern Rough]
H	Represents healthy stands of short-needled conifers with sparse undergrowth and a thin layer of ground fuels. [White Pine, Spruces, Firs, Larchs]
R	Represents hardwood areas after canopies leaf out in the spring. An "off-season" substitute for fuel model E. Best during the summer in all hardwood and mixed conifer-hardwood stands where more than half of the overstory is deciduous.
U	Represents closed stands of western long-needle pines. Ground fuels

	are primarily litter and small branch wood. [Jeffery, Sugar, and Red Pines of the Lake States]
P	Represents closed stands of southern long-needle pines. A thick layer of lightly compacted needle litter is the primary fuel. High moisture of extinction. [Loblolly Pine]
E	Represents hardwood and mixed conifer-hardwood stands <u>after leaf fall</u> . Fuel is primarily loose hardwood leaf litter. [Oak and Hickory]
G	Represents dense conifer stands where there is a heavy accumulation of litter and downed woody material. Typically overmature and suffering insect and disease damage. Undergrowth is variable and restricted to openings. [Spruce-Fir, Lodgepole Pine]
K	Represents light slash from thinnings and partial cuts in conifer stands. Slash is typically scattered under an open canopy. Applies to hardwood slash and southern pine clearcuts where the fuel loading is relatively light.
J	Represents medium slash from clearcuts and heavily thinned conifer stands. Needles are still attached to branches. Material is typically less than 6" diameter.
I	Represents heavy slash loading from conifer clearcuts. Needles are still attached to the branches.

## Appendix C

### Firewise Household Tips, Property Mitigation and Protection

#### HOUSEHOLD TIPS

1. Keep a clearing of at least 30 feet around your house for fire fighting equipment.
2. Space the trees you plant carefully.
3. Remove "ladder fuels". They link the grasses and the tree tops.
4. Create "fuel break" - - - driveways, gravel walkways, or lawns.
5. Maintain your irrigation system regularly.
6. Prune tree limbs so the lowest is between 6' - 10' from the ground.
7. Remove leaf clutter from your roof and yard.
8. Mow regularly.
9. Remove dead or overhanging branches.
10. Store firewood away from your house.
11. Refuel garden equipment carefully.
12. Maintain garden equipment regularly.
13. If you smoke, use your ashtray.
14. Store and use flammable liquids properly.
15. Dispose of cuttings and debris promptly, according to local regulations.
16. Observe local regulations regarding vegetative clearances and fire safety equipment requirements.
17. Check your generator and/or hose to be sure it is in good repair.
18. Don't keep combustible materials under decks or elevated porches.
19. Make trellises of non-flammable metal.
20. Have at least two ground-level doors as safety exits.
21. Keep at least two means of escape (either a door/window) in each room.
22. Mark your driveway and access roads clearly.
23. Keep ample turnaround space near your house for fire equipment.
24. Prevent sparks from entering your house by covering vents with wire mesh no larger than 1/8".
25. When possible, use construction materials that are fire-resistant or non-combustible.

The following Construction and Landscaping information was reproduced from information produced by Firewise Communities™, [www.firewise.org](http://www.firewise.org), 1 Batterymarch Park, Quincy, MA 02269.

#### Firewise Construction

To create your Firewise structure, remember that the primary goals are fuel and exposure reductions.

- Use construction materials that are fire-resistant or noncombustible whenever possible.
- Consider using materials such as Class-A asphalt shingles, slate or clay tile, metal, or cement and concrete products for roof construction.
- Construct a fire-resistant sub-roof for added protection.
- Use fire resistant materials such as stucco or masonry for exterior walls. These products are much better than vinyl which can soften and melt.
- Consider both size and materials for windows; smaller panes hold up better in their frames than larger ones; double pane glass and tempered glass are more effective than single pane glass; plastic skylights can melt.
- Prevent sparks from entering your home through vents, by covering exterior attic and under floor vents with wire mesh no larger than 1/8 of an inch.
- Keep your gutters, eaves and roof clear of leaves and other debris.

- Clear dead wood and dense vegetation within at least 30 feet from your house, and move firewood away from your house or attachments like fences or decks.

**Any structure attached to the house, such as decks, porches, fences and sheds should be considered part of the house. These structures can act as fuses or fuel bridges, particularly if constructed from flammable materials. Therefore, consider the following:**

- If you wish to attach an all-wood fence to your home, use masonry or metal as a protective barrier between the fence and house.
- Use non-flammable metal when constructing a trellis and over with high-moisture, fire-resistant vegetation.
- Prevent combustible materials and debris from accumulating beneath patio deck or elevated porches; screen underneath or box in areas below the deck or porch with wire mesh no larger than 1/8 of an inch.

**To create a landscape that will make your home less vulnerable to wildfire, the primary goal is fuel reduction. Think of the area around your home in zones. Zone 1 is closest to the structure, Zone 4 is the farthest away.**

- Zone 1 This well-irrigated area encircles the structure for at least 30 feet on all sides, providing space for fire suppression equipment in the event of an emergency. Plants should be limited to carefully spaced fire resistant tree and shrub species.
- Zone 2 Fire resistant plant materials should be used here. Plants should be low-growing, and the irrigation system should extend into this section.
- Zone 3 Place low-growing plants and well spaced trees in this area, remembering to keep the volume of vegetation (fuel) low.
- Zone 4 This furthest zone from the structure is a natural area. Thin selectively here and remove highly flammable vegetation.

Also remember to:

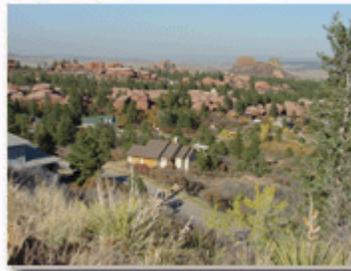
- Carefully space the trees you plant.
- Take out the “ladder fuels” – vegetation that serves as a link between grass and tree tops. These fuels can carry fire from vegetation to a structure or from a structure to vegetation.
- When maintaining a landscape:
  - Keep trees and shrubs pruned. Prune all trees six to 10 feet from the ground.
  - Water and maintain your lawn regularly.
  - Mow dry grass and weeds..
  - Dispose of cuttings and debris promptly.
- Landscape with less-flammable plants: Contact your local state forester, county extension office or landscape specialist for plant information.

**For more information visit these helpful websites:**

- USDA Forest Service, [www.fs.fed.us](http://www.fs.fed.us)
- US Dept of the Interior: [www.doi.gov/bureau.html](http://www.doi.gov/bureau.html)
- National Assoc of State Foresters: [www.stateforesters.org](http://www.stateforesters.org)
- National Fire Protection Assoc: [www.nfpa.org](http://www.nfpa.org)
- US Fire Administration: [www.usfa.fema.gov](http://www.usfa.fema.gov)
- Federal Emergency Management Agency: [www.fema.gov](http://www.fema.gov)
- Firewise Communities: [www.firewise.org](http://www.firewise.org)

- Colorado State Forest Service: [www.colostate.edu/depts/CSFS](http://www.colostate.edu/depts/CSFS)
- Perry Park Metropolitan District: [www.perrypark.org](http://www.perrypark.org)

### Perry Park is nationally recognized as a Firewise Community



Perry Park is located in rapidly-growing Douglas County, Colorado. It is a bedroom

and retirement-oriented community situated between Denver and Colorado Springs. With over 600 existing homes, Perry Park has a potential buildout of 1400 structures. Construction began in the late 1960's. Its residents are predominantly younger families, middle-level management empty nesters and pre-retirees. Typically, they are highly educated and affluent.

Perry Park abuts the South Platte Ranger District of the Pike National Forest. Most of the homes are located on treed sites consisting of ponderosa pine, gambel oak, Rocky Mountain juniper or Douglas-fir. It is predominantly a second-growth forest that has re-grown into a fuel type typical of western forests. The community was evacuated during the Hayman Fire (138,000 acres) of June 2002.

In late 2000, the board of directors of the Perry Park Metropolitan District undertook the task of addressing the potential wildfire problem, and received a Colorado State Fire Assistance Grant of \$45,000 in 2001. This was leveraged into over \$161,000 in cash and in-kind contributions by the community toward becoming Firewise. The community received a second grant for 2002 of \$100,000. The matching In-kind reported to date will double this amount. In two years, the effort has exceeded over \$500,000 with over a three-to-one match with grant funds.

The Perry Park Firewise program has embraced a values-based approach. Early surveys told the board that wildlife and forest were as important as homes. Educational and informational efforts have targeted these values. The message "Saving the Forest=Saving the Wildlife=Protecting Property Values=Being Firewise" has increased participation. A second key component of the program is slash disposal that works for the community. Fuel treated in 2002 is triple the amount treated in 2001.

From the program's inception, partnerships have been critical to its success. Over 18 partners now participate, including the City of Denver. The Denver City Forester is accepting mulch generated through the slash disposal program, calling the effort "Trees Saving Trees." The mulch will be used to protect the drought-stressed urban forest.

To get the latest information about Perry Park Ranch, visit <http://www.perrypark.org>.

**Free public information brochures:**

Free brochures on home preparation for wildfire and emergency conditions are also available at the Phillip S Miller Library in Castle Rock.

- Emergency Preparedness Guide, published by Douglas County
- It Could Happen to You!, How to Protect Your Home!, USDA Forest Service
- Wildfire Are You Prepared, American Red Cross, Federal Emergency Management Agency and United States Fire Administration

## Appendix B

### Colorado State Forest Service

# Minimum Standards for Community Wildfire Protection Plans (CWPP)

#### 1. Participants

- The core planning team must include local government, local fire authority, local CSFS representative and representatives of relevant federal land management agencies.
- Planning activities that involve assessing community risks and values, identifying community protection priorities, or establishing fuels treatment project areas and methods MUST involve diverse representation from interested non-governmental stakeholders.

#### 2. Plan Components

- Community Wildfire Protection Plans must include the following components:
  - A definition of the community's wildland-urban interface (WUI), preferably outlined on a map with an accompanying narrative.
  - A discussion of the community's *preparedness* to respond to wildland fire.
  - A community risk analysis that considers, at a minimum, fuel hazards, risk of wildfire occurrence and community values to be protected – both in the immediate vicinity and in the surrounding zone where potential fire spread poses a realistic threat.
  - Identification of fuels treatment priorities, including locations on the grounds and preferred methods of treatment.
  - Recommendations regarding ways to reduce structural ignitability.
  - An implementation plan.

#### 3. Level of Specificity

- A CWPP may be developed for any level of "community," from a homeowner's association or mountain town to a county or metropolitan city.
- Information contained in the plan should be at a level of specificity appropriate to the size of the community being addressed. For example, data used to develop a community risk analysis or identify fuels treatment priorities for a small town would need to be at a finer scale than that used for a county.
- County level plans can be used as an umbrella for plans in smaller communities, but should not be considered a substitute. A county plan will not provide the detail needed for project level planning.

#### 4. Adapting Existing Plans and Combining Related Plans

- If a community has an existing plan that already meets the majority of the CWPP criteria, it is preferable to work with the community to adapt that plan to meet the remainder of the criteria. However, plan adaptations must be collaborative as described in (1) above and include stakeholder representation. This is particularly important if the adaptation involves establishing fuels treatment priorities.
- Communities are encouraged to combine CWPPs with related documents such as FEMA All-Hazard Mitigation Plans where appropriate.

\* Minimum standards are to be used in combination with the nation publication titled, "Preparing a Community Wildfire Protection Plan: A Guide for Wildland Urban Interface Communities." Maximum flexibility should be sought in meeting individual community needs.

November 18, 2004

## Appendix A

### Healthy Forest Restoration Act of 2003

To improve the capacity of the Secretary of Agriculture and the Secretary of the Interior to plan and conduct hazardous fuels reduction projects on National Forest System lands and Bureau of Land Management lands aimed at protecting communities, watersheds, and certain other at-risk lands from catastrophic wildfire, to enhance efforts to protect watersheds and address threats to forest and rangeland health, including catastrophic wildfire, across the landscape, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

#### **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

(a) SHORT TITLE- This Act may be cited as the 'Healthy Forests Restoration Act of 2003'.

(b) TABLE OF CONTENTS- The table of contents for this Act is as follows:

Sec. 1. Short title; table of contents.

Sec. 2. Purpose.

#### **TITLE I--HAZARDOUS FUELS REDUCTION ON FEDERAL LANDS**

Sec. 101. Definitions.

Sec. 102. Authorized hazardous fuels reduction projects.

Sec. 103. Prioritization for communities and watersheds.

Sec. 104. Environmental analysis.

Sec. 105. Special Forest Service administrative review process.

Sec. 106. Special requirements regarding judicial review of authorized hazardous fuels reduction projects.

Sec. 107. Injunctive relief for agency action to restore fire-adapted forest or rangeland ecosystems.

Sec. 108. Rules of construction.

#### **TITLE II--BIOMASS**

Sec. 201. Findings.

Sec. 202. Definitions.

Sec. 203. Grants to improve the commercial value of forest biomass for electric energy, useful heat, transportation fuels, and petroleum-based product substitutes.

Sec. 204. Reporting requirement.

#### **TITLE III--WATERSHED FORESTRY ASSISTANCE**

Sec. 301. Findings and purpose.

Sec. 302. Establishment of watershed forestry assistance program.

#### **TITLE IV--INSECT INFESTATIONS**

Sec. 401. Definitions, findings, and purpose.

Sec. 402. Accelerated information gathering regarding bark beetles, including Southern pine beetles, hemlock woolly adelgid, emerald ash borers, red oak borers, and white oak borers.

Sec. 403. Applied silvicultural assessments.

Sec. 404. Relation to other laws.

Sec. 405. Authorization of appropriations.

## **TITLE V--HEALTHY FORESTS RESERVE PROGRAM**

Sec. 501. Establishment of healthy forests reserve program.

Sec. 502. Eligibility and enrollment of lands in program.

Sec. 503. Conservation plans.

Sec. 504. Financial assistance.

Sec. 505. Technical assistance.

Sec. 506. Safe harbor.

Sec. 507. Authorization of appropriations.

## **TITLE VI--MISCELLANEOUS PROVISIONS**

Sec. 601. Forest stands inventory and monitoring program to improve detection of and response to environmental threats.

### **SEC. 2. PURPOSE.**

The purpose of this Act is--

(1) to reduce the risks of damage to communities, municipal water supplies, and some at-risk Federal lands from catastrophic wildfires;

(2) to authorize grant programs to improve the commercial value of forest biomass for electric energy, useful heat, transportation fuels, petroleum-based product substitutes and other commercial purposes;

(3) to enhance efforts to protect watersheds and address threats to forest and rangeland health, including catastrophic wildfire, across the landscape;

(4) to promote systematic information gathering to address the impact of insect infestations on forest and rangeland health;

(5) to improve the capacity to detect insect and disease infestations at an early stage, particularly with respect to hardwood forests; and

(6) to protect, restore, and enhance degraded forest ecosystem types in order to promote the recovery of threatened and endangered species as well as improve biological diversity and enhance carbon sequestration.

## **TITLE I--HAZARDOUS FUELS REDUCTION ON FEDERAL LANDS**

### **SEC. 101. DEFINITIONS.**

In this title:

(1) **AUTHORIZED HAZARDOUS FUELS REDUCTION PROJECT**- The term `authorized hazardous fuels reduction project' means a hazardous fuels reduction project described in subsection (a) of section 102, subject to the remainder of such section, that is planned and conducted using the process authorized by section 104.

(2) **CONDITION CLASS 2**- The term `condition class 2', with respect to an area of Federal lands, refers to the condition class description developed by the Forest Service Rocky Mountain Research Station in the general technical report

entitled 'Development of Coarse-Scale Spatial Data for Wildland Fire and Fuel Management' (RMRS-87), dated April 2000, under which--

(A) fire regimes on the lands have been moderately altered from their historical range;

(B) there exists a moderate risk of losing key ecosystem components from fire;

(C) fire frequencies have departed (either increased or decreased) from historical frequencies by one or more return interval, which results in moderate changes to fire size, frequency, intensity, severity, or landscape patterns; and

(D) vegetation attributes have been moderately altered from their historical range.

(3) **CONDITION CLASS 3-** The term 'condition class 3', with respect to an area of Federal lands, refers to the condition class description developed by the Rocky Mountain Research Station in the general technical report referred to in paragraph (2), under which--

(A) fire regimes on the lands have been significantly altered from their historical range;

(B) there exists a high risk of losing key ecosystem components from fire;

(C) fire frequencies have departed from historical frequencies by multiple return intervals, which results in dramatic changes to fire size, frequency, intensity, severity, or landscape patterns; and

(D) vegetation attributes have been significantly altered from their historical range.

(4) **DAY-** The term 'day' means a calendar day, except that, if a deadline imposed by this title would expire on a nonbusiness day, the deadline will be extended to the end of the next business day.

(5) **DECISION DOCUMENT-** The term 'decision document' means a decision notice or a record of decision, as those terms are used in applicable regulations of the Council on Environmental Quality and the Forest Service Handbook.

(6) **FEDERAL LANDS-** The term 'Federal lands' means--

(A) National Forest System lands; and

(B) public lands administered by the Secretary of the Interior, acting through the Bureau of Land Management.

(7) **HAZARDOUS FUELS REDUCTION PROJECT-** The term 'hazardous fuels reduction project' refers to the measures and methods described in the definition of 'appropriate tools' contained in the glossary of the Implementation Plan.

(8) **IMPLEMENTATION PLAN-** The term 'Implementation Plan' means the Implementation Plan for the 10-year Comprehensive Strategy for a Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment, dated May 2002, which was developed pursuant to the conference report for the Department of the Interior and Related Agencies Appropriations Act, 2001 (House Report 106-646).

(9) **INTERFACE COMMUNITY AND INTERMIX COMMUNITY-** The terms 'interface community' and 'intermix community' have the meanings given those terms on page 753 of volume 66 of the Federal Register, as published on January 4, 2001.

(10) **MUNICIPAL WATER SUPPLY SYSTEM-** The term 'municipal water supply system' means the reservoirs, canals, ditches, flumes, laterals, pipes, pipelines, or other surface facilities and systems constructed or installed for the impoundment, storage, transportation, or distribution of drinking water for a community.

(11) **SECRETARY CONCERNED-** The term 'Secretary concerned' means the Secretary of Agriculture with respect to National Forest System lands and the Secretary of the Interior with respect to public lands administered by the Bureau

of Land Management. Any reference in this title to the 'Secretary concerned', the 'Secretary of Agriculture', or the 'Secretary of the Interior' includes the designee of the Secretary concerned.

(12) THREATENED AND ENDANGERED SPECIES HABITAT- The term 'threatened and endangered species habitat' means Federal lands identified in the listing decision or critical habitat designation as habitat for a threatened species or an endangered species under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.).

## **SEC. 102. AUTHORIZED HAZARDOUS FUELS REDUCTION PROJECTS.**

(a) AUTHORIZED PROJECTS- Subject to the remainder of this section, the Secretary concerned may utilize the process authorized by section 104 to plan and conduct hazardous fuels reduction projects on any of the following Federal lands:

- (1) Federal lands located in an interface community or intermix community.
- (2) Federal lands located in such proximity to an interface community or intermix community that there is a significant risk that the spread of a fire disturbance event from those lands would threaten human life and property in the interface community or intermix community.
- (3) Condition class 3 or condition class 2 Federal lands located in such proximity to a municipal water supply system, or to a perennial stream feeding a municipal water supply system, that a significant risk exists that a fire disturbance event would have substantial adverse effects on the water quality of the municipal water supply, including the risk to water quality posed by erosion following such a fire disturbance event.
- (4) Condition class 3 or condition class 2 Federal lands identified by the Secretary concerned as an area where windthrow or blowdown, or the existence or threat of disease or insect infestation, pose a significant threat to forest or rangeland health or adjacent private lands.
- (5) Federal lands not covered by paragraph (1), (2), (3), or (4) that contain threatened and endangered species habitat, but only if--
  - (A) natural fire regimes on such lands are identified as being important for, or wildfire is identified as a threat to, an endangered species, a threatened species, or its habitat in a species recovery plan prepared under section 4 of the Endangered Species Act of 1973 (16 U.S.C. 1533) or in a decision document under such section determining a species to be an endangered species or a threatened species or designating critical habitat;
  - (B) the project will provide enhanced protection from catastrophic wildfire for the species or its habitat; and
  - (C) the Secretary complies with any applicable guidelines specified in the species recovery plan prepared under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.).

(b) RELATION TO AGENCY PLANS- An authorized hazardous fuels reduction project shall be planned and conducted in a manner consistent with the land and resource management plan or land use plan applicable to the Federal lands covered by the project.

(c) ACREAGE LIMITATION- Not more than a total of 20,000,000 acres of Federal lands may be included in authorized hazardous fuels reduction projects.

(d) EXCLUSION OF CERTAIN FEDERAL LANDS- The Secretary concerned may not plan or conduct an authorized hazardous fuels reduction project that would occur on any of the following Federal lands:

- (1) A component of the National Wilderness Preservation System.
- (2) Federal lands where, by Act of Congress or Presidential proclamation, the removal of vegetation is prohibited or restricted.

(3) Wilderness Study Areas.

### **SEC. 103. PRIORITIZATION FOR COMMUNITIES AND WATERSHEDS.**

As provided for in the Implementation Plan, the Secretary concerned shall give priority to authorized hazardous fuel reduction projects that provide for the protection of communities and watersheds.

### **SEC. 104. ENVIRONMENTAL ANALYSIS.**

(a) IN GENERAL- Except as otherwise provided in this title, the Secretary concerned shall plan and conduct authorized hazardous fuels reduction projects in accordance with the National Environmental Policy Act of 1969 (42 U.S.C. 4331 et seq.) and any other applicable laws. The Secretary concerned shall prepare an environmental assessment or an environmental impact statement for each authorized hazardous fuels reduction project.

(b) DISCRETIONARY AUTHORITY TO ELIMINATE ALTERNATIVES- In the case of an authorized hazardous fuels reduction project, the Secretary concerned is not required to study, develop, or describe any alternative to the proposed agency action in the environmental assessment or environmental impact statement prepared for the proposed agency action pursuant to section 102(2) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)).

(c) PUBLIC NOTICE AND MEETING-

(1) PUBLIC NOTICE- The Secretary concerned shall provide notice of each authorized hazardous fuels reduction project in accordance with applicable regulations and administrative guidelines.

(2) PUBLIC MEETING- During the planning stage of each authorized hazardous fuels reduction project, the Secretary concerned shall conduct a public meeting at an appropriate location proximate to the administrative unit of the Federal lands in which the authorized hazardous fuels reduction project will be conducted. The Secretary concerned shall provide advance notice of the date and time of the meeting.

(d) PUBLIC COLLABORATION- In order to encourage meaningful public participation in the identification and development of authorized hazardous fuels reduction projects, the Secretary concerned shall facilitate collaboration among governments and interested persons during the formulation of each authorized fuels reduction project in a manner consistent with the Implementation Plan.

(e) ENVIRONMENTAL ANALYSIS AND PUBLIC COMMENT- In accordance with section 102(2) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)) and the applicable regulations and administrative guidelines in effect on the date of the enactment of this Act, the Secretary concerned shall provide an opportunity for public input during the preparation of any environmental assessment or environmental impact statement for proposed agency action for an authorized hazardous fuels reduction project.

(f) DECISION DOCUMENT- The Secretary concerned shall sign a decision document for each authorized hazardous fuels reduction project and provide notice of the decision document.

(g) PROJECT MONITORING- As provided for in the Implementation Plan, the Secretary concerned shall monitor the implementation of authorized hazardous fuels reduction projects.

### **SEC. 105. SPECIAL FOREST SERVICE ADMINISTRATIVE REVIEW PROCESS.**

(a) DEVELOPMENT OF ADMINISTRATIVE PROCESS- Not later than 90 days after the date of the enactment of this Act, the Secretary of Agriculture shall issue final regulations

to establish an administrative process that will serve as the sole means by which a person described in subsection (b) can seek administrative redress regarding an authorized hazardous fuels reduction project.

(b) **ELIGIBLE PERSONS-** To be eligible to participate in the administrative process developed pursuant to subsection (a) regarding an authorized hazardous fuels reduction project, a person must have submitted specific and substantive written comments during the preparation stage of that authorized hazardous fuels reduction project. The Secretary of Agriculture shall ensure that, during the preparation stage of each authorized hazardous fuels reduction project, notice and comment is provided in a manner sufficient to permit interested persons a reasonable opportunity to satisfy the requirements of this subsection.

(c) **RELATION TO APPEALS REFORM ACT-** Section 322 of the Department of the Interior and Related Agencies Appropriations Act, 1993 (Public Law 102-381; 16 U.S.C. 1612 note), does not apply to an authorized hazardous fuels reduction project.

## **SEC. 106. SPECIAL REQUIREMENTS REGARDING JUDICIAL REVIEW OF AUTHORIZED HAZARDOUS FUELS REDUCTION PROJECTS.**

### **(a) FILING DEADLINE-**

(1) **TIME LIMIT ESTABLISHED FOR FILING-** Notwithstanding any other provision of law, to be timely, an action in a court of the United States challenging an authorized hazardous fuels reduction project shall be filed in the court before the end of the 15-day period beginning on the date on which the Secretary concerned publishes, in the local paper of record, notice of the final agency action regarding the authorized hazardous fuels reduction project. This time limitation supersedes any notice of intent to file suit requirement or filing deadline otherwise applicable to a challenge under any provision of law.

(2) **WAIVER PROHIBITED-** The Secretary concerned may not agree to, and a district court may not grant, a waiver of the requirements of this subsection.

### **(b) DURATION OF PRELIMINARY INJUNCTION-**

(1) **DURATION; EXTENSION-** Any preliminary injunction granted regarding an authorized hazardous fuels reduction project shall be limited to 45 days. A court may renew the preliminary injunction, taking into consideration the goal expressed in subsection (c) for the expeditious resolution of cases regarding authorized hazardous fuels reduction projects.

(2) **SUBMISSION OF INFORMATION-** As part of a request to renew a preliminary injunction granted regarding an authorized hazardous fuels reduction project, the parties shall present the court with an update on any changes that may have occurred during the period of the injunction to the forest or rangeland conditions that the authorized hazardous fuels reduction project is intended to address.

(3) **CONGRESSIONAL NOTIFICATION-** In the event of the renewal of a preliminary injunction regarding an authorized hazardous fuels reduction project, the Secretary concerned shall submit notice of the renewal to the Committee on Resources and the Committee on Agriculture of the House of Representatives and the Committee on Energy and Natural Resources and the Committee on Agriculture, Nutrition, and Forestry of the Senate.

(c) **EXPEDITIOUS COMPLETION OF JUDICIAL REVIEW-** Congress intends and encourages any court in which is filed a lawsuit or appeal of a lawsuit concerning an authorized hazardous fuels reduction project to expedite, to the maximum extent practicable, the proceedings in such lawsuit or appeal with the goal of rendering a final determination on jurisdiction, and if jurisdiction exists, a final determination on the merits, within 100 days from the date the complaint or appeal is filed.

## **SEC. 107. INJUNCTIVE RELIEF FOR AGENCY ACTION TO RESTORE FIRE-ADAPTED FOREST OR RANGELAND ECOSYSTEMS.**

(a) **COVERED PROJECTS-** This section applies with respect to a motion for an injunction in an action brought against the Secretary concerned under section 703 of title 5, United States Code, that involves an agency action on Federal lands, including an authorized hazardous fuels reduction project, that is necessary to restore a fire-adapted forest or rangeland system.

(b) **INJUNCTIVE RELIEF-** When considering a motion described in subsection (a), in determining whether there would be harm to the defendant from the injunction and whether the injunction would be in the public interest, the court reviewing the agency action shall--

(1) balance the impact to the ecosystem of the short-term and long-term effects of undertaking the agency action against the short-term and long-term effects of not undertaking the agency action; and

(2) give weight to a finding by the Secretary concerned in the administrative record of the agency action concerning the short-term and long-term effects of undertaking the agency action and of not undertaking the agency action, unless the court finds that the finding was arbitrary and capricious.

## **SEC. 108. RULES OF CONSTRUCTION.**

(a) **RELATION TO OTHER AUTHORITY-** Nothing in this title shall be construed to affect, or otherwise bias, the use by the Secretary concerned of other statutory or administrative authorities to plan or conduct a hazardous fuels reduction project on Federal lands, including Federal lands identified in section 102(e), that is not planned or conducted using the process authorized by section 104.

(b) **RELATION TO LEGAL ACTION-** Nothing in this title shall be construed to prejudice or otherwise affect the consideration or disposition of any legal action concerning the Roadless Area Conservation Rule, part 294 of title 36, Code of Federal Regulations, as amended in the final rule and record of decision published in the Federal Register on January 12, 2001 (66 Fed. Reg. 3244).

## **TITLE II--BIOMASS**

### **SEC. 201. FINDINGS.**

Congress finds the following:

(1) Thousands of communities in the United States, many located near Federal lands, are at risk to wildfire. Approximately 190,000,000 acres of land managed by the Secretary of Agriculture and the Secretary of the Interior are at risk of catastrophic fire in the near future. The accumulation of heavy forest and rangeland fuel loads continues to increase as a result of disease, insect infestations, and drought, further raising the risk of fire each year.

(2) In addition, more than 70,000,000 acres across all land ownerships are at risk to higher than normal mortality over the next 15 years from insect infestation and disease. High levels of tree mortality from insects and disease result in increased fire risk, loss of old growth, degraded watershed conditions, and changes in species diversity and productivity, as well as diminished fish and wildlife habitat and decreased timber values.

(3) Preventive treatments such as removing fuel loading, ladder fuels, and hazard trees, planting proper species mix and restoring and protecting early successional habitat, and other specific restoration treatments designed to reduce the susceptibility of forest and rangeland to insect outbreaks, disease, and catastrophic fire present the greatest opportunity for long-term forest and

rangeland health by creating a mosaic of species-mix and age distribution. Such prevention treatments are widely acknowledged to be more successful and cost effective than suppression treatments in the case of insects, disease, and fire.

(4) The by-products of preventive treatment (wood, brush, thinnings, chips, slash, and other hazardous fuels) removed from forest and rangelands represent an abundant supply of biomass for biomass-to-energy facilities and raw material for business. There are currently few markets for the extraordinary volumes of by-products being generated as a result of the necessary large-scale preventive treatment activities.

(5) The United States should--

(A) promote economic and entrepreneurial opportunities in using by-products removed through preventive treatment activities related to hazardous fuels reduction, disease, and insect infestation; and

(B) develop and expand markets for traditionally underused wood and biomass as an outlet for by-products of preventive treatment activities.

## SEC. 202. DEFINITIONS.

In this title:

(1) BIOMASS- The term `biomass' means trees and woody plants, including limbs, tops, needles, and other woody parts, and by-products of preventive treatment, such as wood, brush, thinnings, chips, and slash, that are removed--

(A) to reduce hazardous fuels; or

(B) to reduce the risk of or to contain disease or insect infestation.

(2) INDIAN TRIBE- The term `Indian tribe' has the meaning given the term in section 4(e) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b(e)).

(3) PERSON- The term `person' includes--

(A) an individual;

(B) a community (as determined by the Secretary concerned);

(C) an Indian tribe;

(D) a small business, micro-business, or a corporation that is incorporated in the United States; and

(E) a nonprofit organization.

(4) PREFERRED COMMUNITY- The term `preferred community' means--

(A) any town, township, municipality, or other similar unit of local government (as determined by the Secretary concerned) that--

(i) has a population of not more than 50,000 individuals; and

(ii) the Secretary concerned, in the sole discretion of the Secretary concerned, determines contains or is located near land, the condition of which is at significant risk of catastrophic wildfire, disease, or insect infestation or which suffers from disease or insect infestation; or

(B) any county that--

(i) is not contained within a metropolitan statistical area; and

(ii) the Secretary concerned, in the sole discretion of the Secretary concerned, determines contains or is located near land, the condition of which is at significant risk of catastrophic wildfire, disease, or insect infestation or which suffers from disease or insect infestation.

(5) SECRETARY CONCERNED- The term `Secretary concerned' means--

(A) the Secretary of Agriculture with respect to National Forest System lands; and

(B) the Secretary of the Interior with respect to Federal lands under the jurisdiction of the Secretary of the Interior and Indian lands.

**SEC. 203. GRANTS TO IMPROVE THE COMMERCIAL VALUE OF FOREST BIOMASS FOR ELECTRIC ENERGY, USEFUL HEAT, TRANSPORTATION FUELS, AND PETROLEUM-BASED PRODUCT SUBSTITUTES.**

- (a) **BIOMASS COMMERCIAL USE GRANT PROGRAM-**
- (1) **IN GENERAL-** The Secretary concerned may make grants to any person that owns or operates a facility that uses biomass as a raw material to produce electric energy, sensible heat, transportation fuels, or substitutes for petroleum-based products to offset the costs incurred to purchase biomass for use by such facility.
- (2) **GRANT AMOUNTS-** A grant under this subsection may not exceed \$20 per green ton of biomass delivered.
- (3) **MONITORING OF GRANT RECIPIENT ACTIVITIES-** As a condition of a grant under this subsection, the grant recipient shall keep such records as the Secretary concerned may require to fully and correctly disclose the use of the grant funds and all transactions involved in the purchase of biomass. Upon notice by a representative of the Secretary concerned, the grant recipient shall afford the representative reasonable access to the facility that purchases or uses biomass and an opportunity to examine the inventory and records of the facility.
- (b) **VALUE ADDED GRANT PROGRAM-**
- (1) **IN GENERAL-** The Secretary concerned may make grants to persons to offset the cost of projects to add value to biomass. In making such grants, the Secretary concerned shall give preference to persons in preferred communities.
- (2) **SELECTION-** The Secretary concerned shall select a grant recipient under paragraph (1) after giving consideration to the anticipated public benefits of the project, opportunities for the creation or expansion of small businesses and micro-businesses, and the potential for new job creation.
- (3) **GRANT AMOUNT-** A grant under this subsection may not exceed \$100,000.
- (c) **RELATION TO OTHER ENDANGERED SPECIES AND RIPARIAN PROTECTIONS-** The Secretary concerned shall comply with applicable endangered species and riparian protections in making grants under this section. Projects funded using grant proceeds shall be required to comply with such protections.
- (d) **AUTHORIZATION OF APPROPRIATIONS-** There is authorized to be appropriated \$25,000,000 for each of the fiscal years 2004 through 2008 to carry out this section.

**SEC. 204. REPORTING REQUIREMENT.**

- (a) **REPORT REQUIRED-** Not later than October 1, 2010, the Secretary of Agriculture, in consultation with the Secretary of the Interior, shall submit to the Committee on Resources and the Committee on Agriculture of the House of Representatives and the Committee on Energy and Natural Resources and the Committee on Agriculture, Nutrition, and Forestry of the Senate a report describing the results of the grant programs authorized by section 203.
- (b) **CONTENTS OF REPORT-** The report shall include the following:
- (1) An identification of the size, type, and the use of biomass by persons that receive grants under section 203.
- (2) The distance between the land from which the biomass was removed and the facility that used the biomass.
- (3) The economic impacts, particularly new job creation, resulting from the grants to and operation of the eligible operations.

**TITLE III--WATERSHED FORESTRY ASSISTANCE**

**SEC. 301. FINDINGS AND PURPOSE.**

- (a) FINDINGS- Congress finds the following:
- (1) There has been a dramatic shift in public attitudes and perceptions about forest management, particularly in the understanding and practice of sustainable forest management.
  - (2) It is commonly recognized that the proper stewardship of forest lands is essential to sustaining and restoring the health of watersheds.
  - (3) Forests can provide essential ecological services in filtering pollutants, buffering important rivers and estuaries, and minimizing flooding, which makes its restoration worthy of special focus.
  - (4) Strengthened education, technical assistance, and financial assistance to nonindustrial private forest landowners and communities, relating to the protection of watershed health, is needed to realize the expectations of the general public.
- (b) PURPOSE- The purpose of this title is to--
- (1) improve landowner and public understanding of the connection between forest management and watershed health;
  - (2) encourage landowners to maintain tree cover on their property and to utilize tree plantings and vegetative treatments as creative solutions to watershed problems associated with varying land uses;
  - (3) enhance and complement forest management and buffer utilization for watersheds, with an emphasis on urban watersheds;
  - (4) establish new partnerships and collaborative watershed approaches to forest management, stewardship, and conservation;
  - (5) provide technical and financial assistance to States to deliver a coordinated program that enhances State forestry best-management practices programs, as well as conserves and improves forested lands and potentially forested lands through technical, financial, and educational assistance to qualifying individuals and entities; and
  - (6) maximize the proper management and conservation of wetland forests and to assist in their restoration as necessary.

## **SEC. 302. ESTABLISHMENT OF WATERSHED FORESTRY ASSISTANCE PROGRAM.**

The Cooperative Forestry Assistance Act of 1978 is amended by inserting after section 5 the following new section:

### **SEC. 6. WATERSHED FORESTRY ASSISTANCE.**

(a) GENERAL AUTHORITY AND PURPOSE- The Secretary, acting through the Forest Service, may provide technical, financial, and related assistance to State foresters and equivalent State officials for the purpose of expanding State forest stewardship capacities and activities through State forestry best-management practices and other means at the State level to address watershed issues on non-Federal forested lands and potentially forested lands.

(b) TECHNICAL ASSISTANCE TO PROTECT WATER QUALITY-

(1) IN GENERAL- The Secretary, in cooperation with State foresters or equivalent State officials, shall engage interested members of the public, including nonprofit organizations and local watershed councils, to develop a program of technical assistance to protect water quality, as described in paragraph (2).

(2) PURPOSE OF PROGRAM- The program under this subsection shall be designed--

(A) to build and strengthen watershed partnerships that focus on forested landscapes at the local, State, and regional levels;

`(B) to provide State forestry best-management practices and water quality technical assistance directly to nonindustrial private forest landowners;

`(C) to provide technical guidance to land managers and policy makers for water quality protection through forest management;

`(D) to complement State and local efforts to protect water quality and provide enhanced opportunities for consultation and cooperation among Federal and State agencies charged with responsibility for water and watershed management; and

`(E) to provide enhanced forest resource data and support for improved implementation and monitoring of State forestry best-management practices.

`(3) IMPLEMENTATION- The program of technical assistance shall be implemented by State foresters or equivalent State officials.

`(c) WATERSHED FORESTRY COST-SHARE PROGRAM-

`(1) IN GENERAL- The Secretary shall establish a watershed forestry cost-share program to be administered by the Forest Service and implemented by State foresters or equivalent State officials. Funds or other support provided under such program shall be made available for State forestry best-management practices programs and watershed forestry projects.

`(2) WATERSHED FORESTRY PROJECTS- The State forester or equivalent State official of a State, in coordination with the State Forest Stewardship Coordinating Committee established under section 19(b) for that State, shall annually make awards to communities, nonprofit groups, and nonindustrial private forest landowners under the program for watershed forestry projects described in paragraph (3).

`(3) PROJECT ELEMENTS AND OBJECTIVES- A watershed forestry project shall accomplish critical forest stewardship, watershed protection, and restoration needs within a State by demonstrating the value of trees and forests to watershed health and condition through--

`(A) the use of trees as solutions to water quality problems in urban and rural areas;

`(B) community-based planning, involvement, and action through State, local and nonprofit partnerships;

`(C) application of and dissemination of monitoring information on forestry best-management practices relating to watershed forestry;

`(D) watershed-scale forest management activities and conservation planning; and

`(E) the restoration of wetland (as defined by the States) and stream-side forests and the establishment of riparian vegetative buffers.

`(4) COST-SHARING- Funds provided under this subsection for a watershed forestry project may not exceed 75 percent of the cost of the project. Other Federal funding sources may be used to cover a portion of the remaining project costs, but the total Federal share of the costs may not exceed 90 percent. The non-Federal share of the costs of a project may be in the form of cash, services, or other in-kind contributions.

`(5) PRIORITIZATION- The State Forest Stewardship Coordinating Committee for a State shall prioritize watersheds in that State to target watershed forestry projects funded under this subsection.

`(6) WATERSHED FORESTER- Financial and technical assistance shall be made available to the State Forester or equivalent State official to create a State best-management practice forester to lead statewide programs and coordinate small watershed-level projects.

`(d) DISTRIBUTION-

`(1) IN GENERAL- The Secretary shall devote at least 75 percent of the funds appropriated for a fiscal year pursuant to the authorization of appropriations in

subsection (e) to the cost-share program under subsection (c) and the remainder to the task of delivering technical assistance, education, and planning on the ground through the State Forester or equivalent State official.

(2) SPECIAL CONSIDERATIONS- Distribution of these funds by the Secretary among the States shall be made only after giving appropriate consideration to--

(A) the acres of nonindustrial private forestland and highly erodible land in each State;

(B) each State's efforts to conserve forests;

(C) the acres of forests in each State that have been lost or degraded or where forests can play a role in restoring watersheds; and

(D) the number of nonindustrial private forest landowners in each State.

(e) AUTHORIZATION OF APPROPRIATIONS- There is authorized to be appropriated to carry out this section \$15,000,000 for each of the fiscal years 2004 through 2008.

## TITLE IV--INSECT INFESTATIONS

### SEC. 401. DEFINITIONS, FINDINGS, AND PURPOSE.

(a) DEFINITIONS- In this title:

(1) APPLIED SILVICULTURAL ASSESSMENT- The term 'applied silvicultural assessment' means any vegetative or other treatment, for the purposes described in section 402, including timber harvest, thinning, prescribed burning, and pruning, as single treatment or any combination of these treatments.

(2) FEDERAL LANDS- The term 'Federal lands' means--

(A) National Forest System lands; and

(B) public lands administered by the Secretary of the Interior, acting through the Bureau of Land Management.

(3) SECRETARY CONCERNED- The term 'Secretary concerned' means--

(A) the Secretary of Agriculture, acting through the Forest Service, with respect to National Forest System lands; and

(B) the Secretary of the Interior, acting through appropriate offices of the United States Geological Survey, with respect to federally owned land administered by the Secretary of the Interior.

(4) 1890 INSTITUTIONS- The term '1890 Institution' means a college or university eligible to receive funds under the Act of August 30, 1890 (7 U.S.C. 321 et seq.), including Tuskegee University.

(b) FINDINGS- Congress finds the following:

(1) High levels of tree mortality due to insect infestation result in--

(A) increased fire risk;

(B) loss of old growth;

(C) loss of threatened and endangered species;

(D) loss of species diversity;

(E) degraded watershed conditions;

(F) increased potential for damage from other agents of disturbance, including exotic, invasive species; and

(G) decreased timber values.

(2) Bark beetles destroy hundreds of thousands of acres of trees each year. In the West, over 21,000,000 acres are at high risk of bark beetle infestation and in the South over 57,000,000 acres are at risk across all land ownerships. Severe drought conditions in many areas of the South and West will increase risk of bark beetle infestations.

(3) The hemlock woolly adelgid is destroying streamside forests throughout the mid-Atlantic and Appalachian region, threatening water quality and sensitive aquatic species, and posing a potential threat to valuable commercial timber lands in Northern New England.

(4) The emerald ash borer is a nonnative, invasive pest that has quickly become a major threat to hardwood forests as a emerald ash borer infestation is almost always fatal to the affected trees. This pest threatens to destroy over 692,000,000 ash trees in forests in Michigan and Ohio alone, and between five and ten percent of urban street trees in the Upper Midwest.

(5) Epidemic populations of Southern pine beetle are ravaging forests in Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia. In 2001, Florida and Kentucky experienced 146 percent and 111 percent increases, respectively, in beetle populations.

(6) These epidemic outbreaks of Southern pine beetle have forced private landowners to harvest dead and dying trees, in both rural areas and increasingly urbanized settings.

(7) According to the Forest Service, recent outbreaks of the red oak borer in Arkansas have been unprecedented, with almost 800,000 acres infested at population levels never seen before.

(8) Much of the damage from the red oak borer has taken place in National forests, and the Federal response has been inadequate to protect forest ecosystems and other ecological and economic resources.

(9) Previous silvicultural assessments, while useful and informative, have been limited in scale and scope of application, and there has not been sufficient resources available to adequately test a full array of individual and combined applied silvicultural assessments.

(10) Only through the rigorous funding, development, and assessment of potential applied silvicultural assessments over specific time frames across an array of environmental and climatic conditions can the most innovative and cost effective management applications be determined that will help reduce the susceptibility of forest ecosystems to attack by forest pests.

(11) Funding and implementation of an initiative to combat forest pest infestations should not come at the expense of supporting other programs and initiatives of the Secretary concerned.

(c) PURPOSE- It is the purpose of this title--

(1) to require the Secretary concerned to develop an accelerated basic and applied assessment program to combat infestations by bark beetles, including Southern pine beetles, hemlock woolly adelgids, emerald ash borers, red oak borers, and white oak borers;

(2) to enlist the assistance of universities and forestry schools, including Land Grant Colleges and Universities and 1890 Institutions, to carry out the program; and

(3) to carry out applied silvicultural assessments.

**SEC. 402. ACCELERATED INFORMATION GATHERING REGARDING BARK BEETLES, INCLUDING SOUTHERN PINE BEETLES, HEMLOCK WOOLLY ADELGIDS, EMERALD ASH BORERS, RED OAK BORERS, AND WHITE OAK BORERS.**

(a) INFORMATION GATHERING- The Secretary concerned shall establish, acting through the Forest Service and United States Geological Survey, as appropriate, an accelerated program--

(1) to plan, conduct, and promote comprehensive and systematic information gathering on bark beetles, including Southern pine beetles, hemlock woolly adelgids, emerald ash borers, red oak borers, and white oak borers, including an evaluation of--

(A) infestation prevention and control methods;

(B) effects of infestations on forest ecosystems;

(C) restoration of the forest ecosystem efforts;

(D) utilization options regarding infested trees; and  
 (E) models to predict the occurrence, distribution, and impact of outbreaks of bark beetles, including Southern pine beetles, hemlock woolly adelgids, emerald ash borers, red oak borers, and white oak borers;

(2) to assist land managers in the development of treatments and strategies to improve forest health and reduce the susceptibility of forest ecosystems to severe infestations of bark beetles, including Southern pine beetles, hemlock woolly adelgids, emerald ash borers, red oak borers, and white oak borers on Federal lands and State and private lands; and

(3) to disseminate the results of such information gathering, treatments, and strategies.

(b) COOPERATION AND ASSISTANCE- The Secretary concerned shall establish and carry out the program in cooperation with scientists from universities and forestry schools, State agencies, and private and industrial land owners. The Secretary concerned shall designate universities and forestry schools, including Land Grant Colleges and Universities and 1890 Institutions, to assist in carrying out the program.

### **SEC. 403. APPLIED SILVICULTURAL ASSESSMENTS.**

(a) ASSESSMENT EFFORTS- For information gathering purposes, the Secretary concerned may conduct applied silvicultural assessments on Federal lands that the Secretary concerned determines, in the discretion of the Secretary concerned, is at risk of infestation by, or is infested with, bark beetles, including Southern pine beetles, hemlock woolly adelgids, emerald ash borers, red oak borers, and white oak borers. Any applied silvicultural assessments carried out under this section shall be conducted on not more than 1,000 acres per assessment.

(b) LIMITATIONS-

(1) EXCLUSION OF CERTAIN AREAS- Subsection (a) does not apply to--

(A) a component of the National Wilderness Preservation System;

(B) Federal lands where, by Act of Congress or Presidential proclamation, the removal of vegetation is restricted or prohibited; or

(C) congressionally designated wilderness study areas.

(2) CERTAIN TREATMENT PROHIBITED- Subsection (a) does not authorize the application of insecticides in municipal watersheds and associated riparian areas.

(3) ACREAGE LIMITATION- Applied silvicultural assessments may be implemented on not more than 250,000 acres using the authorities provided by this title.

(4) PEER REVIEW- Each applied silvicultural assessment under this title, prior to being carried out, shall be peer reviewed by scientific experts selected by the Secretary concerned, which shall include non-Federal experts. The Secretary concerned may use existing peer review processes to the extent they comply with the preceding sentence.

(c) PUBLIC NOTICE AND COMMENT-

(1) PUBLIC NOTICE- The Secretary concerned shall provide notice of each applied silvicultural assessment proposed to be carried out under this section in accordance with applicable regulations and administrative guidelines.

(2) PUBLIC COMMENT- During the planning stage of each applied silvicultural assessment proposed to be carried out under this section, the Secretary concerned shall provide an opportunity for public input.

(d) CATEGORICAL EXCLUSION- Applied silvicultural assessments carried out under this section are deemed to be categorically excluded from further analysis under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.). The Secretary concerned need not make any findings as to whether the project, either individually or cumulatively, has a significant effect on the environment.

**SEC. 404. RELATION TO OTHER LAWS.**

The authorities provided to the Secretary concerned by this title are supplemental to their respective authorities provided in any other law.

**SEC. 405. AUTHORIZATION OF APPROPRIATIONS.**

There is authorized to be appropriated for fiscal years 2004 through 2008 such sums as may be necessary to carry out this title.

**TITLE V--HEALTHY FORESTS RESERVE PROGRAM****SEC. 501. ESTABLISHMENT OF HEALTHY FORESTS RESERVE PROGRAM.**

(a) ESTABLISHMENT- The Secretary of Agriculture shall establish the healthy forests reserve program as a program within the Forest Service for the purpose of protecting, restoring, and enhancing degraded forest ecosystems to promote the recovery of threatened and endangered species as well as improve biodiversity and enhance carbon sequestration.

(b) COOPERATION- The Secretary of Agriculture shall carry out the healthy forests reserve program in cooperation with the Secretary of the Interior, acting through the United States Fish and Wildlife Service.

**SEC. 502. ELIGIBILITY AND ENROLLMENT OF LANDS IN PROGRAM.**

(a) ELIGIBLE LANDS- The Secretary of Agriculture, in consultation with the Secretary of the Interior, shall designate rare forest ecosystems to be eligible for the healthy forests reserve program. The following lands are eligible for enrollment in the healthy forests reserve program:

(1) Private lands whose enrollment will protect, restore, enhance, or otherwise measurably increase the likelihood of recovery of an endangered species or threatened species in the wild.

(2) Private lands whose enrollment will protect, restore, enhance, or otherwise measurably increase the likelihood of the recovery of an animal or plant species before the species reaches threatened or endangered status, such as candidate, State-listed species, rare, peripheral, and special concern species.

(b) OTHER CONSIDERATIONS- In enrolling lands that satisfy the criteria in paragraph (1) or (2) of subsection (a), the Secretary of Agriculture shall give additional consideration to those lands whose enrollment will also improve biological diversity and increase carbon sequestration.

(c) ENROLLMENT BY WILLING OWNERS- The Secretary of Agriculture shall enroll lands in the healthy forests reserve program only with the consent of the owner of the lands.

(d) MAXIMUM ENROLLMENT- The total number of acres enrolled in the healthy forests reserve program shall not exceed 1,000,000 acres.

(e) METHODS OF ENROLLMENT- Lands may be enrolled in the healthy forests reserve program pursuant to a 10-year cost-share agreement, a 30-year easement, or a permanent easement with buyback option. The extent to which each enrollment method is used shall be based on the approximate proportion of owner interest expressed in that method in comparison to the other methods.

(f) ENROLLMENT PRIORITY- The Secretary of Agriculture shall give priority to the enrollment of lands that, in the sole discretion of the Secretary, will provide the best opportunity to resolve conflicts between the presence of an animal or plant species

referred to in paragraph (1) or (2) of subsection (a) and otherwise lawful land use activities.

### **SEC. 503. CONSERVATION PLANS.**

(a) **PLAN REQUIRED-** Lands enrolled in the healthy forests reserve program shall be subject to a conservation plan, to be developed jointly by the land owner and the United States Fish and Wildlife Service. The conservation plan shall include a description of the land-use activities that are permissible on the enrolled lands.

(b) **INVOLVEMENT BY OTHER AGENCIES AND ORGANIZATIONS-** A State fish and wildlife agency, State forestry agency, State environmental quality agency, and other State conservation agencies and nonprofit conservation organizations may assist in providing technical or financial assistance, or both, for the development and implementation of conservation plans.

(c) **COST EFFECTIVENESS-** The conservation plan shall maximize the environmental benefits per dollar expended.

### **SEC. 504. FINANCIAL ASSISTANCE.**

(a) **PERMANENT EASEMENT WITH BUYBACK OPTION-**

(1) **PAYMENT AMOUNT-** In the case of land enrolled in the healthy forests reserve program using a permanent easement with a buyback option, the Secretary of Agriculture shall pay the owner of the land an amount equal to--

(A) the fair market value of the enrolled land less the fair market value of the land encumbered by the easement; plus

(B) the actual costs of the approved conservation practices or the average cost of approved practices, as established by the Secretary.

(2) **BUYBACK OPTION-** Beginning on the 50th anniversary of the enrollment of the land, and every 10th-year thereafter, the owner shall be able to purchase the easement back from the United States at a rate equal to the fair market value of the easement plus the costs, adjusted for inflation, of the approved conservation practices.

(b) **30-YEAR EASEMENT-** In the case of land enrolled in the healthy forests reserve program using a 30-year easement, the Secretary of Agriculture shall pay the owner of the land an amount equal to--

(1) 75 percent of the fair market value of the land less the fair market value of the land encumbered by the easement; plus

(2) 75 percent of the actual costs of the approved conservation practices or 75 percent of the average cost of approved practices, as established by the Secretary.

(c) **10-YEAR AGREEMENT-** In the case of land enrolled in the healthy forests reserve program using a 10-year cost-share agreement, the Secretary of Agriculture shall pay the owner of the land an amount equal to--

(1) 75 percent of the actual costs of the approved conservation practices; or

(2) 75 percent of the average cost of approved practices, as established by the Secretary.

(d) **ACCEPTANCE OF CONTRIBUTIONS-** The Secretary of Agriculture may accept and use contributions of non-Federal funds to make payments under this section.

### **SEC. 505. TECHNICAL ASSISTANCE.**

The Forest Service and the United States Fish and Wildlife Service shall provide landowners with technical assistance to comply with the terms of agreements and easements under the healthy forests reserve program and conservation plans.

**SEC. 506. SAFE HARBOR.**

In implementing the healthy forests reserve program, the Secretary of the Interior shall provide safe harbor or similar assurances, through section 7 or other authorities under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), consistent with the implementing regulations of the United States Fish and Wildlife Service, to landowners who enroll land in the healthy forests reserve program when such enrollment will result in a net conservation benefit for listed species.

**SEC. 507. AUTHORIZATION OF APPROPRIATIONS.**

There are authorized to be appropriated \$15,000,000 for each of the fiscal years 2004 through 2008 to carry out this title.

**TITLE VI--MISCELLANEOUS PROVISIONS****SEC. 601. FOREST STANDS INVENTORY AND MONITORING PROGRAM TO IMPROVE DETECTION OF AND RESPONSE TO ENVIRONMENTAL THREATS.**

- (a) IN GENERAL- The Secretary of Agriculture shall carry out a comprehensive program to inventory, monitor, characterize, assess, and identify forest stands (with emphasis on hardwood forest stands) and potential forest stands--
- (1) in units of the National Forest System (other than those units created from the public domain); and
  - (2) on private forest land, with the consent of the owner of the land.
- (b) ISSUES TO BE ADDRESSED- In carrying out the program, the Secretary shall address issues including--
- (1) early detection, identification, and assessment of environmental threats (including insect, disease, invasive species, fire, and weather-related risks and other episodic events);
  - (2) loss or degradation of forests;
  - (3) degradation of the quality forest stands caused by inadequate forest regeneration practices;
  - (4) quantification of carbon uptake rates; and
  - (5) management practices that focus on preventing further forest degradation.
- (c) EARLY WARNING SYSTEM- In carrying out the program, the Secretary shall develop a comprehensive early warning system for potential catastrophic environmental threats to forests to increase the likelihood that forest managers will be able to--
- (1) isolate and treat a threat before the threat gets out of control; and
  - (2) prevent epidemics, such as the American chestnut blight in the first half of the twentieth century, that could be environmentally and economically devastating to forests.
- (d) AUTHORIZATION OF APPROPRIATIONS- There are authorized to be appropriated to carry out this section \$5,000,000 for each of the fiscal years 2004 through 2008.