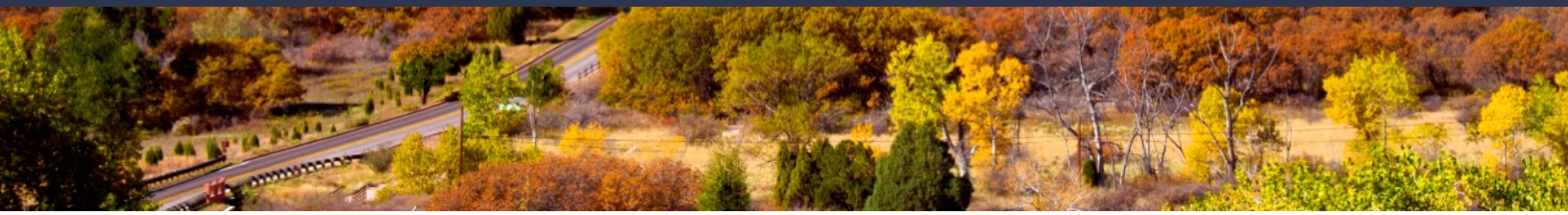
2021 UPDATE

CITY OF COLORADO SPRINGS

COMMUNITY WILDFIRE PROTECTION PLAN



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COMMUNITY WILDFIRE PROTECTION PLAN

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Colorado Springs Community Wildfire Protection Plan

Introduction

In 2011, the first Colorado Springs Community Wildfire Protection Plan (CWPP) was developed to provide a detailed emphasis on project planning, conditions, and future plans for wildfire risk reduction efforts. This provides an update to the 2011 City of Colorado Springs CWPP on the current conditions of the City of Colorado Springs with relation to wildfire risk, while providing planned details for the next five years. Additionally, this plan provides detailed information on how to continue Colorado Springs' wildfire risk reduction efforts and account for significant learnings from wildfire events to prevent future loss.

Significant Activities and Progress

Since the 2011 CWPP was developed, many significant activities and progress have occurred in the Colorado Springs wildland urban interface (WUI). This includes:

- Substantial wildfire mitigation project work. See Table 1 and Table 2 below for completed wildfire mitigation project areas. The combined total of both tables is 4,380.24 mitigated acres within the Colorado Springs WUI.

Table 1. Completed Pre-Disaster Mitigation Grant Funded Projects

2011-2019 Project Areas (FEMA PDM Grant)	Year	2011-2019 Completed Acres
Village at Skyline	2011	5
Quail Lake Park	2011-12	57
Broadmoor Resort Community	2011-13	173
Garden Ranch/Union Meadows	2012	32
Skyway Heights	2012	20
Palmer Park (North)	2012-13	300
Cedar Heights	2013	75
Ute Valley Park	2019	194.74
Denman Property	2019	293.12
TOTAL		**1,149.86**

Table 2. Completed Wildfire Mitigation Projects, 2014-2019

2014 - 2019 Project Areas	Completed Acres
Bear Creek Regional Park	211.78
Blodgett Peak Open Space	26.6
Comstock/Linear Park	37.27
Garden of the Gods	1,292.94
Mount Saint Francis	58.87
Mountain Shadows	2.19
North Cheyenne Canon Park	1,351.20
Palmer Park (South)	30.88
Southface (Rockrimmon)	38.17
University Park	180.48
TOTAL	**3,230.38**

- The Colorado Springs Fire Department (CSFD) Wildfire Mitigation Section worked with a total of 63 neighborhoods in 2011. In 2021, 142 neighborhoods work in stewardship with them to reduce wildfire risk.
- In 2011, the free Neighborhood Chipping Program serviced 39 neighborhoods and now it services 120 neighborhoods.
- Home hardening and fuels management codes related to the lessons learned from the Waldo Canyon Fire were updated at the end of 2012 and went into effect January 1, 2013.
- The Wildfire Mitigation Risk assessment map was updated in early 2012, right before the Waldo Canyon Fire.
- Added 16 Firewise USA sites to the Colorado Springs WUI to make a total of 25.
- From 2012-2020 the Wildfire Mitigation Section has:
  - Completed 4,733 onsite consultations
  - Presented at 370 meetings with 14,598 people in attendance
  - Serviced 31,202 homes in the free Neighborhood Chipping Program
  - Removed 39,873.96 cubic yards or 3,987.396 tons of biomass from the free Neighborhood Chipping Program.

Goals, Objectives, and Outcomes

The Goals of the Colorado Springs Community Wildfire Protection Plan are:

- Identify short-term and ongoing risk
- Plan for abatement or mitigation
- Implement strategies to abate or mitigate risk

The Objectives of the Colorado Springs Community Wildfire Protection Plan are:

- Educate the community regarding ways to reduce their wildfire risk
- Make sure the community has a heightened awareness of wildfire risk
- Reduce the density of hazardous fuels around and adjacent to homes, businesses, schools, infrastructure, and medical facilities
- Improve the structural characteristics of new and existing residential construction in the WUI through ordinances, development review and individual consultations
- Manage common areas and open spaces, with respect for the natural landscape characteristics and habitat features, in order to provide larger landscape fuels reduction

The Anticipated outcomes of the Colorado Springs Community Wildfire Protection Plan are:

- A community educated on wildfire risk and wildfire mitigation measures that can be taken into action
- Maintained community engagement for ongoing work
- Reduced risk of wildfire to the community and firefighters of Colorado Springs
- Reduced risk of wildfire to properties, businesses, and city infrastructure
- Reduced risk of wildfire to natural resources
- A maintained vibrant economy

Area Description

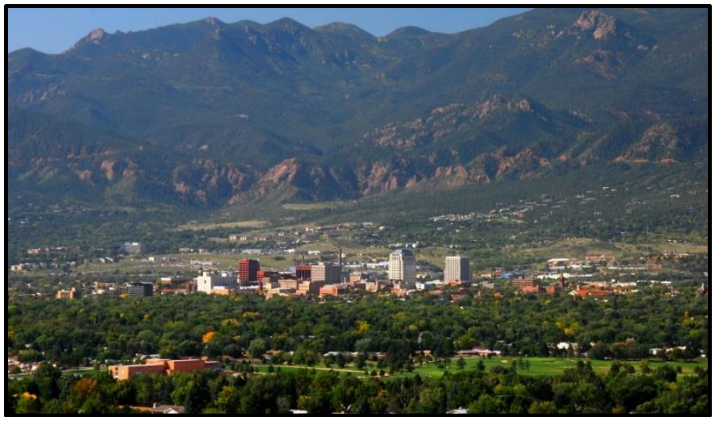
The City of Colorado Springs is located 60 miles south of Denver along the foothills of the Rocky Mountains and at the foot of Pikes Peak which summits at 14,115 feet. Colorado Springs is the county seat for El Paso County and is a home rule city. The city limits span an area of 195 square miles. It has an elevation of 6,035 feet, and the population in 2021 is 489,529 residents.[1]

The city has a multitude of amenities to offer residents including over 9,000 acres of parkland, over 500 acres of trails, a five-star rated hotel, the U.S. Olympic and Paralympic Training Center, museums, and a municipal airport.

Within the city limits and adjacent lands, there are five military instillations: The United States Air Force Academy, Fort Carson Army Base, Schriever Space Force Base, Peterson Space Force Base, and Cheyenne Mountain Space Force Station – North American Aerospace Defense Command (NORAD). In addition to the military instillations, the City of Colorado Springs has many other assets at risk including:

- Martin Drake Power Plant, 208-megawatt coal-fired plant
- Cheyenne Mountain Zoo, the highest elevation mountain zoo in the world
- United States Olympic and Paralympic Training Center, the flagship training center for the U.S. Olympics
- Garden of the Gods Park, the most visited City park in the nation
- Pikes Peak, America's Mountain
- Colorado Springs Airport
- The Broadmoor Hotel
- COG Railway

The city has been ranked in the top three places to live in America for multiple years and most recently in 2019, by U.S. News & Report.[2] Also, the city has received a multitude of national rankings and recognitions as the "Most Desirable Place to Live and Best Place to Live."



City of Colorado Springs in 2021

[1] World Population Review, https://worldpopulationreview.com/us-cities/colorado-springs-co-population

[2] City of Colorado Springs, https://coloradosprings.gov/city-communications/article/news/colorado-springs-ranked-no-3-best-place

Climate

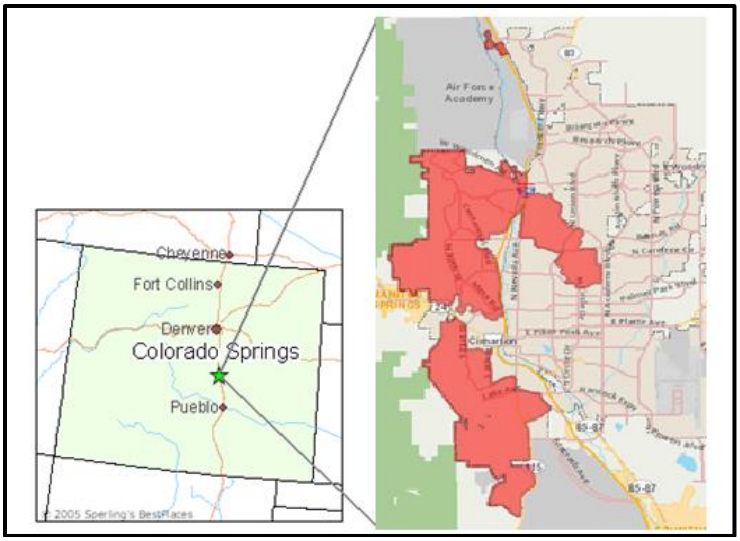
The climate is often pleasant in the winter and summer months, with dry humidity in the summer. Colorado Springs receives an average of 17.5 inches of precipitation, 37.7 inches of snowfall, and receives over 300 days of sunshine annually. The driest month for Colorado Springs is January, coincidently the month that has had a large impact from wildfires.

City of Colorado Springs Wildland Urban Interface

The area of heightened risk, where the homes intermix with the forested environment, is identified by the Colorado Springs Fire Department as the City of Colorado Springs WUI. The Colorado Springs WUI shares over 22 miles of boundary with federal lands, has slopes that range from 0% to 45%, and elevations that range from 6,035 to 9,200 feet above sea level. Nearly 20% of the city's population resides in the WUI and is at risk for wildfire. The City of Colorado Springs WUI spans 32,655 acres, making it one of the largest wildland urban interface zones in the entire country.

The WUI extends predominately south from the United States Air Force Academy to the north side of Cheyenne Mountain State Park and borders the Pike National Forest to the west. Although, most of the defined WUI area is located in the foothills west of Interstate 25, there are bluffs and mesas east of the interstate that exhibit wildland characteristics that are also identified as being in the WUI. Within the WUI, there are state and County parks that comprise of roughly, 10,492 undeveloped acres. Less than 5% of the vacant land within the WUI remains for residential homes due to topography and vacancy constraints.

The CSFD Wildfire Mitigation Section operates under the Division of the Fire Marshal, and is tasked to identify, manage, and reduce wildfire risk within the WUI. Although this section is not a land managing entity, it collaborates and works in stewardship with organizations to reduce wildfire risk. The CSFD Wildfire Mitigation Section is also responsible for maintaining and updating the community wildfire risk model within the City of Colorado Springs.



The City of Colorado Springs WUI denoted in red

Historical Fire Regime

The Colorado Springs region has a long history of wildland fires resulting in multiple fatalities, millions of dollars in suppression costs, and property loss. Colorado Springs has a mixed severity regime of frequent, low intensity fires and infrequent high intensity fires. Although large fires are less frequent, the city can often be impacted by local small wildland fires and receive smoke impacts from many large wildland fires that occur from neighboring communities.

Large historic fires that have occurred in or near Colorado Springs include:

- Big Burn of 1853 - 1854
- Cheyenne Mountain Fire in 1890 (over 400 acres)
- Camp Carson Fire in 1950 (8,000 acres and nine fatalities)
- Westwood Fire in 2005 (35 acres and one structure)
- Manitou Incline Fire in 2007 (30 acres)
- Fort Carson TA 25 Fire in 2008 (one firefighter fatality)
- Coronado Fire in 2009 (12 acres)
- Waldo Canyon Fire in 2012 (18,287 acres, two civilian fatalities, and 347 structures)
- Black Forest Fire in 2013 (14,208 acres, two civilian fatalities, and 502 structures)
- 117 Fire in 2018 (42,795 acres and 23 structures)

Waldo Canyon Fire

Colorado Springs has had its share of wildland fires resulting in fatalities and property loss in the past. The Waldo Canyon Fire in 2012 was unprecedented in terms of fire size and intensity. It devastated the Mountain Shadows community by claiming 347 homes and damaging more than 100 structures.

2012 Waldo Canyon Fire

This fire resulted in over $465.5 million in insured loss[3] and post fire impacts. It remains the costliest wildfire in Colorado history. A year later, nearly to the day, the 2013 Black Forest Fire surpassed the Waldo Canyon Fire in destruction by claiming 502 structures and two civilian lives. The Black Forest Fire, however, was more of an uninsured fire relative to the Waldo Canyon Fire.

The National Institute of Standards and Technology (NIST) completed a comprehensive study of the ignition sources and impacts incurred from the Waldo Canyon Fire. Within the NIST study findings,[4] only 48 of the destroyed homes were ignited directly from the wildfire. 296 of the destroyed homes were caused by structure-to-structure ignition, also known as a conflagration, due to the structure adjacencies and susceptibility of the structure to ember intrusion. Over 95% of the destroyed structures occurred within five and a half hours after the fire entered the Mountain Shadows community. It was determined that the rate of structure ignition was 79 structures per hour or 1.3 structures a minute. Although there were significant losses, 154 structures were successfully defended and 94 structures that ignited were saved by first responders.

Due to the active wildfire mitigation efforts of the community, CSFD is credited with a 83% save rate during the Waldo Canyon Fire.[5] Based upon the save rate estimate from the City of Colorado Springs Waldo Canyon Fire After Action Report, 1,927 homes were saved from the wildfire due to effective firefighting and wildfire mitigation efforts. The cost-benefit ratio for the Cedar Heights neighborhood was 1:257, for every $300,000 spent on mitigation work, $77.2 million in losses were avoided.[6] Cedar Heights was proactive with mitigation work on the front end of the Waldo Canyon Fire and this is what aided in saving over 250 homes in their neighborhood.

Home design features and structure components led to the demise of many of the lost structures. Elements such as combustible decks, wood siding, wood shake shingle roofs, wood fences, and re-entrant corners were contributing factors to the loss of structures during the incident. These lessons learned became foundational elements for future wildfire prevention. Following the Waldo Canyon Fire, in December of 2012, Colorado Springs City Council approved Appendix K in the City of Colorado Springs Fire Prevention Code and Standards. Appendix K mandates all homes constructed and reconstructed, from January 1, 2013 and on, within the WUI be built with fire resistant materials and fuels management must be conducted within the first 30 feet of structures.

Current Conditions

Vegetation

The WUI is composed of three main forest cover types that range geographically. The southern region of the WUI consists of Ponderosa pine dominant overstory with a mixture of Douglas-fir and White-fir overstory and Gambel oak understory (Fuel Model 10). The central region is predominantly Pinyon-Juniper cover type with mixed areas of Gambel oak and fine flashy fuel understory (Fuel Model 2, 5, and 8). Lastly, the northern region of the WUI contains the dominant

[3] Rocky Mountain Insurance Information Association, http://www.rmiia.org/catastrophes_and_statistics/Wildfire.asp
[4] National Institute of Standards and Technology, "A Case Study of a Community Affected by the Waldo Fire – Event Timeline and Defensive Actions. https://nvlpubs.nist.gov/nistpubs/TechnicalNotes/NIST.TN.1910.pdf
[5] City of Colorado Springs Fire Department Waldo Canyon Fire After Action Report, 3 April 2013
[6] Lessons learned from destructive Colorado Springs Fire, https://www.fs.usda.gov/features/lessons-learned-destructive-colorado-springs-fire

vegetation of Ponderosa pine with pockets of Douglas fir, Gambel oak, and flashy fuel understory (Fuel Model 10). Other vegetation types include short grass prairie with yucca and prickly pear cactus (Fuel Model 1).

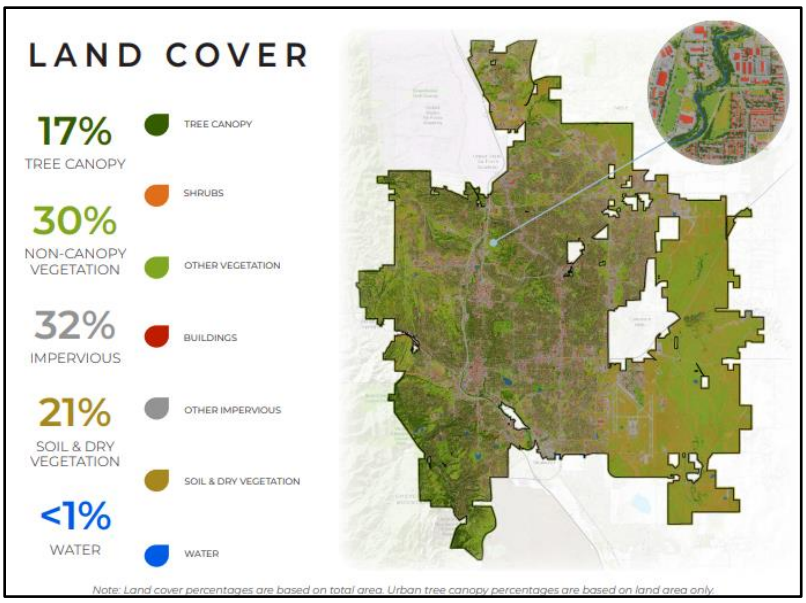
Stand densities in the heavy fuel loading areas average greater than 300 stems per acre, where traditionally stand densities range between 75-150 stems per acre, dependent on tree canopy and dominant vegetation cover types.[7] Within the lighter fuel loadings, the dominant species of the Gambel oak cover type, there are upwards of 2,500 stems per acre. It is one of the more difficult species to manage due to its re-generative nature and species composition of growth.

Within the predominant vegetation cover types, there are isolated areas of infestation from insects and disease that have significantly affected the forested area of the WUI. The infestation areas include impacts from beetle-kill, Tussock Moth, and Spruce Budworm. Additionally, areas of Mistletoe are common across the WUI within the Ponderosa pine species. In the southwestern and northwestern region of the WUI, Spruce Budworm and Tussock Moth infestations have had the greatest impacts to the heavy fuel types, causing extreme tree mortality and heavier surface fuel loadings.

In 2019, an Urban Tree Canopy Assessment was completed in the City of Colorado Springs, consulted by plan-it GEO.[8] The study reflects the conditions for the City of Colorado Springs as it contains less than 18% of un-vegetated area within the western region of the city. Overall, the city contains 32% of impervious urban area and only 17% of the city is tree canopy.

This study identifies the city as not densely vegetated with trees, but rather contains a high density of light flashy fuels that align with a high plains desert ecoregion and a hardscaped urban environment. The findings suggest, the greatest fire threat would be grassfire in the more eastern plains of the city.

[7] United States Forest Service, Department of Agriculture, GIS and Spatial Analysis, https://www.fs.fed.us/foresthealth/applied-sciences/mapping-reporting/gis-spatial-analysis/index.shtml
[8] Urban Tree Canopy Assessment, City of Colorado Springs, https://coloradosprings.gov/forestry/page/urban-tree-canopy-assessment



Land cover classes for Colorado Springs, Colorado Based on 2015 NAIP imagery and 2011 El Paso County LiDAR.

Residents

Residents within the WUI have been addressing wildfire risk for more than 20 years. The CSFD Wildfire Mitigation Section's records indicate residents are active in mitigation efforts and have removed thousands of tons of biomass through the free Neighborhood Chipping Program. Although not all residents choose to participate in the program, active mitigation efforts within the first 30 feet of the structure and home hardening efforts do occur regularly.

Example of a mitigated property in the Colorado Springs WUI

Plan for Achieving Desired Conditions in the WUI

It is the desire of the City of Colorado Springs to have WUI residents reduce their own risk at the lot level in the urban environment and encourage further mitigation by practitioners in the forested open environment. Residential structures that have properly mitigated properties prevents the spread of wildfire across neighborhoods. It also enables operations to quickly intercede, thereby reducing structural ignition. A mitigated property includes fuels management to the first 30 feet or to the property line, whichever comes first. The first 30 feet, defined as the safety zone, is the primary area of concern for wildfire risk and should be the primary focus of mitigation for residents. In efforts of continued risk reduction, homeowners should seek opportunities to harden their structure through ignition resistant construction materials. Both vegetation management and home hardening features are all attributes associated with the desired condition to enable community risk reduction. Mandatory fire codes and ordinances are not the only solution to obtaining a desired condition. Desired conditions only become achieved if homeowners *"share the responsibility"* and comply with regulations and best management practices.

In the safety zone, prescriptions for desired conditions include, but are not limited to:

- Refrain from having conifers growing within 15 feet of the structure
- Create separation of vegetation patches with clear areas of 10 feet or more
- Prune trees up to a height of 10 feet or retaining a minimum of 70% of the crown
- Install Class A rated roof coverings on all residential homes
- Install composite decking material on all residential homes
- Use ignition-resistant materials for exterior cladding, eaves and soffits when building or replacing home siding materials
- Enclose attic vents, soffit vents, and other home openings with 1/8" mesh screening
- Use rock mulch instead of wood mulch up against structures. The recommended distance between structures and wood mulch is one-three feet

Within open space and park areas, stand management through vegetation fuels reduction reduces the density of vegetation and the number of stems per acre to a more preferred condition. Preferred stand densities range between 75-150 stems per acre, depending on the forest type and based upon best forest management practices. By removing dead and diseased vegetation **(not clear cutting or putting in firebreaks),** restoration of the forested environment can occur, and natural positive wildfire impacts can be reduced.

In open space areas, prescriptions to achieve desired conditions include:

- Less than 20% timber and brush vegetation mortality
- Reduce stand density to 75 – 150 stems per acre
- Remove ladder fuels by limbing and thinning
- Create separation between clusters of oak by at least 10 feet or 1½ times the height of the fuels
- Retain a minimum of two snags per acre for wildlife, as available, with a minimum of six inches diameter at breast height (DBH)

- Thin understory regeneration in mixed-conifer cover type forests and manage for mature overstory while promoting overstory native vegetation types

Completed Fuels Mitigation Project in Broadmoor Spires (Untreated / Treated)

Wildfire Hazard Risk Assessments

The City of Colorado Springs Wildfire Hazard Risk Assessment was created using a uniquely developed model, Wildfire Hazard Information Extraction (WHINFOE). WHINFOE is a locally developed model that processes 25 weighted values, utilizing fire behavior modeling to determine an individual risk rating at the parcel level. This model has been implemented on the parcels that reside within and are adjacent to the WUI. The model inputs are derived using geographic information systems (GIS), hyperspectral imagery, light detection and ranging (LIDAR), and field collected data through curbside assessments. Input factors range from structural characteristics to vegetative fuels and topography.

The Wildfire Risk Rating map displays wildfire risk at the lot level and is shared with residents, homeowner associations, community associations, subdivisions, and neighborhood groups during educational events. In total, the CSFD Wildfire Mitigation Section partners with 142 neighborhoods to share information regarding risk. A list of partnering neighborhoods can be found in Appendix I. Ninety-nine percent of the partnering neighborhoods are within the WUI, while 1% of the neighborhoods fall outside of the WUI. Those neighborhoods are partners in wildfire risk reduction and committed to *"Sharing the Responsibility,"* due to their adjacency to areas of heightened wildfire risk.

Parcel level risk ratings are comprised of five adjectives and colors to identify the property's risk ranging from LOW to EXTREME (Green to Red), found in Appendix II. Homeowners can access their individual wildfire risk ratings through the CSFD Wildfire Mitigation website[9] under the, "Learn Your Wildfire Risk" tab. The initial data collection of the wildfire risk ratings was completed in the year 2000, and updates to the ratings have been made as homeowners remove

[9] Colorado Springs Fire Department Wildfire Mitigation Section Website, "Learn Your Wildfire Risk" www.coloradosprings.gov/wildfiremitigation

hazardous vegetation and harden their homes. These neighborhoods are identified as they contain necessary criteria to meet wildland characteristics. This includes having certain fuels (either immediate or adjacent) that increase the risk of a wildland fire (e.g. grassy areas, oak brush, or mature conifers in the landscaping). The CSFD Wildfire Mitigation Section continues to update all the parcels, by collecting ground-truth data and updating GIS files.

The wildfire risk ratings are not a guarantee of the ignitability or survivability of a structure, but a statement of relative wildfire risk for education. The risk assessments are not utilized as an operational model or tactical decision tool during a wildfire event. The sole purpose of the model is to provide education to the resident and to determine the highest areas of risk, prioritization of projects and community risk analysis.

Project Planning

Establishing selection criteria in the project planning process is an essential function for identifying many variables other than fuel conditions. Projects are not only for forest health, but many other benefits can be achieved. All potential project areas are identified based on local knowledge and support of steering committee members and through partnerships with local, state, and federal agencies. Selection criteria for project areas are discussed and considered for each wildfire fuels mitigation project, prior to implementation.

The criteria are as follows:

- Neighborhoods with HIGH – EXTREME wildfire risk ratings
- Identified locations and adjacency to population density
- Positive cooperation and "buy-in" from the surrounding neighborhood
- Committed in *"Sharing the Responsibility,"* a demonstrated commitment to reducing wildfire risk on private and common property
- Excessive vegetation density, fuel type, and fuel loading
- Poor stand health and high amounts of mortality in the timber and brush
- Steep topography
- Adjacency to critical infrastructure (hospitals, schools, fire stations, transportation routes)
- Critical animal habitat (threatened and endangered species)
- Significant cultural and historical resources
- Elevated or reduced fire history and frequency
- Larger project size (larger projects receive the highest priority as they can drive down the cost per acre)

Project Area Specifications

Project specifications are intended to provide general parameters of wildfire mitigation projects, although not all-inclusive as project details and specifications are dependent on the vegetation composition, project goals, and funding source requirements. All project specifications are identified in the project scopes of work and all projects are to be in alignment with best forestry practices.

Project areas are identified as opportunities to reduce wildfire risk and severity, while reducing threats to the community and city assets. General project specifications implemented for the City of Colorado Springs include the following attributes:

- Evaluation and consideration of animals and environmental habitats
- Removal of dead and diseased trees and brush
- Thinning of small diameter understory trees and brush
- Limbing overstory trees
- Removal of ladder fuels within the dripline of trees
- Removal of dead and down woody fuels
- Selectively thin overstory trees by size class or species specifications
- Promote large diameter dominant trees
- Sustain vegetation that has begun the decomposition process and may have biological benefit

Project acres and the abilities to perform fuels treatments are subject to funding opportunities from both internal budget and grant funding sources. Project scheduling and completion will depend on funding availability, staffing resources, and weather or seasonal conditions.

Voluntary time allocated from volunteer projects and the free Neighborhood Chipping Program can be utilized as grant matching commitments in accordance with specific grant requirements, as allowed. An average estimate of four hours is factored into each resident that participates in the free Neighborhood Chipping Program, unless otherwise identified and these hours will factor into the government rate for volunteer labor.

Fuels Management

The CSFD Wildfire Mitigation Section has the responsibility and authority to assist with mitigation efforts. If property is within city limits and threatens any city assets other than federal land, the section has the responsibility to work with the landowner or agency responsible for maintaining that property to mitigate the wildfire risk. City assets can include watersheds, utilities, communication sites or infrastructure. Fuels management projects are completed through effective partnerships, collaborative measures, and mutual agreements.

Implementation of fuels mitigation projects are based on several factors including:

- Collaborative intent to participate in the program
- Wildfire risk rating
- Environmental, cultural, and historical assessment
- Slope and topography
- Access
- Fuel loading
- Forest health and mortality
- Values at risk
- Property ownership
- Funding and resource availability

Fuels management has a high benefit cost ratio. Nationally, fuels mitigation projects have a 6:1 benefit cost ratio[10], meaning that for every $1 spent on mitigation, there is a savings of $6 for

[10] FEMA – Benefit Cost Analysis (BCA), *Hazard Mitigation Assistance (HMA)*

operational fire response, property damage, and recovery. Analysis of Colorado Springs' projects for grant funding has shown that every dollar spent on fuels mitigation projects results in a savings of $12 - $24 in a wildfire event. Based upon the Waldo Canyon Fire in 2012, NIST recorded a 24:1 cost benefit ratio due to fire suppression efforts and fuels mitigation work completed in the years prior to the incident.[11]

The CSFD Wildfire Mitigation Section treats on average more than 1,800 acres annually between project acres, maintenance acres, prescribed burning, volunteer projects, free Neighborhood Chipping Program, and the residential Cost-Share Stipend Program.

Fuels Treatment Options

Efforts to lessen the impacts of the various vegetation treatments include education, outreach, rehabilitation, specified operating periods (time of year) and specialized equipment. Treatment options may include a combination of treatment prescriptions (e.g. hand thinning and pile burning). Table 4 reflects considerations and determining factors considered prior to a fuels treatment project.

There can be associated benefits as well as detriments for each of the treatment options. Cost benefit analysis goes beyond project expenditures to include social and political capital. Hand thinning can be species selective with little to no ground disturbance and tends to be visually appealing as slash is chipped and hauled away or scattered onsite. Hand thinning tends to be a costly method of removal; however, it does provide social benefits in terms of visual quality and site aesthetics.

Table 4. Considerations and determining factors of fuels treatments

Issues / Treatment	Slash	Smoke	Wildlife	Visual	Water	Soils	Cost	Risk
Neighborhood Chipping	x							
Hand Thinning	x						x	
Mechanical	x		x			x		x
Pile Burning		x		x				x
Chemical Treatment	x		x		x		x	x
Understory Burning		x	x	x	x			x

[11] Waldo Canyon Fire Adapted Communities Report, Insurance Institute for Business and Home Safety, https://fireadapted.org/wp-content/uploads/2018/06/waldo-canyon-report.pdf

Mechanical treatment can drive down the treated cost per acre, but can also result in some soil disturbance or woody biomass that is unsuitable for project specifications. Contracting specifications, when completed and managed properly, can create limited disturbance on fuels treatment projects with all factors considered and mitigated. With detailed project management and specifications, projects have proven to produce effective results with minimal to no disturbance to soils or the landscape. Mechanical treatment is the recommended fuels treatment option for oak brush in areas with high mortality and in areas of dense continuity open spaces.

When completed and applied properly chemical treatment can be used in conjunction with a cutting treatment to prevent regeneration sprouting of the oak brush as part of preventive maintenance. The herbicide application adds to the cost of the treatment and should only be used for complete eradication of the oak brush on project sites as part of the long term fuels reduction effort.

Prescribed fire has not been a desired treatment option within the city limits in the past due to smoke related issues and risk of escape in a densely populated area. As a management tool, prescribed burning may not be considered within the neighborhoods of the WUI. However it remains an effective tool in reducing threat in other remote areas to protect city infrastructure. Reintroducing fire in the form of pile burning and broadcast burning can have ecological as well as social benefits for residents within the WUI as smoke in the air can serve as a reminder of their wildfire risk and encourage prescribed fire when and where appropriate. There are areas in the WUI where access is an issue and burning could be a viable treatment option. Pile or understory broadcast burning would require an approved burn plan, a qualified burn boss, lighting and holding crews, and appropriate permits and approvals from the authority having jurisdiction (AHJ) with the state, county, and city.

Prescribed fire requires specific requirements, permitting, and approvals from the state and fire marshal or county sheriff. Although prescribed fires for broadcasted burning is not frequently utilized, pile burning is a very cost effective method (no chipping or hauling costs) that results in acres treated and is typically easier to contain. Broadcast understory burning can have a greater smoke impact and risk of escape, but can be ecologically sound for areas away from neighborhoods or in areas with agricultural benefit. Broadcast understory burning would also require a detailed burn plan with a smoke management plan and appropriate permitting from all state, county and local authorities.

Colorado Springs Utilities (CSU) Watersheds

CSUpartners with hundreds of partners to manage and sustain the City of Colorado Springs watershed. The Colorado Springs water infrastructure associated with the watershed and water distribution operates in 11 counties and manages more than 35,000 acres to ensure water resources are managed for three of Colorado's major river basins. Factors that can threaten the water supply include:

- Poor forest health conditions
- Wildfire
- Development infringement
- Access demands
- Security concerns
- Well-head contamination risks
- Invasive species
- Threatened and endangered species
- Changing regulations and requirements

CSU is tasked with planning for and managing these risk factors to ensure the critical resources for water distribution remain intact, while managing the ecosystem of the Pikes Peak Region. The protection of water resources is completed through forest management and restoration, wildfire suppression, post-fire mitigation planning, and the utilization of prescribed fire. Through proper implementation of forest management, the risk and severity of wildfire events can greatly reduce the impacts post-fire on water quality and water collection for the forested environment.

To date, CSU has ongoing forest management projects on the Pikes Peak North and South Slope watersheds. They have also funded the completion of a National Environmental Policy Act (NEPA) environmental assessment by the U.S. Forest Service to reduce the amount of fuels and risk on the Pike National Forest.

To establish project priorities and critical areas of risk, a composite wildfire risk analysis has been completed and can be found in Appendix III. The composite wildfire risk and the pre assessment wildfire risk rating has been ranked from low to high risk based upon critical infrastructure and the forested environment that can be impacted by a wildfire. In efforts to address the risk, CSU has taken actions to assess the risk and implement forest health projects, to reduce the threat of wildfire near collection and water storage infrastructure.

Removal and Utilization

In Colorado Springs, there is currently no market for tree logging of material harvested or removed from a project site. The vegetation and timber that could be harvested from project sites, is not viable or profitable based upon timber industry standards at this time. State-wide and non-local sawmills and facilities that process products other than lumber (POL), have not desired additional material from non-local sites due to travel distances, transportation costs and the various species of wood products available.

Disposal of slash and woody biomass require consideration for travel time and distance, supplemental cost, labor costs, operational costs, economic benefit, insects, root systems, and visual quality. Removal methods include chipping and scattering onsite, chipping, and hauling to landfill, recycling, and burning by various methods. Chipping and scattering are very cost-effective, as it cuts down on travel time and added expense of hauling material away. Scattering chipped biomass from generated slash requires that it be scattered around the site at a depth no greater than four inches. Scattering onsite may be beneficial as the nutrient base is not removed from the site, it helps with the prevention of noxious weeds from sprouting after cutting and helps with erosion.

One of the only local market sources for chipped woody biomass or removed slash, in Colorado Springs, is Rocky Top Resources, Inc.[12] Rocky Top Resources recycles slash and chipped biomass into decorative mulch for retail or soil amendments.

Pile burning or air burners are an option for removing slash from project sites in areas where the potential of using fire is available. Due to the urban demographic of the WUI and the Colorado

[12] Rocky Top Resources Inc, Wood Recycling Facility and Landscape Supply Yard, http://www.rockytopresources.com/services/#recycling

Department of Public Health and Environment requirements for a permit, pile burning has been the primary source of removal on remote areas of the city and watershed.

Any slash generated from the CSFD Wildfire Mitigation Section from wildfire mitigation projects and neighborhood chipping is taken to Rocky Top Resources free-of-charge. This is a viable alternative to chipping and scattering if slope, chipped biomass depth, or visual quality is an issue. Rather than going into a landfill, the material is treated and repurposed for landscaping.

CSFD Wildfire Mitigation Chipping Crews

Project Areas of Opportunity

Project areas are identified as city assets at risk. The identified project area opportunities are dependent on grant funding availability, budgetary funds, staffing resources, weather conditions, and community participation. Each prospective project area will be unique in project scope, community involvement, and partnership contribution. The following list of opportunities are areas identified for continued and additional wildfire fuels reduction treatment. Table 3 is updated, and a continuation of the tables identified in the 2011 CWPP.

Table 3. Priority project areas and targeted areas for treatment, as funding and resources allow.

2021 - 2026 Project Areas	Acres
Open Space	
Cheyenne Mountain State Park - City owned	2,107
Palmer Park	730
Austin Bluffs Open Space	408
Bear Creek Park – City and County owned	586
Sunset Mesa Open Space	78
Stratton Open Space	431
North Cheyenne Canon	1,331
Blodgett Peak Open Space	176
Pulpit Rock Open Space	192
Red Rock Canyon Open Space	785
Garden of the Gods	1,367
Areas of Risk - Within City Limits	
Cheyenne Mountain Zoo	140
The Broadmoor Hotel, Event Center, Cloud Camp	80
Seven Falls	160
University of Colorado - Colorado Springs	437
Mount St. Francis	112
Areas Adjacent to the City	
Pike National Forest	
North Slope of Pikes Peak, Pikes Peak Watershed	
Cheyenne Mountain State Park - State Owned	
The Ranch at Emerald Valley	
COG Railway	
Manitou Section 16	

The CSFD Wildfire Mitigation Section works with multiple agencies to complete cross-boundary wildfire mitigation projects. These projects span multiple property lines and multiple owners. Cross-boundary projects include work on private property, common areas, city owned parcels, City Parks, El Paso County, Pikes Peak watersheds, U.S. Forest Service, U.S. Air Force Academy, and Colorado Springs Utilities. These projects reflect stewardship, commitment, and partnership to allow for more holistic approach of community wildfire adaptation. For a location map of project areas through 2026, see Appendix IV.

Community Education and Outreach

Targeted opportunities for education have expanded from homeowners and neighborhoods and now includes educating those that work on homeowner's property or welcome new homeowners into the community. It is essential that these individuals are made aware of the elements of wildfire risk, as well as fire prevention code requirements that may affect the new homeowner or

homeowner association codes and requirements. Education and awareness are essential to these areas, as informed motivation leads to further mitigation and risk reduction. Through understanding and community willingness, the ***"Sharing the Responsibility"*** message can resonate with those that live in and serve our community.

The identified targeted audiences will be:

- Building architects
- Contractors
- Developers
- Realtors
- Home insurance providers
- Property managers
- Home inspectors

The Identified Targeted Workforce Education Audience will be:

- Landscape architects
- Landscapers
- Arborists

The CSFD Wildfire Mitigation Section continues to offer free onsite consultations to residents where they receive specific suggestions and recommendations on how they can mitigation their wildfire risk through vegetation management and improve their home hardening features. As well, the section will attend homeowner association/neighborhood meetings and events to promote the wildfire mitigation message.

As well, the CSFD Wildfire Mitigation Section will continue to rely on our Neighborhood Champions to *"Share the Responsibility"* in spreading our mitigation message. Neighborhood Champions are residential leaders that provide mentorship and organization to their respective neighborhood or community. They are critical in sustaining the success of the CSFD Wildfire Mitigation Program.

Neighborhood Chipping Program

The free Neighborhood Chipping Program is part of *"Sharing the Responsibility."* The Colorado Springs WUI is truly an urban setting and many households do not own a truck for hauling debris to collection sites. This program offers homeowners free curbside chipping and hauling when they do mitigation work on their property. The intent of the program is to reduce wildfire risk, modify fuels adjacent to structures and reduce fire behavior in the event of a wildfire.

The CSFD Wildfire Mitigation Section currently works with 142 neighborhoods. Of these 142 neighborhoods, the free Neighborhood Chipping Program is offered to 120 neighborhoods, six months out of the year due to funding limitations. The goal is to offer the program to all 142 neighborhoods and have chipping occur all year long. The section will continue to update the program and educate residents on the proper guidelines and participation requirements. See Appendix V for an updated free Neighborhood Chipping Program flyer.

Grant Administration

The CSFD Wildfire Mitigation Section continues to rely heavily on federal, state, local, and private grants for project and residential cost share stipend funding for the reduction of hazardous fuels. Grant administration involves project planning, application process, scoping, monitoring, reporting, project oversight, evaluation, and closeout reports. Matching commitment is funded through Public Safety Sales Tax, and soft match using volunteer labor and homeowner matching. Examples of homeowner matching include neighborhood volunteer projects, structural retrofits, contracted labor, and hard cash donations.

The section will continue to apply for grant opportunities as they become available to help fund the project areas of opportunity for the next five years and to help assist homeowners reduce hazardous fuels on the first thirty feet of their property, through our residential Cost-Share Stipend Program.

Other services that will continue to operate as normal, mentioned in the 2011 CWPP, include:

- Operational Support
- Burn Ban and Restrictions
- Development Review
- Hazardous and Non-Hazardous Material Permitting
- Prescribed Burning
- Monitoring of Daily Fire Danger Adjective
- Volunteer Program Coordination
- Social Media Updates
- Grassfire Education

Scoping

Scoping is defined as the ongoing assessment of a situation through monitoring, consultation, and discussion. The CSFD Wildfire Mitigation Section works with numerous agencies and non-profit organizations throughout the project planning and implementation process and works through stewardship agreements to complete wildfire mitigation projects successfully. The intent of scoping is to pre-determine partners and collaborators to identify project priorities, financial obligations, ownership, and long-term maintenance plans prior to initiation of a wildfire mitigation project.

Public input and collaboration are essential in scoping projects for upcoming wildfire mitigation measures. Public support with understanding through awareness and community buy-in is achievable through effective education and public notifications. In efforts to notify the public, the CSFD Wildfire Mitigation Section and collaborating agencies utilize a variety of public mediums to inform the community on upcoming wildfire risk reduction opportunities and projects.

Public scoping and notification process mediums:

- Neighborhood signs
- Colorado Springs Fire Department website
- City of Colorado Springs websites
- Social media sites
- Neighborhood meetings
- Mailings
- Community networking website

The following is a list of interagency and non-profit organizations that assist in effective collaboration with the City of Colorado Springs. These agencies and organizations include, but are not limited to:

Interagency and Non-Profit Collaboration:

- United States Air Force Academy
- Cheyenne Mountain Air Force Station
- Cheyenne Mountain Zoo
- Coalition for the Upper South Platte
- Colorado Division of Homeland Security & Emergency Management
- Colorado Parks and Wildlife
- Colorado Historical Society
- Colorado Springs Council of Neighbors and Organizations
- Colorado Springs Police Department Code Enforcement Unit
- Colorado Springs Police Department Homeless Outreach Team
- Colorado Springs Development Review Enterprise
- Colorado Springs Parks, Recreation and Cultural Resources
- Colorado Springs Public Safety Sales Tax Oversight Committee
- Colorado Springs Utilities
- City of Colorado Springs Water Resource Engineering
- City of Colorado Springs Public Works
- Colorado State Forest Service, Woodland Park District
- Colorado State Parks, Cheyenne Mountain State Park
- Division of Fire Prevention and Control (DFPC)
- El Paso County Sheriff's Office
- Federal Emergency Management Agency
- Fort Carson Army Installation
- Friends of Cheyenne Cañon
- Friends of Ute Valley
- Guardians of Palmer Park
- Sisters of Mount Saint Francis
- Palmer Land Trust
- Pikes Peak Wildfire Prevention Partners
- School Districts 2, 11, 12, 20
- University of Colorado at Colorado Springs
- US Forest Service, Pikes Peak Ranger District
- Federal Emergency Management Agency, Region 8
- The independence Center
- Rocky Mountain Center

Potential collaboration on wildfire mitigation projects include cross boundary projects with Air Force Academy, El Paso County, Colorado Springs Utilities, US Forest Service, Cheyenne Mountain State Park, NORAD, and Fort Carson.

Maintenance, Monitoring, and Rehabilitation

Initial cost for fuels mitigation treatments can range between $1,800 - $4,200 per acre, depending on fuel loading, access, prescription, equipment, and slope of the project site. Maintenance costs range from $600 - $1,300 per acre. Maintenance includes public notifications and collaboration in order to ensure communication conducted on upcoming mitigation project locations and project areas are maintained.

Current wildfire mitigation projects are monitored during the implementation process and up to five years post-treatment on a frequent basis. Projects are managed and monitored for the duration of ownership, as all fuels mitigation projects are completed in stewardship with the intent of ensuring all objectives are met for the property owner or partnering agency. Additionally, completed projects are to be managed by the landowner with the understanding that they will maintain the vegetation and effectiveness of the fuels treatment of the project with the assistance and technical experience from the CSFD Wildfire Mitigation Section. The landowner may continue to collaborate with the CSFD Wildfire Mitigation Section to assist in the maintenance and re-treatment of a project area as the vegetation regenerates or the vegetation is subject to a disturbance.

Most wildfire mitigation projects completed in open spaces are maintained on a five to eight-year cycle; depending on the location of the project, timing of treatment, seasonal precipitation, regeneration rates of vegetation, and stand composition. It will be the landowner's responsibility to work with the CSFD Wildfire Mitigation Section to ensure areas sustain proper maintenance and remain in stewardship for future recommendations of re-treatment.

Post treatment monitoring includes:

- Erosion and sediment accumulation
- Noxious weeds and invasive plants
- Oak brush and conifer regeneration
- Insect and disease infestations
- Wildlife activity
- Social trails and unauthorized vehicle access
- Woody biomass decomposition

Rehabilitation planning is essential in wildfire mitigation projects and post wildland fires. In the event of any adverse effects on the mitigation work, prescribed burn or wildland fire, the CSFD Wildfire Mitigation Section will mitigate the sustained damages using erosion control methods, noxious weed abatement measures, or other called-for rehabilitation and recovery necessities. All attempts to minimize impact to the site will be made with respect to time of year, weather conditions, soil conditions, existing vegetation, the severity of a disturbance, ecological factors, and impacts to the community.

Project maintenance for the CSFD Wildfire Mitigation Section, is funded from the PSST budget and some grant funding opportunities. Maintenance includes cutting oak regeneration using brush cutters, small walk behind mowers, and large hydraulic mowing equipment.

Post-Fire Planning and Recovery

Post-fire recovery considerations and plans need to be established and tested prior to the incident and implemented before the disaster has ended. It is critical to begin planning for recovery measures that include damage assessments, site rehabilitation, debris management, building regulations, construction regulations, fire code amendments, fire code adoptions, and community resiliency. These factors are integral parts of the mitigation perspective, as wildfire mitigation fuel treatments lessen the impact of post-fire recovery and damage impact sustained to the community.

The result of post-fire planning is to restore the community back to a pre-fire state while becoming more resilient for future events. Post fire and recovery planning falls within the responsibility of the Pikes Peak Regional Office of Emergency Management (PPROEM) for the City of Colorado Springs and El Paso County. PPROEM has developed and maintained the respective plans for all hazards, to include wildfire, and updates them on a regular basis to ensure alignment with the City of Colorado Springs Hazard Mitigation Plan.[13] The city also maintains the Emergency Finance, Purchasing and Administrative Plan 2017, to ensure funding sources are identified, requested, and applied before, during, and after an incident occurs. This finance plan meets the stringent requirements of the Emergency Management Accreditation Program and specifically addresses alignment with federal funding requirements.

The city has developed such post-fire plans consisting of a comprehensive hazard mitigation plan and mitigation strategies, and proven emergency operation procedures. The City of Colorado Springs Office of Emergency Management Disaster Recovery Plan 2017,[14] identifies the following points for post-fire planning and each respective point contains a corresponding plan within the operations of emergency management.

Damage Assessment

Throughout and after an incident, it is critical for agencies and partners to gain an understanding of the damage incurred during a wildfire event. It is critical that assessments are collected quickly to determine severity of impacts and to initiate appropriate plans for recovery, as well as potential reimbursements through disaster declarations. Damage assessments should include impacts to structures, utility infrastructure, roadways, hazardous debris, and other environmental and hazardous concerns that can affect the community or responders. (Once assessed, work can be implemented on repair and recovery of damage sustained.)

As damage and impacts from a wildfire event are determined, as accurately as possible, it is essential to share the information with the public when available. This helps alleviate uncertainty and prevent misleading information from being shared. The information shall also be dispersed with respective partnering agencies and media outlets to ensure consistent messaging occurs. The 2017-2020 Crisis Communication and Public Information and Education Plan has detailed

[13] City of Colorado Springs Hazard Mitigation Plan, https://coloradosprings.gov/office-emergency-management/page/plans-and-reports
[14] City of Colorado Springs Disaster Recovery Plan; 2017, https://coloradosprings.gov/sites/default/files/disaster_recovery_plan_final_2017.pdf

procedures to ensure that information is dispersed to the whole community, to include those with access and functional needs. These procedures also include a mechanism to address misinformation.

The City of Colorado Springs has created a multitude of plans focused on damage assessments, the considerations for impacts received from a disaster, and the initiation of recovery for the community and essential infrastructure. These plans can be found in the Damage Assessment Plan for the City of Colorado Springs, Emergency Operations Plan, and within the Emergency Operations Center.

Short-Term Recovery

It is essential to allow homeowners to return to a normal state as quickly as possible following a wildfire event. Short-term recovery addresses and prioritizes unmet needs in order to restore basic infrastructure, sustain operations, and mobilize recovery organizations and partners. All of the recovery needs determined are essential in ensuring community resiliency while allowing the recovery process to initiate at the community or homeowner level. Code adjustments and changes must be accomplished in this phase.

Long-Term Recovery

This type of recovery refers to the process that will occur over a timeframe of months or years after the incident. It is essential to plan for the repercussions that follow a catastrophic wildfire event and identify potential impacts that will follow the incident.

Long-term recovery can have many impacts post-wildfire, as wildfires can adversely affect adjacent communities and the environment for years following the incident. These impacts can include flooding, subsidence, water quality concerns, hydrophobic soils, landslide, long-term environmental impacts, and monitoring requirements. The adverse effects from a wildfire also provide significant concerns with debris and debris management, as well as community impacts due to loss.

In this stage, the City relies heavily on partnerships and sustainable resources that provide recovery needs to the community. This often involves partnerships with multiple jurisdictions, local human resources, charitable organizations, volunteer organizations, state, and federal recovery agencies.

The city has created long-term recovery plans that recognize priorities involving development of revitalization to impacted areas, rebuilding damaged or destroyed structures and infrastructure, as well as supporting the community to self-sufficiency and sustainability. The City's Disaster Recovery Plan identifies the framework in which considerations need to be made with respect to planning for respective side effects of the incident.

The city has prepared an All Hazard Debris Management Plan to be implemented in such circumstances of erosion or debris outflow concerns. This documented plan is regularly maintained and tested by PPROEM.

Our community's strength for recovery is supported by a strong collaborative of local Voluntary Organizations Active in Disasters (VOAD) and the South-Central Region VOAD. The city's

established partnership with our local VOAD enables the provision of additional resources and services for those with unmet needs.

Prevention

Through appropriate mitigation measures, active monitoring and community support, prevention is one of the least expensive and easiest plans to achieve. Prevention requires all partners and cooperators to work cohesively while utilizing the latest technology in efforts of fuel reduction and post-fire recovery. Prevention is proven to be an effective measure in making the community resilient against wildfire, while protecting the City's resources, infrastructure, and community. Through prevention and mitigation, we can protect our community.

Glossary of Terms

Burn ban: a temporary prohibition on open burning as a result of very high or extreme fire danger

Burn restrictions: a temporary limitation on open burning as a result of high fire danger

Clear cut: to cut down or remove every tree in a designated area

Conifer: a cone bearing tree with evergreen needles

Diameter at Breast Height (DBH): A standard method of measuring the circumference of the trunk of a standing tree. The measurement is taken at 4.3 ft. from the highest ground surface at the base of the tree.

Firebreak: an area where all the vegetation has been removed in order to stop a wildfire

Fire danger adjective: standard rating of the fire danger that includes Low, Moderate, High, Very High, and Extreme

Fire regime: the pattern and frequency of wildfire occurrence in an area

Forest health: condition of a forest stand based on resiliency, productivity, and sustainability

Fuel model: a standard description of available natural vegetation, including dead and down woody material that is available to burn, distinguished by amount and arrangement.

Geographic Information System (GIS): a system of hardware and software for storing and displaying geographical information

Hazard: a source of harm

Invasive plants: non-native species that can have an adverse effect on the ecology of the area

Ladder fuels: intermediate sized vegetation that provides continuity allowing fire to spread from the surface into the crowns of trees

Mitigation: the act of reducing or alleviating the severity of the hazard

Mulch: shredded or chipped woody material

Noxious weeds: plants that are considered harmful

Prescribed burning: an intentionally set controlled fire intended to reduce wildfire hazard

Regeneration: new plant growth after the act of cutting or destroying plant material

Risk: the probability of harm if exposed to a hazard

Safety Zone: the first 30 feet from the structure or to property line, whichever comes first.

Slash: the woody debris resulting from cutting or removing trees or bushes

Snag: a dead, standing tree

Social trails: trails established from constant use, not established through trail construction

Stem: the main stalk of a tree or bush

Structural retrofit: adding to or updating building features or material in order to reduce the wildfire risk

Understory: the smaller trees and bushes growing under the canopy of trees

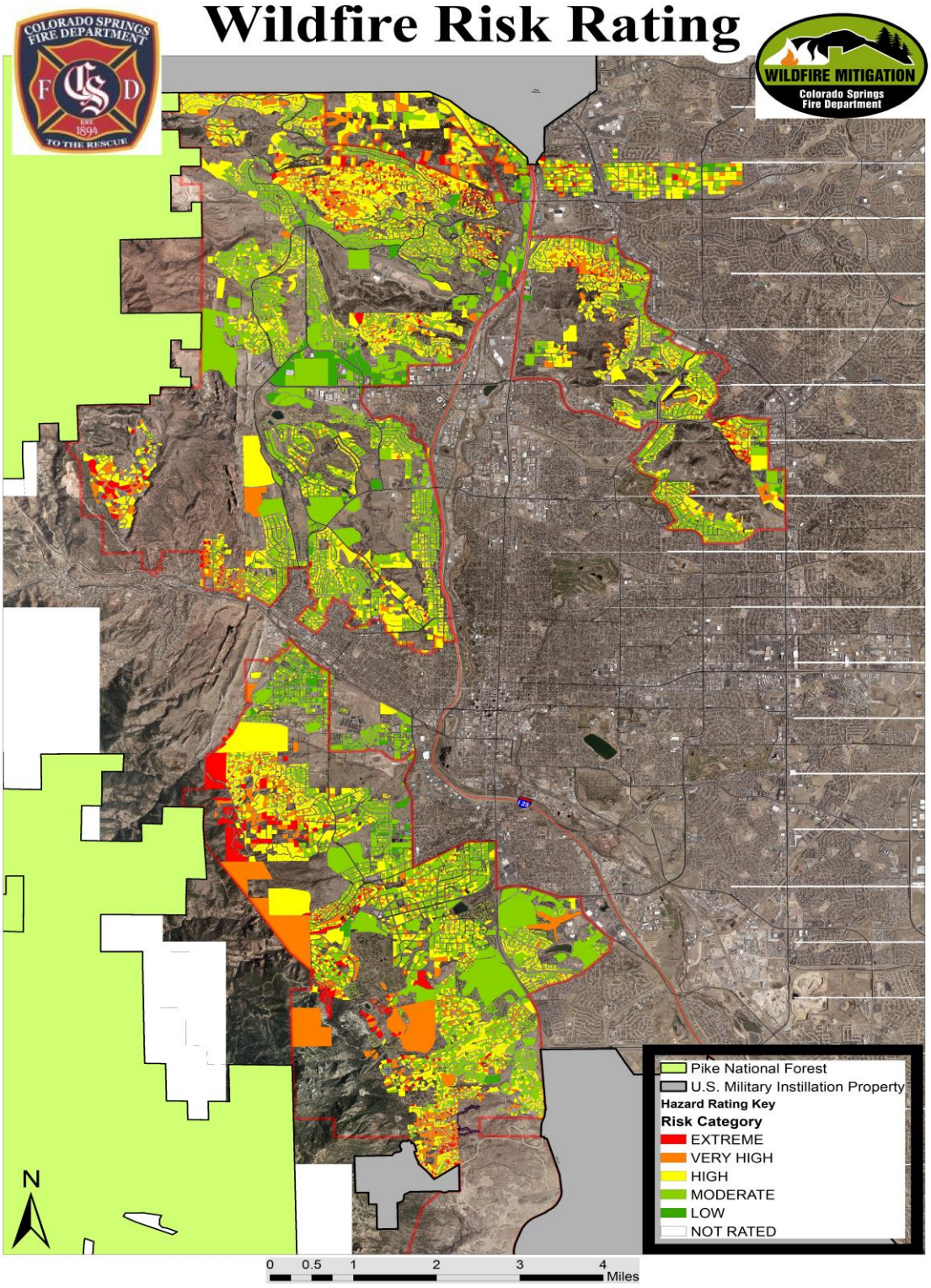
Wildfire Mitigation: to reduce the wildfire risk to life and property through education, outreach, fuels management and structural characteristics

Wildland Urban Interface: An area where communities and homes are adjacent to or intermix with natural vegetation. The combination of fuels, topography, property, and people constitute a risk of wildfire.

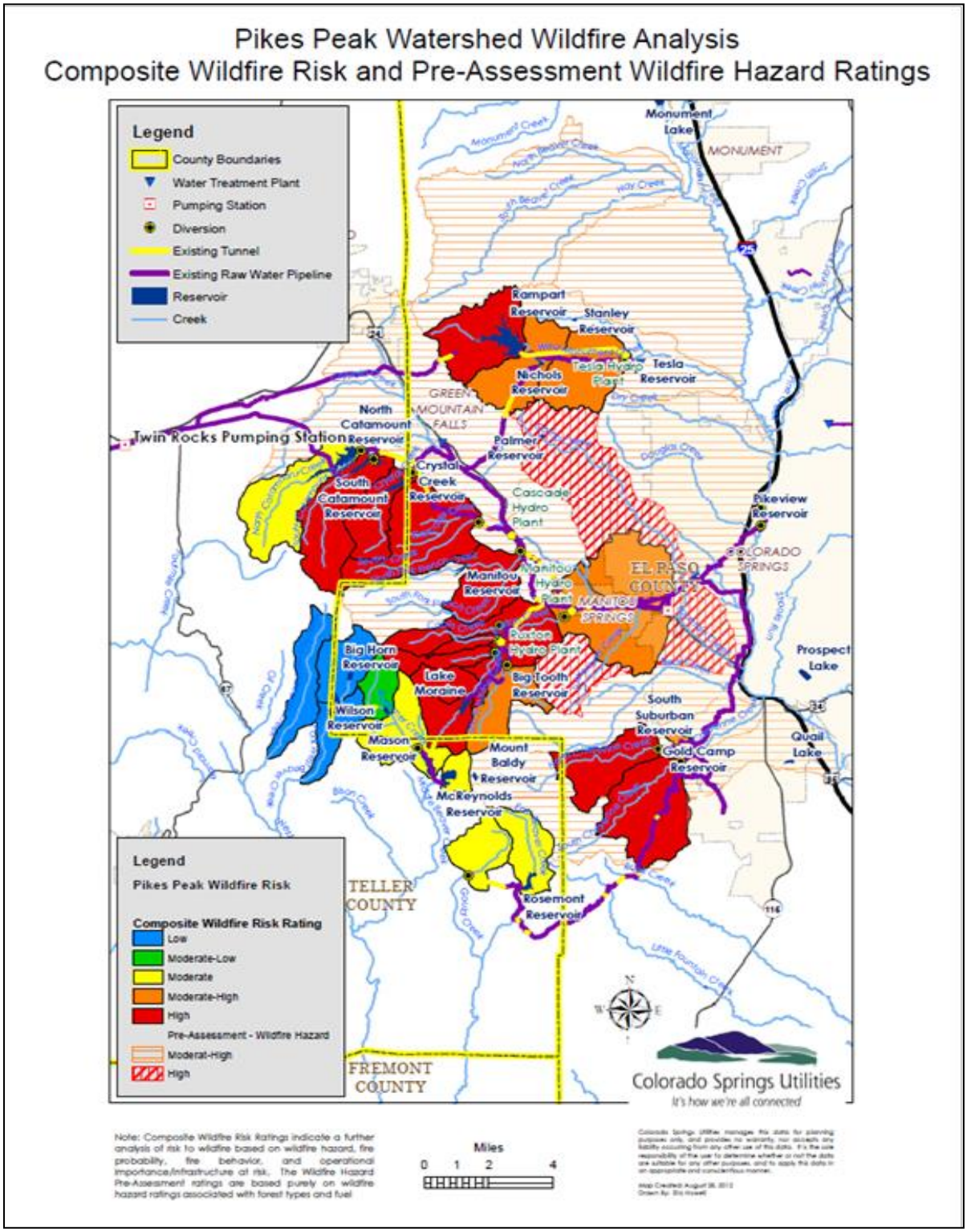
Appendix I: Partnering Neighborhoods

1. Austin Heights
2. Autumn Heights
3. Bear Creek
4. Big Valley
5. Bradford Heights
6. Broadmoor
7. Broadmoor Downs
8. Broadmoor Glenn
9. Broadmoor Hills
10. Broadmoor Park
11. Broadmoor Resort Community
12. Broadmoor Vista
13. Broadmoorings
14. Brookwood Estates
15. Camels Ridge
16. Canyons at Broadmoor
17. Cathedral Ridge
18. Cedar Heights
19. Chatham
20. Cobblestone
21. Columbia Road
22. Comstock Village
23. Constellation
24. Count Pourtales
25. Country Broadmoor
26. Country Club
27. Cragmor
28. Crescent
29. Discovery
30. Eagle Rock
31. Eaglepointe Townhomes
32. Erindale Heights
33. Erindale Park
34. Erindale Place
35. Erindale Topaz
36. Falcon Estates
37. Friendship
38. Garden Ranch
39. Gold Camp
40. Golden Hills
41. Greencrest
42. Hartsock
43. Highland Oaks
44. Highland Terrace
45. Holland Park
46. Hunters Point
47. Indian Heights
48. Ivywild
49. Kissing Camels
50. Kissing Camels Townhomes
51. La Bellezza
52. La Posada del Sol
53. La Strada
54. Lower Broadmoor Bluffs
55. Majestic
56. Mayhurst
57. Mesa
58. Mesa Crest Grove
59. Mesa Point
60. Midland/Bott
61. Mission Ridge
62. Morning Light Terrace
63. Mountain Oaks
64. Mountain Shadows
65. North Cheyenne Canon
66. Northface
67. Oak Valley
68. Oak Valley Ranch
69. Oakmont
70. Old Star Ranch View
71. Overlook Colony
72. Panorama
73. Pebblewood at Pinecliff
74. Peregrine
75. Perfect View
76. Pine Creek Estates
77. Pine Hill at Erindale
78. Pine Terrace at the Broadmoor
79. Pinecliff
80. Pinecliff Townhomes
81. Pinon Valley
82. Pleasant Valley
83. Pointe at Cheyenne Mountain
84. Ptarmigan Townhomes
85. Pulpit Rock
86. Quail Ridge Point
87. Raven Hills
88. Ravencrest Townhomes
89. Reed Ranch
90. Rustic Hills
91. Sanctuary at Peregrine
92. Signature Point
93. Skyway
94. Skyway Heights
95. Sondermann
96. Southface
97. Spires
98. Spring Grove
99. Spring Lake
100. Springs Canyon
101. St Andrews
102. Star Ranch
103. Stonebridge
104. Stratton Forest
105. Stratton Pines
106. Stratton Preserve
107. Sunset Mesa
108. Suntide
109. Tamarron
110. The Courtyard
111. The Greens
112. The Park
113. The Preserve
114. The Villas at University Park
115. Three Eagles
116. Thunderbird Estates
117. Top of Skyway (TOSHA)
118. Tuscany Villas
119. Uintah Bluffs Place
120. University Bluffs
121. University Park
122. Upper Broadmoor Bluffs
123. Valley at Erindale
124. Villa de Mesa
125. Village at Peregrine
126. Village at Skyline
127. Vista Ridge
128. Woodbridge
129. Woodmen Oaks
130. Woodmen Oaks Estates
131. Woodmen Valley
132. Woodstone
133. Yorkshire
134. Erindale at Cottonwood Creek
135. Broadview Terrace
136. The Retreat at Kissing Camels
137. Alpine Glen
138. Bella Collina
139. Old Broadmoor Condos
140. Chase Point
141. Stage Station
142. Victoria Park

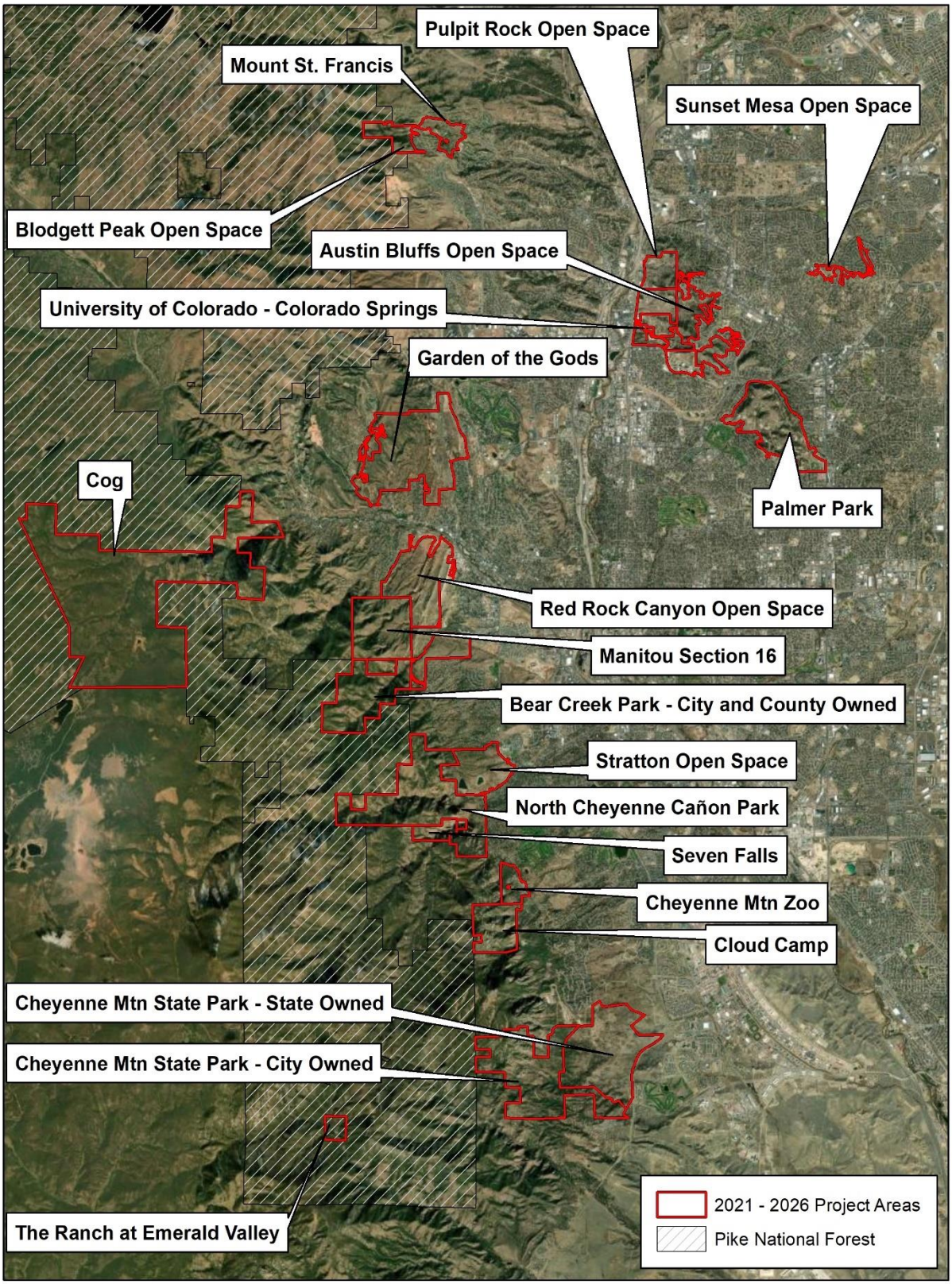
Appendix II: Wildfire Risk Rating Map



Appendix III: Wildfire Mitigation Stewardship Agreement



Appendix IV: 2021-2026 Project Areas of Opportunity



Appendix V: Free Neighborhood Chipping Program Flyer

WILDFIRE MITIGATION
COLORADO SPRINGS FIRE DEPARTMENT

NEIGHBORHOOD CHIPPING

You Cut and Stack; We'll Chip and Haul

Getting Started

- Your neighborhood must be within the City of Colorado Springs and identified as being at risk for wildfire. Find your address at: coloradosprings.gov/wildfiremitigation or call (719) 385-7342 for assistance.
- Participants MUST attend a neighborhood meeting or have an onsite consultation before the chipping date.
- Select a neighborhood representative to sign a stewardship agreement.
- A minimum of 12 addresses are required to participate.
- Submit a list of participating addresses at least 1 week prior to the chipping date or participants can sign up online at: coloradosprings.gov/wildfiremitigation.

What's Acceptable

- Piles only of woody limbs and branches, up to 9'' in diameter.
- No construction or building material.
- No trash, weeds or yuccas.
- No root wads, dirt or rocks.
- No grass clippings.
- No bags of leaves or pine needles.
- Piles must be clear of nails and wire.

Pile Guidelines

- Piles must be stacked curbside by 8:00 am Monday morning during your designated chipping week.
- Piles must be stacked neatly with ends facing the road.
- Piles must be within 5' of the roadway.
- Please limit pile size to 5'x 5' x 5'. No limit to the number of piles.
- Please do not combine piles with neighbors or haul material in from other neighborhoods.
- Do not tie or band piles.

For more information visit coloradosprings.gov/wildfiremitigation

"Sharing the Responsibility"