

**Wildfire Hazard Mitigation Plan**  
***Ken-Caryl Ranch Community and Open Space***



**Prepared for:**

**Ken-Caryl Ranch Master Association**

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Jefferson County, Colorado  
Sections 25, 26, 27, 35, and 36 of  
Township 5S, Range 70W;  
Sections 1, 2, 12 of  
Township 6S, Range 70W;  
Sections 5 & 6 of  
Township 6S, R69W;  
Sections 30 & 31 of  
Township 5S, R69W  
Including 4800 acres of Open Space

This wildfire mitigation plan has been prepared at the request of the Ken-Caryl Ranch Master Association (KCRMA) to guide their forest management activities, which they will voluntarily apply on Ken-Caryl Ranch Open Space land. This plan was developed using the Colorado State Forest Service and Jefferson County standards for wildfire hazard mitigation plans.

*Approved by CSFS Forester:* \_\_\_\_\_

As the representative of KCRMA, I have reviewed this wildfire mitigation plan, which has been prepared at my request to guide KCRMA's stewardship management activities, and KCRMA will voluntarily apply them on its property. I believe the management recommendations in this plan are appropriate to meet KCRMA's goals and objectives, and will benefit natural resources on Ken-Caryl Ranch Open Space, in addition to protecting surrounding property from wildfire.

*Approved by KCRMA Representative:* \_\_\_\_\_

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## Property Characteristics

### Introduction

This Community Wildfire Mitigation Plan has been prepared for the Ken-Caryl Ranch communities located west of C-470 and the Dakota Hogback geologic formation. The “North Ranch” and “Valley” communities of Ken-Caryl Ranch are located between the Dakota Hogback on the east, and the foothills of the Front Range to the west. These areas are considered part of the “wildland-urban interface” (WUI) in Jefferson County. The “Plains” community and the Industrial District of Ken-Caryl Ranch, located east of C-470, are not addressed in this Plan, as the character and exposure, wildfire hazards, and mitigation needs are greatly different and more like an “urban” setting.

This Plan replaces the Ken-Caryl Ranch Community Wildfire Mitigation Plan developed in 2014 by the Colorado State Forest Service under contract to Ken-Caryl Ranch Open Space. That plan included a general wildfire risk assessment, wildfire mitigation measures that contain fuels management suggestions, actions to reduce structure ignitability, recommendations for community outreach and education, in addition to planning and preparation for a wildfire event. Specific wildfire mitigation activities (fuels treatments) on Ken-Caryl Ranch Open Space (KCROS) lands have been included in the most recent revision (2015) of the KCROS Forest Management Plan (FMP). This Community Wildfire Mitigation Plan is a revision and updating of the 2014 plan and will include relevant concepts from that plan along with new information.

The Ken-Caryl Ranch Community became a Firewise Community in July 2016. In order to be “In Good Standing” with the National Fire Protection Association, the equivalent of one volunteer hour (currently an estimated value of \$24.14) per residential dwelling unit must be invested in wildfire risk reduction activities annually. Activities that count towards this include collaborative efforts between residents and forestry or fire professionals, conducting meetings or educational workshops for residents, making improvements or performing maintenance around homes, reducing risk in the home ignition zones, and community focused projects such as participation in national Wildfire Community Preparedness day, fuelbreak thinning and maintenance, and fuels reduction in open space areas.

This Community Wildfire Mitigation Plan should be reviewed and updated regularly by the Ken-

Caryl Ranch Community, to determine progress on addressing wildfire hazards and new issues or opportunities that have become known since the last plan update. Fuels reduction and other wildfire mitigation recommendations in other planning documents should be considered when updating the Community Wildfire Mitigation Plan.

## Coordination with Other Plans

In September 2006, a Community Wildfire Protection Plan (CWPP) was completed by the Jefferson County Sheriff's Office for the portion of the West Metro Fire Protection District located west of C-470. This CWPP covered seven communities, including Ken-Caryl Ranch. The CWPP was developed to evaluate community wildfire risk, and to recommend activities to reduce risk through hazardous fuels management and other mitigation actions. The West Metro CWPP found that Ken-Caryl's North Ranch and Valley communities were a moderate risk for wildfires, primarily because of grass and shrubs fuels near structures. General recommendations for wildfire mitigation activities were included within the CWPP, particularly the creation of "defensible space" around private homes and community fuelbreaks. Implementation of the CWPP's recommendations is voluntary, and normally occurs when a community takes on the responsibility for accomplishing the needed activities.

Ken-Caryl Ranch Open Space has a Forest Management Plan (FMP) for its lands located west of the North Ranch and Valley communities. The FMP was originally prepared by the Colorado State Forest Service in 2006, and contained recommendations for fuelbreaks and forest management activities within the northwest portion of the Open Space lands. KCROS implemented several of these recommended activities over the past 9 years, but did not complete all the originally planned areas. The FMP was revised in 2015 to update the vegetation conditions, progress of the previous management activities, and to develop an updated set of recommended projects. Included in the updated list of recommended projects were: maintenance and expansion of fuelbreaks in the northwest portion of the Open Space; continued maintenance of currently mown fuelbreaks along trails and roads on Open Space lands around the North Ranch and Valley communities; and removal of other native fuels within greenbelts as needed during routine maintenance activities. Most of the recommended projects have been completed and now require continued maintenance to remain effective fuels mitigation.

## Location

Ken-Caryl Ranch is a primarily residential development located in Jefferson County, Colorado, in the southwestern part of the Denver Metro area. A portion of the community with a mixture of residential and commercial properties is located east of the Dakota hogback formation and C-470 highway. The portion of the community west of the Dakota hogback is a clustered residential development in two sections – the North Ranch and Valley communities. Ken-Caryl is surrounded by Open Space areas, including 2500 acres of Ken-Caryl Ranch Open Space

(KCROS) lands west of the residential community referred to as the Foothills Open Space. There are additional KCROS lands (the Valley Open Space) interspersed within the residential community and laced with trails. There are two larger open space areas known as the North Hogback Open Space and the South Hogback Open Space, partly open to the public, between the community and C-470. The rest of Ken-Caryl Open Space trails are for residents only. There are about 45 miles of trails in Ken-Caryl Open Space, with some extending from the Foothills Open Space to the Valley Open Space and others serving as greenways, spur trails, and connectors within the community. Within the boundaries of Ken-Caryl Ranch are over 4,800 acres of Open Space. There are over 2000 homes in the communities west of the Hogback. In addition to the homes, there are other community facilities with associated parking including the Community Center, the Equestrian Center, the Manor House, and the Bradford Pool.

The Foothills Open Space property discussed in this plan is located within Sections 25, 26, 27, 35, and 36 of Township 5 South, Range 70 West, and Sections 1, 2 and 12 of Township 6 S, Range 70 W. The approximate UTM coordinates of the site are Zone 13S, 484350N, 4379700E.

The primary access to the Foothills Open Space property can be reached by driving west on Highway 285 from Denver. From the intersection of C-470 and Highway 285, go south on C-470 for 4.5 miles. Exit at Ken-Caryl Avenue and turn right (west) at the bottom of the ramp. Proceed for 0.2 miles, and bear right onto Valley Parkway. At this point, Drive 1.0 miles, and bear left onto Valley Parkway. After 0.1 miles, turn right onto Mountain Laurel drive, and another right onto Manor House Road. Before reaching the parking lot for the Manor House Restaurant, turn right onto a dirt road. This road is the primary vehicular access to the Open Space areas, and is commonly known as the Manor House Trail. Fuelbreaks installed in the Foothills Open Space can be partly accessed via this trail by firefighters. Vehicular access to other portions of the Open Space lands is open to Ken-Caryl staff via agreements with adjacent landowners, but is somewhat limited. Access into much of the forested areas in the Open Space is primarily via Ken-Caryl trails.

## General Description of Environmental Conditions

The Foothills Open Space lies to the west of the residential development. The easternmost portion of the Open Space is at the edge of a valley and is composed of grassland on flat-to-moderate slopes. The western side of the property is considered part of the foothills of the Front Range, and the terrain is steeper and more rugged. Vegetation on the western three-fourths of the property is classified as a lower montane woodland, with drought-resistant, shrubby vegetation on the south sides of hills and heavy timber on the north sides of hills. A number of drainages run from the top of the Open Space property east and into the valley.

The elevation of this property ranges from about 6,000 feet to 6,700 feet. Soils are sandy to clay loam with a moderate potential for erosion. The climate of Ken-Caryl is semi-arid with dry

summers and mild winters. Precipitation averages 15 inches annually with average annual snowfall of 60 inches. The graph below summarizes the annual climate data for a nearby location similar to Ken-Caryl.

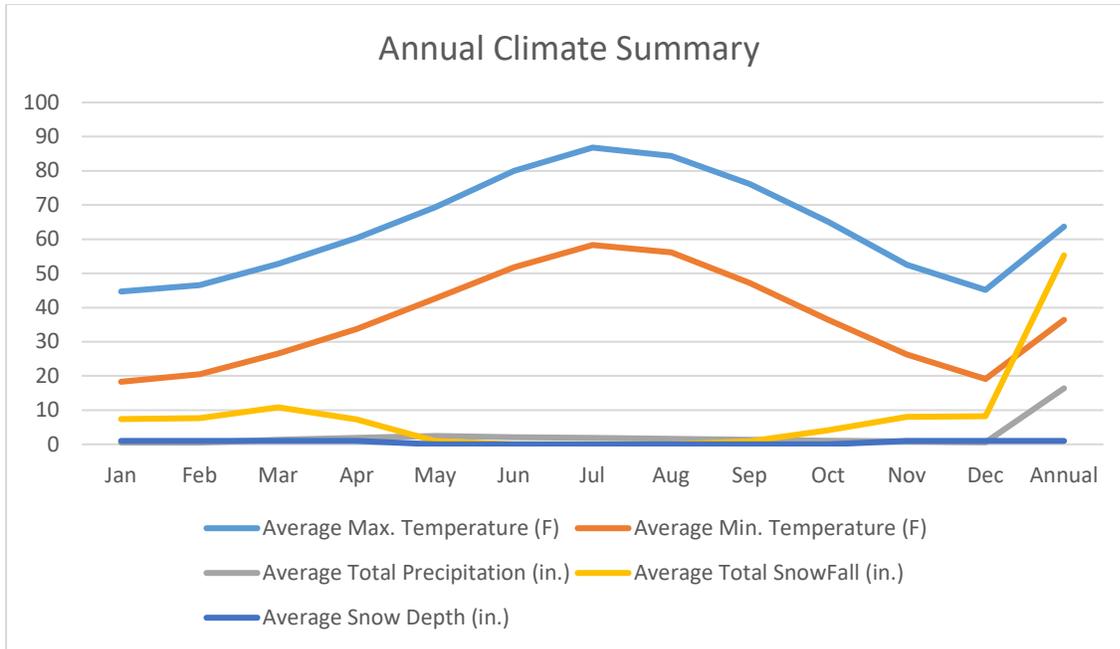


Figure 1 No climate data exists for Ken-Caryl specifically. This data comes from a nearby Lakewood weather station.

Natural vegetation within the area is predominantly native grasslands, with shrubs and trees occurring along drainages, streams, and slopes of the Dakota hogback formation. Grasses includes species such as smooth brome (a non-native), crested wheatgrass, orchard grass, wild rye, Timothy grass, and Kentucky bluegrass. Shrubs include Gambel oak, skunkbush, mountain mahogany, rabbitbrush, and several types of willow along streams. Cottonwood (plains and some narrowleaf) and willow trees occur along streams and ponds. Russian olive (a non-native, invasive species) is found in some areas of otherwise native vegetation, and is probably due to residential landscaping in the area. Ponderosa pine and Rocky Mountain juniper are found occasionally, especially in the areas along the Dakota Hogback and in the lower foothills area. Most of the community does not directly adjoin native vegetation, except where houses or community buildings lie next to the parks, green belts or greater areas of open space.



Some of the native grasses found in the Open Space.

Irrigated grass lawns are common in both private residences and Ken-Caryl facilities, with varying amounts of both evergreen and deciduous shrubs and trees both in the lawns and in designed planting areas. Planting areas have a range of ground cover and weed control, including potentially flammable materials of wood chips and bark mulch. Trees and shrubs are maintained to different levels of condition by the homeowners. Firewood storage occurs in and around residences, as determined by residents' preferences. However, it is recommended that firewood never be stored in direct contact with the home.

## Wildfire Risk Assessment

### Colorado Wildfire Risk Assessment Summary

The Colorado Wildfire Risk Assessment Portal (CO-WRAP) generates reports on wildfire risk to aid in prevention planning. The CO-WRAP report is broken up into sections such as WUI Risk Index, Wildfire Risk, Wildfire Threat, and more. This report only contains the aforementioned sections, though the entire report is available in Appendix 5 of the 2015 KCROS FMP.

The Wildland Urban Interface (WUI) Risk Index is a metric that assess potential impact of a wildfire on people and their homes. As noted by the map on the following page, the houses on the eastern edge of the Foothills Open Space property are at a higher risk, simply due to the amount of homes situated here and also the amount of and proximity to the fuel loads in the Open Space area to the west. If a wildfire were to occur in this area, potential life/safety risk and property loss could be catastrophic. Depending on the amount of winter moisture, wildfires can occur during any month of the year in the Ken-Caryl community, especially when the fine fuels like grasses are dry and cured.



*The community is part of the "WUI" or wildland urban interface.*

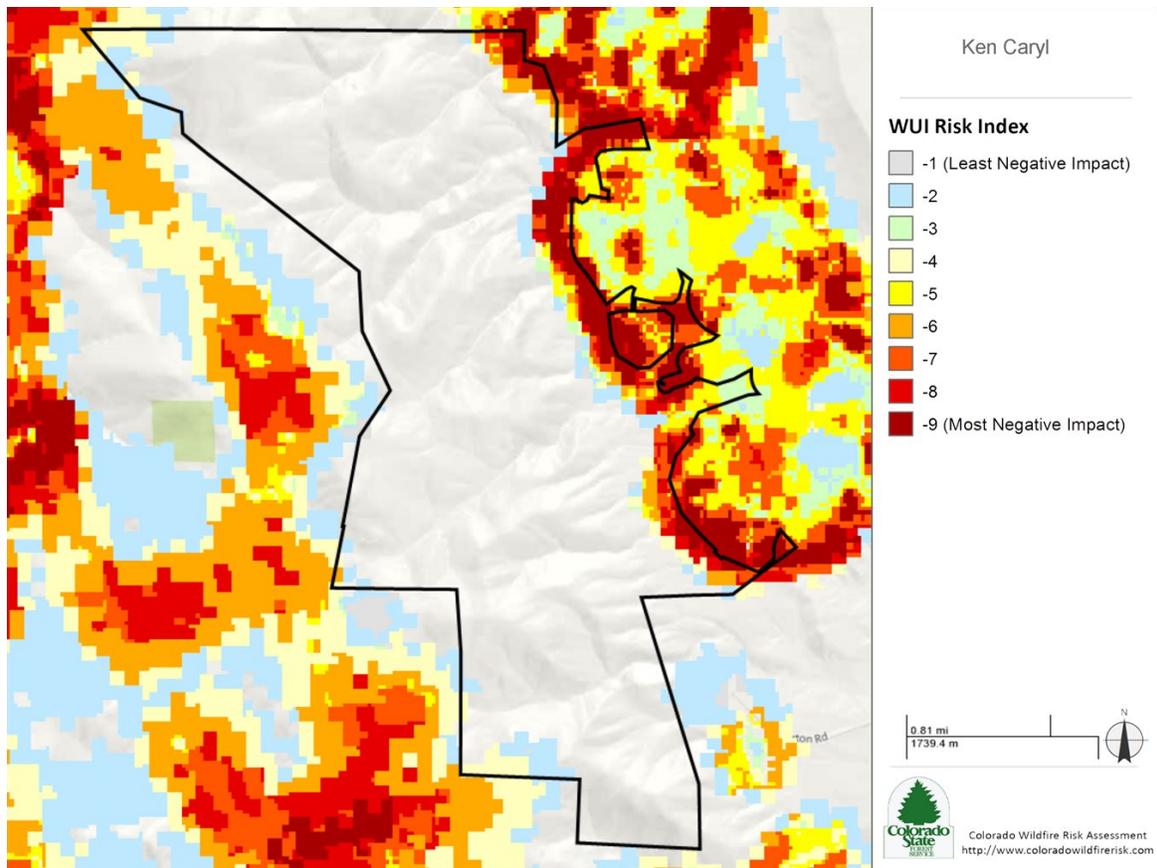


Figure 2 Housing density and flame height are taken into consideration to generate risk classes. Risk is defined as “least negative impact” in the Foothills Open Space (within black boundary line) because there are no houses.

Fire Intensity Scale “specifically identifies where significant fuel hazards and associated dangerous fire behavior potential exist.” Fuels, weather, and topography influence Fire Intensity Scale. Almost half of KCROS is considered “High” intensity which means “large flames, up to 30 feet in length...significant potential for harm or damage to life and property.” It is difficult and often ineffective to fight fires at this intensity.

FIS Class	Acres	Percent
Non-Burnable	90	3.7 %
1 (Lowest Intensity)	23	0.9 %
2 (Low)	441	17.9 %
3 (Moderate)	529	21.4 %
4 (High)	986	40.0 %
5 (Highest Intensity)	397	16.1 %
<b>Total</b>	<b>2,465</b>	<b>100.0 %</b>

Figure 3 FIS conveys fire danger. Most of KCROS is “Moderate” to “High” danger.

Unlike the WUI Risk Index Map above, the Fire Intensity Scale output, (map on next page and table to the left) does not include houses as potential wildland fire fuel. It shows the neighborhoods of landscaped homes as unburnable, which is unfortunately not realistic. The map below illustrates the distribution of Fire Intensity Scale only across the wildland/Open Space portion of the Ken-Caryl property.

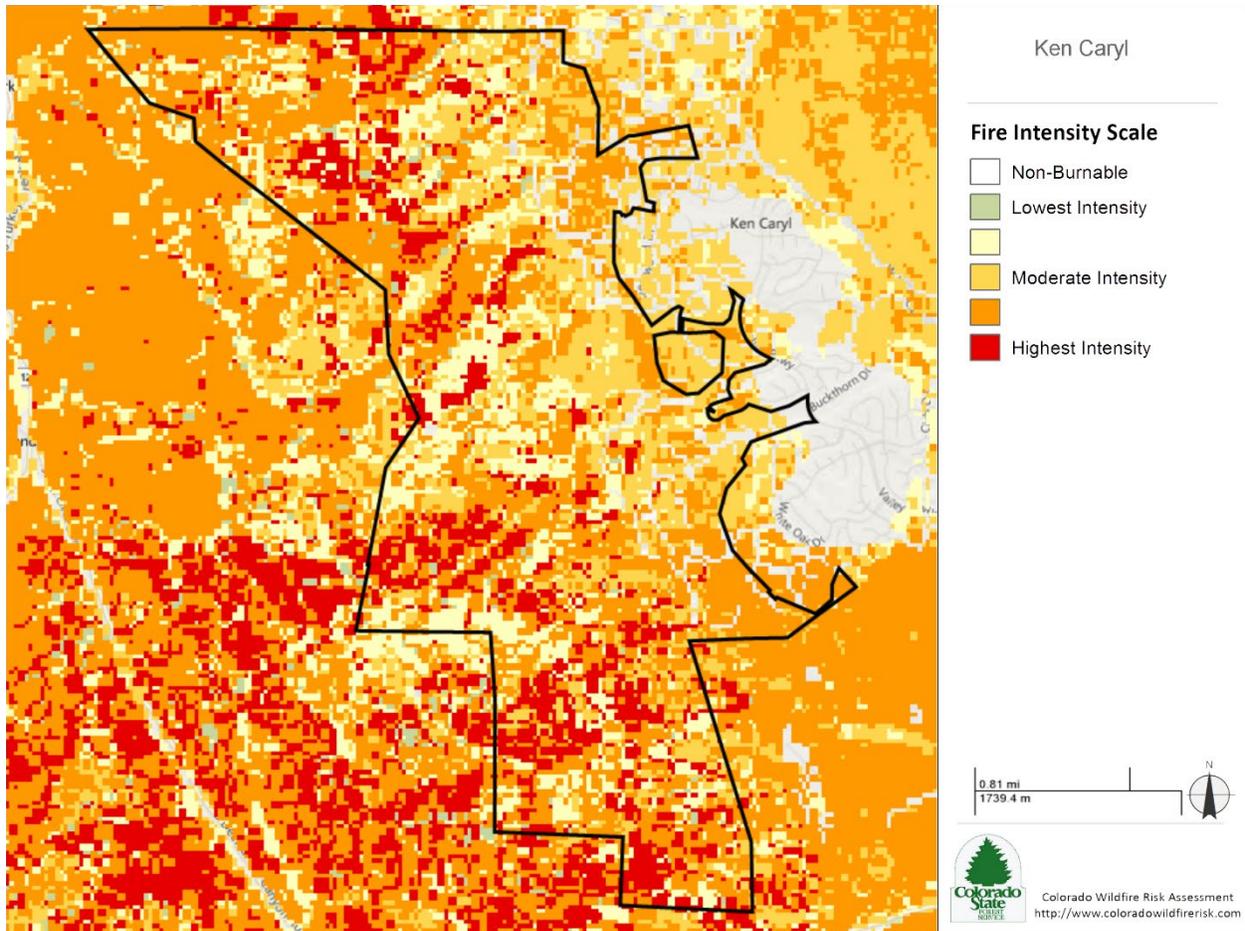


Figure 4 Fire Intensity Scale identifies the magnitude of potential fire in areas with wildland fuels.

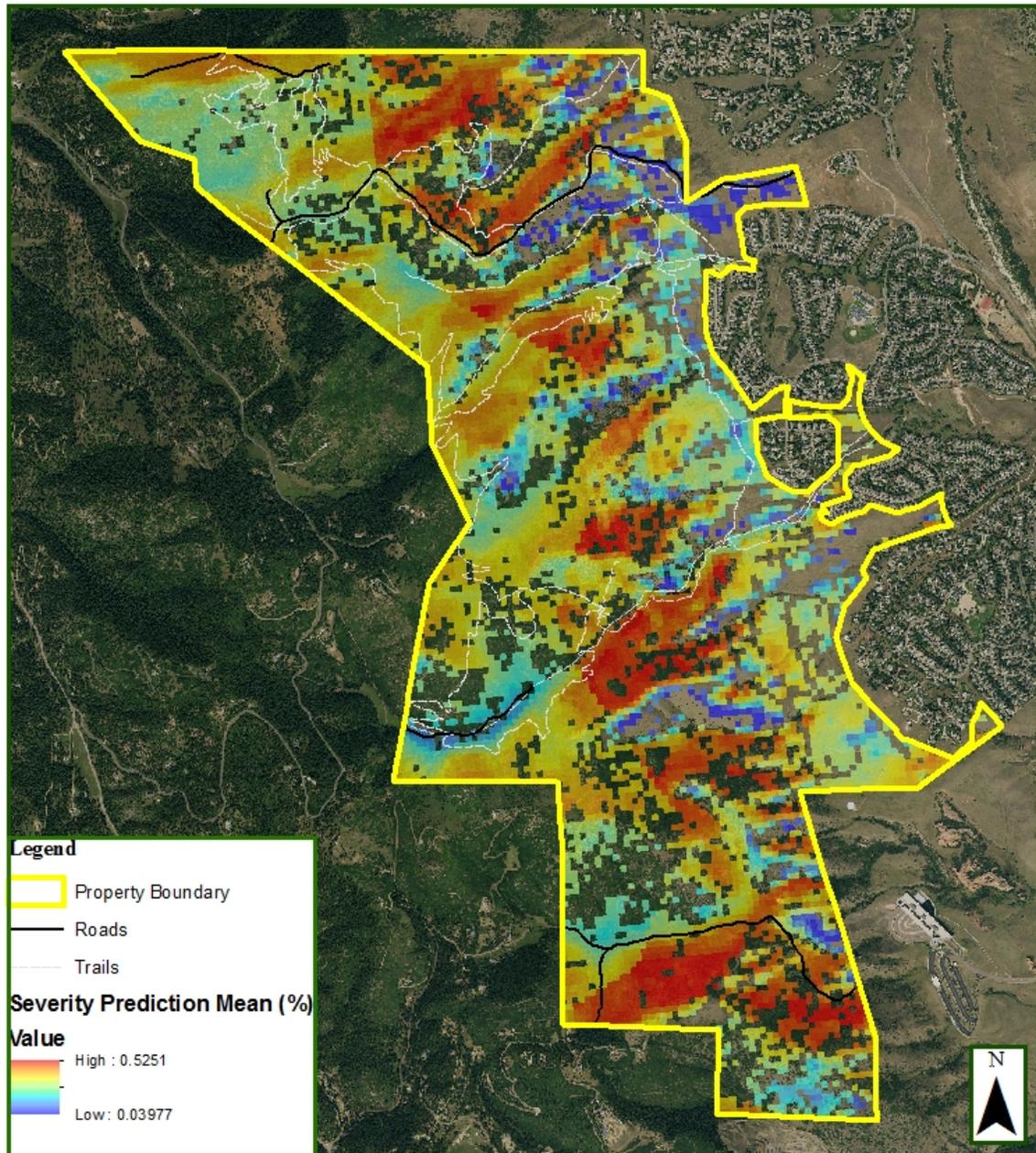
The eastern part of the Open Space property is full of fine fuels, such as grasses that are easily flammable and carry flame quickly. Some grasses allow flame heights of 12-25 feet. Grasses have a historically shorter fire return rate than forests (i.e. grasslands burn more frequently than a forest would); grass fires do not typically burn as intensely nor severely as forest fires.

### Severity Prediction Mean Percent

The Severity Prediction map is derived from a data package created by the U.S. Forest Service. Inputs of the map include live fuel, topography, climate, and fire weather data, which then is manipulated into a mean percentage of predicted wildlife severity. Severity is a function of how long a fire burns as well as the heat generated by the flames; severity also describes the immediate post-fire effects on soil, vegetation, and litter (Fire Intensity and Severity). The more severe a wildfire, the longer it will take to regenerate and the longer those impacts on the landscape remain, as in the case of the Hayman Fire.

Areas treated in the past 12 years are at a considerably lower risk for wildfire severity compared to areas that have not been treated. The vegetation removal and thinning operations performed reduce the fuels and the potential fire severity. See the map image below:

# Ken Caryl Open Space Wildlife Severity Prediction



0 700 1,400 2,800 4,200 5,600 Feet



Colorado State Forest Service  
Golden Field Office  
Coordinate System: NAD 1983 UTM Zone 13N  
Projection: Transverse Mercator  
Date: 11/07/2018

## Past Treatments

Since the management plans of 2008 and 2015, work was completed in the Tincup, Shaffer and Beacon Hill areas of the Open Space. Approximately 60 acres in these sections have been treated. Past treatments include fuelbreaks in Gambel oak, ponderosa pine, and mixed conifer.



*Past treatments of oak have been successful for reducing fire risk, though work needs to continue to fully eradicate the oak regeneration.*

The 2015 management plan revision emphasized defensible space and firewise landscaping around private residences and community buildings within the North and Valley communities of Ken-Caryl Ranch. For reference, defensible space is the creation of an area in which firefighters have the opportunity to protect structures. Defensible space breaks up fuel continuity, and reduces the overall wildfire hazard. At a minimum, defensible space should be created following the current CSFS guidelines found within the publication “Quick Guide Fire 2012-1, protecting Your Home from Wildfire: Creating Wildfire-Defensible Zones.” A link to this publication is in the Bibliography section of the plan. The CSFS defensible space recommendations will be updated soon to include more information on reducing wildfire risks in the Home Ignition Zone (HIZ). The Firewise USA publication “Reducing Wildfire Risks in the Home Ignition Zone” is a good source for additional recommendations to implement in order to increase the chance of a home surviving a wildfire. Given the large number of homes in the community, there will not be a fire engine to defend every home in the event of a large wildfire. Individual homeowner actions to reduce risks in the HIZ may help protect their home with little or no intervention from firefighters if the community embraces wildfire risk reduction.

## Wildfire Mitigation Actions

### Firewise Landscaping

Firewise landscaping is an easy preventative measure to take. It can be achieved by considering the recommended lists of plants and grass seed mixes for Colorado. Practices such as clearing dead brush removing dead branches of trees or shrubs, and mowing grasses also can help protect against the spread of wildfire. Appropriate irrigation schedules are another step to prevent plants from becoming overly dry during the growing season. Deciduous plants are less flammable, generally, than evergreen plants (i.e. conifers or other such shrubs) and cover plants. Controlling highly invasive plants such as cheatgrass (*Bromus tectorum*) helps reduce not only fire risk, but also supports native plant growth. Flammable ground covers like mulch should be replaced with rocks or other non-flammable material to prevent fire spreading to homes. There is a tax incentive for homeowners who implement wildfire mitigation measures in the wildland urban interface. Current information concerning Firewise landscaping as well as information about tax credits for wildfire mitigation can be found in the links in the Bibliography at the end of the report.

### Home Ignition Zone

The Home Ignition Zone (HIZ) includes the structure itself and extends at least 100 feet from the edge of the structure. Both the house and the landscape within 100 to 200 feet plays an important role in whether the structure survives a wildfire. To prevent sources of ignition, homeowners should perform regular maintenance activities such as cleaning gutters and clearing material that may fall around decks or on roofs (e.g. leaves piling up). Storing wood or building materials outside is permissible, though it should be stored 30 feet away from any other structures. Closed structures (like a woodshed) are ideal for storing wood to protect it from contact with embers or direct flames. Flammable items like outdoor furniture should be stored away from decks and homes when fire danger is high.

Structures can be made more fire resistant by using closed building eaves, installing proper screens for vents, screening or enclosing under decks, using fire resistant material for decks, using double-pane tempered glass in sliding glass doors and multi-paned tempered glass in windows, and replacing any non-Class A roofing materials with Class A fire rated roofing material. Wooden fencing should not be attached to the house. Within 0 to 5 feet of the home, the Immediate Zone, non-flammable components should be installed around the perimeter instead of flammable mulches. Shrubs and trees should be removed from this area. No branches should contact the home and tree limbs that overhang into this area should be trimmed back. The Intermediate Zone is 5 to 30 feet from the edge of the home.

Recommendations for the Intermediate Zone include spacing trees to have at least eighteen feet between crowns with the distance increasing with slope percentage. This is stricter than defensible space guidelines. Other recommendations for this zone are similar to defensible space guidelines. In the Extended Zone, from 30 to 100 feet, the HIZ recommendations are

consistent with defensible space guidelines for Zone Two (see below) with some minor differences in recommended distances between tree crowns.

## Defensible Space

Jefferson County land use regulations address the creation of defensible space for new homes or additions of greater than 400 square feet in the “Wildland Hazard Overlay Zone.” These regulations can be used as minimum guidelines to address wildfire hazard in the North Ranch and Valley areas for existing homes as well. Defensible space is “the natural and landscaped area around a home or other structure that has been modified to reduce fire hazard.” This is a critical step for preventing a total loss of property and/or life as well as reducing the spread of flames from one structure to another. The Colorado State Forest Service describes defensible space in three zones:

- Zone One
  - 0-30 feet from the structure
  - Non-irrigated landscaping within this zone (i.e. rockscape) is preferred
  - Some conifer trees are allowed, though at least 10 feet from other trees
  - Trees or shrubs should be pruned to 10 feet or 1/3 of its height
  - Remove all dead or dying material seasonally
- Zone Two
  - 30-100 feet from the structure (if applicable), though this distance is extended downhill if on a slope and especially in dense vegetation
  - Tree crowns should still be maintained at least 10 feet apart
  - Trees and shrubs should be pruned to 10 feet or 1/3 of its height
  - Wood-based mulch should still not be used
- Zone Three
  - 100+ feet beyond the structure (if applicable)
  - Continue to reduce limbs that extend to the ground and dead material
  - Continue to maintain space between tree crowns

Defensible space may be adjusted for slope or special species characteristics. For example, Gambel oak may require more aggressive treatment and some deciduous species like aspen are not as concerning. It is best to consult a forester or fire personnel with wildland experience for help with defensible space or HIZ recommendations. Whether we refer to it as defensible space or the Home Ignition Zone, the best way to protect structures on a property is to extend treatments a distance of 200 feet. Many homeowners do not own enough property to accomplish this. In some cases, the neighboring property line impinges on Zone One or the Immediate Zone. If a neighboring home is within 100 feet, it is important to work with the neighboring property owner to reduce shared risk since the properties share defensible space. If the adjacent property in the defensible space or HIZ is community Open Space, Ken-Caryl allows private landowners to mow native grasses on Open Space property to a width of ten feet

from their property boundary. This practice should be actively encouraged to help homeowners create effective defensible space. Homeowners do not need to request permission to mow the ten foot buffer. In addition, Ken-Caryl sponsors defensible space assessments by the Colorado State Forest Service for homeowners adjacent to Open Space who request this assistance.

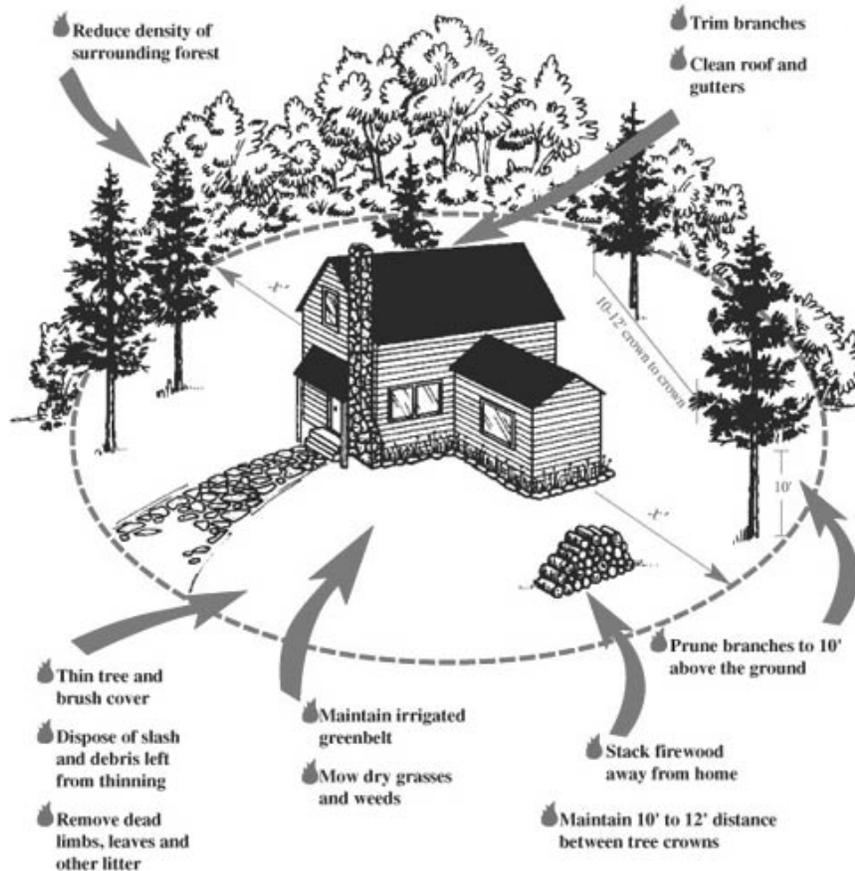


Figure 8 Making sure the home is clear of debris as well as the area surrounding the home is paramount for reducing risk of loss.

## Community Mitigation Activities

Community-wide clean up days could be used to satisfy the Firewise Community standard of performing one volunteer hour annually per residence while mitigating vegetation around their homes. Engaging the community in involvement and/or support in the grant proposal or application process could also provide more cross-community mitigation. Other community mitigation activities include:

- Information distributed through HOA mailings
- Articles in Ken-Caryl community publications, especially during fire season

- Providing up-to-date information and resources on Ken-Caryl Ranch Open Space and Master Association websites and community locations
- Presentations and workshops concerning fire prevention and protection at community events
- Participation in nationally promoted events such as the annual National Wildfire Preparedness Day usually held in early May

Emergency planning and preparation are also critical to having a fire-ready community. Residents should sign up for the Code Red notification system and follow West Metro Fire Rescue, the Jefferson County Sheriff's Department, and Jefferson County Office of Emergency Management on Facebook and/or Twitter.

West Metro Fire Rescue uses the "Ready, Set, Go!" Program to engage the community. This is a national program that helps residents prepare for a wildfire event by being "Ready" for a fire, "Set" with situational awareness when fire threatens, and able to "Go" by acting early when a fire starts. West Metro has created customized "Ready, Set, Go!" brochures ready for distribution.

Being "Ready," means that the public is Firewise and has taken steps to prepare for fire; this is done through maintaining defensible space and using Firewise landscaping. Having emergency supplies and invaluable personal items at the ready in addition to escape routes and a plan of action are also highly recommended.

When "Set," the public has "situational awareness" of the wildfire risk and monitors for wildfires around the community. Again, residents should have emergency supplies and personal items ready to go in the case of emergency. Staying aware of the fire and having current information from local media and emergency personnel is also having situational awareness.

Finally, "Go" represents the action that residents should take when a fire threatens the community. This means following their personal wildland fire action plan. More information about the program can be found at:

<http://www.wildlandfirersg.org/Resident>

Official emergency routes and establishment of "shelter-in-place" sites for the community should be planned with the assistance of West Metro Fire Rescue and the Jefferson County Sheriff's Office. Evacuation route signs should be installed on established routes. The 2006 Community Wildfire Protection plan lists Ken-Caryl Avenue as the evacuation route for Ken-Caryl Ranch. The public should be made aware of the evacuation route, and any newly-established routes and shelter-in-place sites to use in their emergency action plans.

The West Metro CWPP should be reviewed and updated to reflect new information and advances in emergency planning and fire science. KCROS staff, the Firewise Board, and Ken-Caryl Ranch community representatives should partner with West Metro Fire Rescue and the

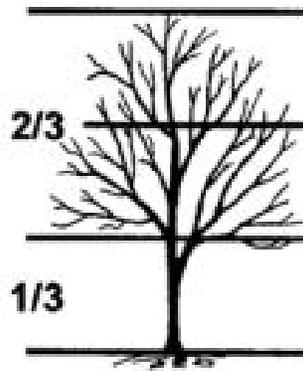
Colorado State Forest Service to develop collaborative mitigation plans. Ken-Caryl Ranch should also consider updating its Master Association Plan and Open Space Comprehensive Management Plan every five years to reflect the most current wildfire hazard information and the mitigation activities planned for the community.

## Fuels Mitigation Actions

The Ken-Caryl Open Space staff has taken excellent steps to ready the community for wildfire including mowing and thinning activities done throughout KCROS, and implementation of most of the highest priority forest health and wildfire mitigation recommendations in the 2014 FMP. Continued maintenance of trail corridors, cleanup of excessive dead wood in areas near homes, and hazard tree removal will help protect the community and provide an example of proactive action.

Educational outreach efforts within the community have been thorough. KCROS staff and the Firewise Committee do excellent work spreading the word about wildfire hazard and mitigation recommendations. In spite of the educational outreach, many homeowners choose to use landscaping more typical of an urban area. Continued work to encourage and improve upon mitigation measures would provide even more benefits for homeowners along the WUI boundary.

During a wildland fire, the abundant grasses in the Open Space would carry flames at a projected rate of 12-40 chains per hour (396-2,640 feet per hour) (CO-WRAP Assessment). For this reason, it is imperative to maintain grass height at no more than 4" from the ground along trail corridors. Fuelbreaks along roads and trails can be maintained by mowing during the growing season. Pruning tree limbs away from the ground up to 10 feet or 1/3 of the tree's height is also advisable in the fuelbreaks.



*Figure 9 This figure demonstrates the proper limb pruning height.*



*This home has shrubs planted very close to the structure and the grasses around the structure are not maintained.*

Shrubs and trees should not be in contact with buildings, as in the photo above. Trees should be spaced at least a distance of 10 feet in between crowns to make sure flames cannot carry between them.

The photo below demonstrates excellent mowing practices and better crown spacing; the grass is mowed out to extend into the natural area and the trees are far enough away from the home. A preventative course of action for this landowner would be to prune the conifers higher to reduce potential ladder fuels. More spacing between the crowns of the trees would also improve the defensible space. Continued maintenance of defensible space is necessary for continued hazard reduction over time.

Some of the homes in the WUI boundary north of The Manor House appear to follow good defensible space protocols. However, many homes in Ken-Caryl are less prepared for wildfire. Landscaping next to homes shows little consideration for defensible space, with shrubs and evergreen trees right next to structures. Communicating with WUI boundary homeowners who demonstrate less awareness and providing them with information would greatly benefit not only the people who live along the Ken-Caryl Ranch Open Space, but the entire community.



*This home demonstrates preventative measures against fire such as mowing the grasses.*

The current Forest Management Plan for KCROS expires in 2025. Much of the highest priority work has been completed. Over the next 6 years, completed fuelbreak and thinning operations in the Beacon Hill, Shaffers, Tincup, and Docmann Gulch areas should be maintained. These management activities will reduce fuels and improve the health of the forest. Manage the Foothills Open Space to reduce fuels, treat insect and disease problems, and slow the regrowth of Gambel oak in established fuelbreaks. There are continued needs for mowing, trail corridor maintenance and hazard tree removal in Open Space within the community. There is also an opportunity to work with homeowners bordering Open Space to treat hazardous fuels on Open Space in conjunction with homeowners who have done defensible space work on their own property. Final responsibility for reducing risk around the homes rest with the homeowners.

The highest risk to homes in the Ken-Caryl community is from house to house ignition. It can start with a surface fire in flashy fuels igniting a fence, deck, or firewood pile. More likely, it may occur when a crown fire in nearby wildlands under extreme conditions results in embers and firebrands carried on the wind igniting a home. Becoming a more fire-adapted community is critical. A large fire event like the Murphy Gulch Fire that burned over 3000 acres in 1978 would probably have catastrophic effects now that the Ken-Caryl Ranch is fully developed.

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- More information is available at <https://csfs.colostate.edu/wildfire-mitigation/>. The publications listed on the following page can be downloaded or viewed at the Colorado State Forest Service website: <https://csfs.colostate.edu/csfspublications/#wildfire>

# Wildfire Mitigation & Education

## Resources for Homeowners & Landowners

- [Are You FireWise? Notebook](#) (553 KB PDF)
- [Are You Plains FireWise? Notebook](#) (280 KB PDF)
- [Protecting Your Home from Wildfire: Creating Wildfire-Defensible Zones](#) – 2012 Quick Guide (738 KB PDF)
- [Fire-Resistant Landscaping](#) (192 KB PDF)
- [FireWise Plant Materials](#) (279 KB PDF)
- [Forest Home Fire Safety](#) (349 KB PDF)
- [Cheatgrass and Wildfire](#) (336 KB PDF)
- [Grass Seed Mixes to Reduce Wildfire Hazard](#) (150 KB PDF)
- [Home Fire Protection](#) (114 KB PDF)
- [Living with Fire](#) (2.1 MB PDF)
- [Wildfire & Insurance](#) (2.2 MB PDF)

## FireWise Construction

- [FireWise Construction: Site Design & Building Materials](#) – 2012 (1.3 MB PDF)
- [Decks](#) (505 KB PDF)
- [Roofing Materials](#) (782 KB PDF)
- [Siding](#) (831 KB PDF)
- [Windows and Glass](#) (388 KB PDF)

## Resources for Communities – Community Wildfire Protection Planning

- [Community Guide to Preparing & Implementing a CWPP – 2008](#) (8.6 MB PDF)
- [Community Wildfire Protection Plan Evaluation Guide](#) (809 KB PDF)
- [Community Wildfire Protection Planning: HFRA and Beyond](#) (1.5 MB PPT)
- [Community Wildfire Protection Plans: Guidelines for Implementation](#) (4.1 MB PDF)
- [CWPP Briefing Paper – May 11, 2005](#) (48 KB PDF)
- [CWPP Minimum Standards – REVISED 2009](#) (75 KB PDF)
- [Fuelbreak Guidelines for Forested Subdivisions & Communities](#) (611 KB PDF)
- [Leaders Guide for Developing a CWPP](#) (209 KB PDF)
- [Preparing a Community Wildfire Protection Plan – Handbook](#) (662 KB PDF)

## Post-Fire Rehabilitation

- [Insects and Diseases Associated with Forest Fires](#) (347 KB PDF)
- [Replanting in Burn Areas: Tips for Safety and Success](#) (385 KB PDF) – Feb. 2013
- [Soil Erosion Control after Wildfire](#) (6 MB PDF)
- [Vegetative Recovery after Wildfire](#) (188 KB PDF)
- [Restoring Colorado's Forests Fund](#) (200 KB PDF)