Crystal Lakes Property Owner Action Plan

2022 COMMUNITY WILDFIRE PROTECTION PLAN EXECUTIVE SUMMARY

NEXT STEPS FOR PROPERTY OWNERS TO REDUCE THE RISK OF WILDFIRE IN THE CRYSTAL LAKES COMMUNITY

Crystal Lakes Road & Recreation Association

Wildfire Risk

The Crystal Lakes community is at high risk for wildfires that can threaten property, lives, and livelihoods. Some areas of the community are at higher risk than others, and everyone has different risk factors that affect the ability of their home and property to withstand wildfires. Fire risk was mapped based on community input and scientific modelling. The full CWPP document and interactive maps can be found at <u>crystal-lakes.org</u>



Suppression Challenges





Extreme

High

Moderate

Evacuation Hazards



Home Ignition Zone Hazards



Goal

The guiding goal is for Crystal Lakes to become a fire-adapted community, which is a community consisting of informed and prepared citizens collaboratively planning and taking action to safely coexist with wildland fire.

Process

Individual Action

Property owners within the Crystal Lakes Fire Protection District (CLFPD) create defensible space around their homes, harden their homes, and plan for wildfire evacuations.

Neighborhood Action

Neighborhoods and CLRRA pool resources to educate neighbors, mitigate privatelymaintained roads, increase firefighter accessibility, and plan connected defensible space and landscape treatments.

Agency Action

Major land managers, government agencies, and local organizations work with property owners and each other to complete landscape-scale forest health and fuel mitigation projects that protect the community.



Property Owner Next Steps



Defensible Space

Create space around your home to protect it from flames and embers, and to create space for firefighters to defend your home.

Home Hardening

Build or update your house so it can resist flames and embers in case they do come in contact with your house.

Evacuation Preparedness

Create an evacuation plan with your family and neighbors. Pack go-bags so you are ready to leave immediately during an evacuation order.

Defensible Space

Home Ignition Zone 1 - The non-combustible zone 0-5 feet from your home

Start your work here - Remove ALL flammable material from 5 feet around your whole house. Mulch, wood fences, wood furniture, firewood, and plants should be removed. Everything in this area should not be flammable.

Home Ignition Zone 2 - The lean, clean, green zone 5-30 feet from your home

Keep grass mowed to under 4 inches. Remove all dead plants and woody materials. Any trees or shrubs should be healthy and spaced at least 10 ft apart. Prune trees up 6-10 ft and remove all material below the tree. Remove all junipers.

Home Ignition Zone 3 - The fuel reduction zone 30-100 feet from your home

Trees should be spaced 10 ft apart, measured at the closest branches. All material below trees like limbs and shrubs should be removed. Slash and flammable debris should be removed or relocated. This is a safe distance to store propane tanks and firewood piles.



Home Hardening Goal: Prevent your house from catching on fire

Low-cost actions:

B. Cover chimneys and stovepipe outlets with ½ inch corrosion-resistant metal mesh.

C. Minimize debris accumulation under and next to solar panels.

E. Cover vent openings with 1/16 inch corrosion-resistant metal mesh. Install dryer vents with metal flappers and keep closed unless in use.

G. Clear debris from roof and gutters regularly.

I. Install metal flashing around garage doors that goes up at least 6 inches on the door.

J. Use noncombustible lattice, trellis, or other decorative features.

K. Install weather stripping around and under doors.

L. Remove combustible materials from underneath, on top of, or within 5 feet of deck.

- M. Use noncombustible patio future.
- N. Cover all eaves with screened vents.
- O. Establish and maintain a 5-foot noncombustible buffer around the home.



Actions to plan and save for:

A. Use noncombustible siding and trim at least 2 feet up around the base of your home.

C. Use multipaned glass for skylights, not materials that can melt, and use metal flashing.

- D. Install a 6-inch vertical noncombustible surface on all gables above roofs.
- F. Install multi-pane windows and metal mesh screens. Use noncombustible window frames.
- G. Install noncombustible gutters, gutter covers, and downspouts.
- H. Install ignition-resistant or noncombustible roofs.
- I. Install 1-hour fire rated garage doors.
- K. Install 1-hour fire rated front and back doors.
- L. Use ignition-resistant or noncombustible decking. Enclose crawl spaces.
- N. Use noncombustible eaves.
- P. Replace wooden fences with noncombustible materials.

Evacuation Prep Goal: Be ready to leave when needed, safely, and with confidence

Plan

- Create an evacuation and emergency plan with your family. Discuss what will happen with kids, elderly family, and neighbors that may need assistance evacuating.
- Talk to the school, assisted living facility, or other places where family may be to see what their protocols are.
- Plan for evacuating pets and livestock. If you need extra time, always begin evacuating when you receive a voluntary evacuation notice.

Get Notified

• Sign your family up for emergency alerts at nocoalert.org

Pack and Prepare

- Prepare a go-bag with essentials clothes, snacks, water, emergency contact information, phone chargers, flashlight, etc.
- Include a printed checklist of necessary items around the house to take (medicines, essential documents, urgent pet supplies) and include their locations.
- Update the bag annually based on family needs extra pet food, infant formula, a few kids games, toiletries, batteries, masks, etc.



Resources

You must take action, but you do not have to do it alone

Colorado State Forest Service

Website: <u>csfs.colostate.edu</u> Phone: (970) 491-8660 Email: CSFS_FortCollins@mail.colostate.edu

Crystal Lakes Fire Protection District Website: <u>clvfd.org</u> Phone: (970) 881-3521 Email: clvfd@clvfd.org

Crystal Lakes Road and Recreation Association

Website: <u>crystal-lakes.org</u> Phone: (970) 881-2250 Email: office@crystal-lakes.org

Larimer Conservation District

Website: <u>larimercd.org</u> Phone: (970) 599-0640 Email: matt@larimercd.org

Larimer County Office of Emergency Management

Website: <u>larimer.org/emergency</u> Phone: (970) 619-4903 Email: decatusa@co.larimer.co.us

Larimer County Sherriff's Office

Website: <u>larimer.org/emergency</u> Phone: (970) 498-5100 Email: rosenqdc@co.larimer.co.us

Coalition for the Poudre River Watershed

Website: <u>poudrewatershed.org</u> Phone: (970) 222-5754 Email: daniel@poudrewatershed.org











Crystal Lakes Road & Recreation Association

Plan Unit Priorities

Overall Relative Risk across Crystal Lakes Fire Protection District



Filing 1 - Extreme relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 1:

- 72% non-survivable roadways
- 74% of homes exposed to radiant heat from burning vegetation
- 61% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

Vegetation in filing 1 is variable with ponderosa pine overstories and grass and shrub understories on flat and south-facing slopes, dense mixed-conifer on north-facing slopes, and aspen and willow in drainages.

Several homes are located mid-slope, which increases their potential exposure to extreme fire behavior. In general, homes are older in this filing and have more flammable construction materials, including wooden decks. Unfortunately, many homes have older asphalt roofs that are less flame resistant than metal, composite, or new asphalt roofs. Most homes have abundant hazards in Home Ignition Zone (HIZ) 1 and 2. Tree branches overhang roofs, pine needles are accumulated in gutters, and tall grass abuts many homes. Many homes have hazards such as old wooden sheds, wood piles, and other flammable material within 30 ft of the home.

Over two-thirds of roads in this filing could experience non-survivable conditions during wildfires. Most roads are accessible for Type 3 engines, except for several roads with tight switchbacks. Most roads can only accommodate one-way traffic. Wooden street signs across the filing could burn during a wildfire and would be illegible at night or through heavy smoke.

Recommendations for collective action in filing 1:

- Remove vegetation along roadways to reduce the risk of non-survivable conditions during wildfires, particularly along Tiny Bob Road, Lone Pine Drive, Commanche Court, Commanche Circle, Delaware Court, and Teton Court. Treatments along Tiny Bob Road are called out as priority project areas for this CWPP.
- Work with neighbors to create linked defensible space. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractor costs can sometimes be shared across homeowners, reducing the cost for everyone involved.
- Speak with the USFS about the potential to coordinate treatments on private land when work begins in the priority project area in the eastern part of the CLFPD on the Arapaho-Roosevelt National Forest.
- Conduct walking tours to demonstrate home hardening and defensible space practices. Every homeowner in filing 1 should review and consider actions outlined in Section 3.a. of the CWPP. Even homes in the interior of this filing have the potential for ignition from long-range ember cast during wildfires.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations.
- Replace wooden street signs with metal, reflective signs to make it easier for firefighters to locate homes through heavy smoke and at night.





Filing 2 - High relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 2:

- 69% non-survivable roadways
- 58% of homes exposed to radiant heat from burning vegetation
- 25% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

Moderate to steep slopes in filing 2 are covered in ponderosa pine with grass and shrub understories. Aspen is present along valley bottoms. Grasses could support fast rates of fire spread up steep, dry slopes, and shrubs could support long flame lengths that could cause overhead trees to ignite.

Numerous homes are located mid-slope and several on ridgetops, which increases their potential exposure to extreme fire behavior. In general, homes are older in this filing and have more flammable construction materials, including wooden decks. Some homes have non-burnable barriers within HIZ 1 and adequate defensible space in HIZ 2. Some homes have hazards such as old wooden sheds, wood piles, and other flammable material within 30 ft of the home. Fortunately, many homes have metal or new asphalt roofs.

Over two-thirds of roads in this filing could experience non-survivable conditions during wildfires. Almost all roads are accessible for Type 3 engines, but at least half of roads can only accommodate one-way traffic. Reflective street signs are present along CR 73C, but wooden street signs along sideroads could burn during a wildfire and would be illegible at night or through heavy smoke

Recommendations for collective action in filing 2:

- Remove vegetation along roadways to reduce the risk of non-survivable conditions during wildfires, particularly along CR 73C and Caddo Road. Treatments along CR 73C are called out as priority project areas for this CWPP.
- Work with neighbors to create linked defensible space. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractor costs can sometimes be shared across homeowners, reducing the cost for everyone involved.
- Speak with the USFS about the potential to coordinate treatments on private land when work begins in the priority project area east of the CLFPD boundary on the Arapaho-Roosevelt National Forest.
- Conduct walking tours to demonstrate home hardening and defensible space practices. Every homeowner in filing 2 should review and consider actions outlined in Section 3.a. of the CWPP. Even homes in the interior of this filing have the potential for ignition from long-range ember cast during wildfires.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations.
- Replace wooden street signs with metal, reflective signs to make it easier for firefighters to locate homes through heavy smoke and at night.
- Widen roads and create pullouts to facilitate two-way traffic during emergencies.





Filing 2 - High relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 2:

- 69% non-survivable roadways
- 58% of homes exposed to radiant heat from burning vegetation
- 25% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

Moderate to steep slopes in filing 2 are covered in ponderosa pine with grass and shrub understories. Aspen is present along valley bottoms. Grasses could support fast rates of fire spread up steep, dry slopes, and shrubs could support long flame lengths that could cause overhead trees to ignite.

Numerous homes are located mid-slope and several on ridgetops, which increases their potential exposure to extreme fire behavior. In general, homes are older in this filing and have more flammable construction materials, including wooden decks. Some homes have non-burnable barriers within HIZ 1 and adequate defensible space in HIZ 2. Some homes have hazards such as old wooden sheds, wood piles, and other flammable material within 30 ft of the home. Fortunately, many homes have metal or new asphalt roofs.

Over two-thirds of roads in this filing could experience non-survivable conditions during wildfires. Almost all roads are accessible for Type 3 engines, but at least half of roads can only accommodate one-way traffic. Reflective street signs are present along CR 73C, but wooden street signs along sideroads could burn during a wildfire and would be illegible at night or through heavy smoke.

Recommendations for collective action in filing 2:

- Remove vegetation along roadways to reduce the risk of non-survivable conditions during wildfires, particularly along CR 73C and Caddo Road. Treatments along CR 73C are called out as priority project areas for this CWPP.
- Work with neighbors to create linked defensible space. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractor costs can sometimes be shared across homeowners, reducing the cost for everyone involved.
- Speak with the USFS about the potential to coordinate treatments on private land when work begins in the priority project area east of the CLFPD boundary on the Arapaho-Roosevelt National Forest.
- Conduct walking tours to demonstrate home hardening and defensible space practices. Every homeowner in filing 2 should review and consider actions outlined in Section 3.a. of the CWPP. Even homes in the interior of this filing have the potential for ignition from long-range ember cast during wildfires.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations.
- Replace wooden street signs with metal, reflective signs to make it easier for firefighters to locate homes through heavy smoke and at night.
- Widen roads and create pullouts to facilitate two-way traffic during emergencies.





Filing 3 - Extreme relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 3:

- 95% non-survivable roadways
- 81% of homes exposed to radiant heat from burning vegetation
- 74% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

Vegetation in filing 3 is varied with ponderosa pine, Douglas-fir, lodgepole pine, and aspen. Some areas have low tree densities and grass and shrub understories, and others are dense and have abundant ladder fuels. Much of the filing is on a steep north-facing slope, but the northern portion is on a south-facing slope. There is a high potential for extreme fire behavior in dense forests on steep slopes on hot, dry, and windy days. Areas with grass-shrub understories can support fast rates of fire spread.

Numerous homes are located on ridgetops, and several are mid-slope, which increases their potential exposure to extreme fire behavior. In general, homes in this filing have newer, flame-resistant siding and roofs. Several homes have old wooden decks enclosed in flammable, wooden lattice. Unfortunately, most homes have abundant hazards in HIZ 1 and 2. Tall grasses and shrubs abut homes and abundant ladder fuels could carry wildfire into trees near homes. Some homes have hazards such as old wooden sheds, wood piles, and other flammable material within 30 ft of the home.

Almost all roads in this filing could experience non-survivable conditions during wildfires. Most roads are accessible for Type 3 engines, but Crow Road and side roads can only accommodate one-way traffic. Reflective street signs are present along CR 73C, but wooden street signs along sideroads could burn during a wildfire and would be illegible at night or through heavy smoke.

Recommendations for collective action in filing 3:

- Remove vegetation along roadways to reduce the risk of non-survivable conditions during wildfires, particularly along CR 73C, Caddo Road, Pueblo Road, and Blackfoot Road. Treatments along CR 73C are called out as priority project areas for this CWPP.
- Work with neighbors to create linked defensible space, building on momentum started by several property owners in this filing who have already created defensible space on their properties. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractor costs can sometimes be shared across homeowners, reducing the cost for everyone involved.
- Conduct walking tours to demonstrate defensible space practices. Much work needs to be done around home hardening and defensible space creation in this filing. Every homeowner in filing 3 should review and consider actions outlined in Section 3.a. of the CWPP. Even homes in the interior of this filing have the potential for ignition from long-range ember cast during wildfires.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations.
- Replace wooden street signs with metal, reflective signs to make it easier for firefighters to locate homes through heavy smoke and at night.
- Widen roads and create pullouts to facilitate two-way traffic during emergencies.





Filing 4 - Moderate relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 4:

- 72% non-survivable roadways
- 74% of homes exposed to radiant heat from burning vegetation
- 61% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

Filing 4 is mostly in a valley bottom and relatively flat. Most forests have ponderosa pine overstories with occasional aspen and grass and shrub understories. There are some lodgepole pine stands with moderate tree densities, but these are intermixed with aspen and meadows. There is a lower potential for extreme fire behavior in this filing, but a potential for fast rates of spread in areas with grass-shrub understories.

Homes in this filing have highly varied construction material and defensible space. Some homes have newer, flame-resistant siding and roofs and others have older, flammable siding and roofs. Some homes have trees immediately adjacent to homes, and most homes have flammable vegetation within HIZ 1. Many homes have hazards such as wood piles, propane tanks, and other flammable material within 30 ft of the home.

Only about a third of roads in this filing could experience non-survivable conditions during wildfires. Almost all roads are accessible for Type 3 engines and can accommodate two-way traffic. Wooden street signs across the filing could burn during a wildfire and would be illegible at night or through heavy smoke.

Recommendations for collective action in filing 4:

- Conduct walking tours to demonstrate home hardening and defensible space practices. Much work needs to be done around home hardening and defensible space creation in this filing. Every homeowner in filing 4 should review and consider actions outlined in Section 3.a. of the CWPP. Even homes in the interior of this filing have the potential for ignition from long-range ember cast during wildfires.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations.
- Replace wooden street signs with metal, reflective signs to make it easier for firefighters to locate homes through heavy smoke and at night.
- Create pullouts to facilitate emergency traffic.





Filing 5 and Poudre Meadows - Moderate relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 5:

- 61% non-survivable roadways
- 43% of homes exposed to radiant heat from burning vegetation
- 20% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

The southern part of filing 5 and Poudre Meadows has low to moderate density of ponderosa pine and shrub understories. Other parts of the filing have ponderosa pine and Douglas-fir overstories with occasional aspen, high tree densities, and abundant ladder fuels. Slopes are mostly shallow to moderate. There is a lower potential for extreme fire behavior in this filing, but a potential for fast rates of spread in areas with grass-shrub understories and for passive crown fire in areas with ladder fuels.

In general, homes in this filing have newer, flame-resistant siding and roofs and non-burnable barriers within HIZ 1. Several homes have old wooden decks enclosed in flammable, wooden lattice. Some homes in the northern part of the filing have a high density of trees within HIZ 2. Many homes have hazards such as wooden sheds, wood piles, and other flammable material within 30 ft of the home.

Over half of roads in this filing could experience non-survivable conditions during wildfires. Almost all roads are accessible for Type 3 engines, but at least half of roads can only accommodate oneway traffic. Wooden street signs across the filing could burn during a wildfire and would be illegible at night or through heavy smoke.

Recommendations for collective action in filing 5 and Poudre Meadows:

- Remove vegetation along roadways to reduce the risk of non-survivable conditions during wildfires, particularly along Muskogee Trail, Pottawatomie Trail, and Okmulkee Circle.
- Work with neighbors to create linked defensible space, building on momentum started by several property owners in this filing who have already created defensible space on their properties. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractor costs can sometimes be shared across homeowners, reducing the cost for everyone involved.
- Conduct walking tours to demonstrate defensible space practices, particularly in HIZ 2. Every homeowner in filing 5 and Poudre Meadows should review and consider actions outlined in Section 3.a. of the CWPP. Even homes in the interior of this filing and neighborhood have the potential for ignition from long-range ember cast during wildfires.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations.
- Replace wooden street signs with metal, reflective signs to make it easier for firefighters to locate homes through heavy smoke and at night.
- Widen roads and create pullouts to facilitate two-way traffic during emergencies.





Filing 6 - Extreme relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 6:

- 64% non-survivable roadways
- 45% of homes exposed to radiant heat from burning vegetation
- 27% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

About half of filing 6 is on a steep slope with ponderosa pine and Douglas-fir overstories. Higher elevation areas have lodgepole pine. Some forests have low to moderate tree densities and grass and shrub understories, and others are dense and have abundant ladder fuels. There is a moderate potential for extreme fire behavior in dense forests on steep slopes on hot, dry, and windy days.

Numerous homes are located mid-slope and several on ridgetops, which increases their potential exposure to extreme fire behavior. Homes have highly varied construction material. Some have older, flammable siding and roofs. Several homes have wooden decks with flammable wood lattice. Most homes have abundant hazards in HIZ 1 and 2, including vegetation abutting homes. Many homes have hazards such as wood piles and propane tanks within 30 ft of the home.

Over two-thirds of roads in this filing could experience non-survivable conditions during wildfires, and property owners could experience particularly long evacuation times in this filing due to the road network and distance from primary points of egress out of CLFPD. Most roads are accessible for Type 3 engines, except for the roads with tight switchbacks. Most roads can only accommodate one-way traffic. Wooden street signs across the filing could burn during a wildfire and would be illegible at night or through heavy smoke.

Recommendations for collective action in filing 6:

- Remove vegetation along roadways to reduce the risk of non-survivable conditions, particularly along Pottawatomie Trail, Okmulkee Circle, Jicarilla Trail, and Chickasaw Court.
- Work with neighbors to create linked defensible space. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractor costs can sometimes be shared across homeowners, reducing the cost for everyone.
- Collaborate with the CLRRA Greenbelt Management Committee (GMC) to explore options for mitigating wildfire risk in Mummy View Park. Steep slopes make fuel treatments difficult in this greenbelt, making it important for adjacent homeowners to mitigate their properties.
- Conduct walking tours to demonstrate home hardening and defensible space practices. Include a discussion about HIZ around campers. Much work needs to be done around home hardening and defensible space creation in this filing. Every homeowner in filing 6 should review and consider actions outlined in Section 3.a. of the CWPP. Even homes in the interior of this filing have the potential for ignition from long-range ember cast during wildfires.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations. This filing could experience long evacuation times, so property owners should plan to leave early to avoid long evacuation times.
- Replace wooden street signs with metal, reflective signs.
- Widen roads and create pullouts for two-way traffic.





Filing 7 - Extreme relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 7:

- 70% non-survivable roadways
- 73% of homes exposed to radiant heat from burning vegetation
- 44% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

Vegetation in filing 7 is highly varied with ponderosa pine overstories and grass and shrub understories in lower elevations and dense lodgepole pine forests with occasional aspen at higher elevations. Ladder fuels are abundant in forests throughout this filing. There is a high potential for extreme fire behavior on steep southeast-facing slopes and in dense forests with abundant ladder fuels on hot, dry, and windy days.

Several homes are located mid-slope, which increases their potential exposure to extreme fire behavior. Homes in this filing have highly varied construction material. Some have newer, flame-resistant siding and roofs and others have older, flammable siding and roofs and old wooden decks. Some homes have non-burnable barriers within HIZ 1, but almost all homes have abundant hazards in HIZ 2, including tall grass, shrubs, trees, ladder fuels abutting homes. Some homes have hazards such as wood piles, wooden sheds, and other flammable material within 30 ft of the home.

Over two-thirds of roads in this filing could experience non-survivable conditions during wildfires. Some roads are accessible for Type 3 engines, but other roads and driveways are long, narrow, and have no turnarounds. Most roads can only accommodate one-way traffic. Reflective street signs are present along CR 73C, but wooden street signs along sideroads could burn during a wildfire and would be illegible at night or through heavy smoke.

Recommendations for collective action in filing 7:

- Remove vegetation along roadways to reduce the risk of non-survivable conditions during wildfires, particularly along CR 73C, Tiny Bob Road, and Shawnee Road. Treatments along CR 73C and Tiny Bob Road are called out as priority project areas for this CWPP.
- Work with neighbors to create linked defensible space. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractor costs can sometimes be shared across homeowners, reducing the cost for everyone involved.
- Speak with the USFS about the potential to coordinate treatments on private land and CLRRA greenbelts when work begins in the priority project area east of the CLFPD boundary on the Arapaho-Roosevelt National Forest.
- Conduct walking tours to demonstrate home hardening and defensible space practices. Every homeowner in filing 7 should review and consider actions outlined in Section 3.a. of the CWPP. Even homes in the interior of this filing have the potential for ignition from long-range ember cast during wildfires.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations.
- Replace wooden street signs with metal, reflective signs to make it easier for firefighters to locate homes.
- Widen roads and create pullouts for two-way traffic.





Filing 8 - Extreme relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 8:

- 77% non-survivable roadways
- 70% of homes exposed to radiant heat from burning vegetation
- 80% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

Most of filing 8 is on a moderate to steep north-facing slope with dense lodgepole pine, Douglasfir, spruce, and occasional aspen. Ladder fuels are abundant in these dense forests. A small portion of the filing lies along Panhandle Creek and is covered in riparian meadows with willows and aspen. There is a high potential for extreme fire behavior on steep slopes in dense forests with abundant ladder fuels on hot, dry, and windy days.

Numerous homes are located mid-slope, which increases their potential exposure to extreme fire behavior. Homes in this filing have highly varied construction material. Some have newer, flame-resistant siding and roofs and others have older, flammable siding and roofs and old wooden decks. Some homes have non-burnable barriers within HIZ 1, but almost all homes have abundant hazards in HIZ 2, including trees and ladder fuels abutting homes. Some homes have hazards such as wood piles, wooden sheds, and other flammable material within 30 ft of the home.

Over three-fourths of roads in this filing could experience non-survivable conditions during wildfires. Main roads are accessible for Type 3 engines, but some sideroads and driveways are long, narrow, and have no turnarounds. Most roads can accommodate two-way traffic but have no pullovers. Wooden street signs across the filing could burn during a wildfire and would be illegible at night or through heavy smoke.

Recommendations for collective action in filing 8:

- Remove vegetation along roadways to reduce the risk of non-survivable conditions during wildfires, particularly along Ottawa Way, Shoshoni Drive, Cuna Way, and Catamount Way. Treatments along Ottawa Way are called out as priority project areas for this CWPP. Re-treat areas along roadways thinned in 2012 where young trees are growing and creating ladder fuels.
- Work with neighbors to create linked defensible space, building on momentum started by several property owners in this filing who have already created defensible space on their properties. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractors can sometimes be shared across homeowners, reducing the cost.
- Conduct walking tours to demonstrate home hardening and defensible space practices, particularly in HIZ 2. Include a discussion about HIZ creation around campers. Every homeowner in filing 8 should review and consider actions outlined in Section 3.a. of the CWPP.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations.
- Replace wooden street signs with metal, reflective signs to make it easier for firefighters to locate homes.
- Create pullouts to facilitate emergency traffic.





Filing 9 - Moderate relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 9:

- 67% non-survivable roadways
- 39% of homes exposed to radiant heat from burning vegetation
- 32% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

Most of filing 9 has shallow slopes and a mix of ponderosa pine woodlands, aspen stands, and dense forests with ponderosa pine, Douglas-fir, and limber pine. The interior of this filing contains a large meadow with grasses, forbs, and shrubs. Dense forests with ladder fuels and downed wood are most prevalent north of CR 73C, and these areas have higher potential for extreme fire behavior than other parts of the filing. There is a potential for fast rates of spread in areas with grass-shrub understories. Aspen stands could slow the spread of fire.

In general, homes are older in this filing and have flammable siding and old wooden decks. Unfortunately, many homes have older asphalt roofs that are less flame resistant than metal, composite, or new asphalt roofs. Most homes have abundant hazards in HIZ 1 and 2. Tree branches overhang roofs, pine needles are accumulated in gutters, and tall grass abut many homes. Many homes have hazards such as old wooden sheds, wood piles, and other flammable material within 30 ft of the home.

Over two-thirds of roads in this filing could experience non-survivable conditions during wildfires. Most roads are accessible for Type 3 engines but can only accommodate one-way traffic and have no pullovers. Reflective street signs are present along CR 73C, but wooden street signs along sideroads could burn during a wildfire and would be illegible at night or through heavy smoke. There were fewer homes in this filing with reflective address signs than in any other CLRRA filing.

Recommendations for collective action in filing 9:

- Remove vegetation along roadways to reduce the risk of non-survivable conditions during wildfires, particularly along Socorro Trail.
- Work with neighbors to create linked defensible space. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractor costs can sometimes be shared across homeowners, reducing the cost for everyone involved.
- Conduct walking tours to demonstrate home hardening and defensible space practices. Include a discussion about HIZ creation around campers. Much work needs to be done around home hardening and defensible space creation in this filing. Every homeowner in filing 9 should review and consider actions outlined in Section 3.a. of the CWPP. Even homes in the interior of this filing have the potential for ignition from long-range ember cast during wildfires.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations.
- Replace wooden street signs with metal, reflective signs to make it easier for firefighters to locate homes through heavy smoke and at night.





• Create pullouts to facilitate emergency traffic.

Filing 10 - High relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 10:

- 70% non-survivable roadways
- 31% of homes exposed to radiant heat from burning vegetation
- 18% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

Most of filing 10 is on a moderately steep northeast-facing slope with dense lodgepole pine and aspen and abundant ladder fuels. Some treatments have already occurred along roadways to reduce wildfire risk. There is a high potential for extreme fire behavior in dense forests with abundant ladder fuels on hot, dry, and windy days.

Numerous homes are located mid-slope, which increases their potential exposure to extreme fire behavior. In general, homes in this filing have newer, flame-resistant siding and roofs. Unfortunately, about half of homes have older asphalt roofs that are less flame resistant than metal, composite, or new asphalt roofs. Many homes have non-burnable barriers within HIZ 1, and some have adequate defensible space in HIZ 2, including linked defensible space on neighboring properties. Few homes have hazards such as old wooden sheds, wood piles, and other flammable material within 30 ft of the home.

Over two-thirds of roads in this filing could experience non-survivable conditions during wildfires. Most roads are accessible for Type 3 engines and can accommodate two-way traffic but have no pullovers. Some driveways are steep and narrow and inaccessible for Type 3 engines. Wooden street signs along sideroads could burn during a wildfire and would be illegible at night or through heavy smoke.

Recommendations for collective action in filing 10:

- Remove vegetation along roadways to reduce the risk of non-survivable conditions during wildfires, particularly along Shoshoni Drive and Catamount Way. Re-treat areas along roadways thinned in 2012 where young trees are creating ladder fuels.
- Work with neighbors to create linked defensible space, building on momentum started by several property owners in this filing who have already created defensible space on their properties. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractors can sometimes be shared across homeowners, reducing the cost for everyone.
- Target outreach and education campaigns to share the importance of replacing flammable roofs with noncombustible materials. Include a discussion about HIZ creation around campers. Every homeowner in filing 10 should review and consider actions outlined in Section 3.a. of the CWPP. Even homes in the interior of this filing have the potential for ignition from longrange ember cast during wildfires.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations.
- Replace wooden street signs with metal, reflective signs to make it easier for firefighters to locate homes.
- Create pullouts to facilitate emergency traffic.





Filing 11 - High relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 11:

- 78% non-survivable roadways
- 64% of homes exposed to radiant heat from burning vegetation
- 62% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

More than half of filing 11 is on a shallow moderately steep northwest-facing slope with variable mixes of ponderosa pine, lodgepole pine, limber pine, and aspen overstories and grass and shrub understories. Ladder fuels are present in some forests but have been removed in some treated areas, particularly around the CLRRA office. The northern part of the filing is covered in aspen, willow, and meadow along Pearl Creek. There is a moderate potential for extreme fire behavior in dense forests on hot, dry, and windy days. Grasses could support fast rates of fire spread up steep, dry slopes and shrubs could support long flame lengths that could cause overhead trees to ignite.

Most homes in this filing have newer, flame-resistant siding and roofs, but some have older, flammable siding and old wooden decks. Many homes have non-burnable barriers within HIZ 1 but abundant hazards in HIZ 2, including trees and ladder fuels abutting homes. Some homes have hazards such as wood piles, wooden sheds, and other flammable material within 30 ft of the home.

Over three-fourths of roads in this filing could experience non-survivable conditions during wildfires. Almost all roads are accessible for Type 3 engines and can accommodate two-way traffic, but there are few pullovers. Reflective street signs are present along CR 73C, but wooden street signs along sideroads could burn during a wildfire and would be illegible at night or through heavy smoke.

Recommendations for collective action in filing 11:

- Remove vegetation along roadways to reduce the risk of non-survivable conditions during wildfires, particularly along CR 73C and Huron Road. Treatments along CR 73C are called out as priority project areas for this CWPP.
- Work with neighbors to create linked defensible space. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractors can sometimes be shared across homeowners, reducing the cost for everyone.
- Conduct walking tours to demonstrate home hardening and defensible space practices, particularly in HIZ 2. Include a discussion about HIZ creation around campers. Every homeowner in filing 11 should review and consider actions outlined in Section 3.a. of the CWPP. Even homes in the interior of this filing have the potential for ignition from long-range ember cast during wildfires.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations.
- Replace wooden street signs with metal, reflective signs to make it easier for firefighters to locate homes through heavy smoke and at night.
- Create pullouts for two-way traffic during emergencies.





Filing 12 - Extreme relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 12:

- 73% non-survivable roadways
- 57% of homes exposed to radiant heat from burning vegetation
- 61% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

Filing 12 spans from steep slopes in the north to a riparian corridor with willow, aspen, and blue spruce along Panhandle Creek to steep slopes in the south. There are many valleys creating complex topography that can complicate fire behavior. The western part of the filing was burned in the 1980 Bear Trap Fire and is covered in thick young lodgepole pine. Other areas have older, taller lodgepole pine forests with scattered ponderosa pine, Engelmann spruce, aspen and beetle-killed pines. The community and property owners have invested in some fuel treatments along roadways, in greenbelts, and around homes, and this work should continue. There is a high potential for extreme fire behavior in dense, untreated forests on hot, dry, and windy days.

Many homes are located mid-slope, which increases their potential exposure to extreme fire behavior. Most homes in this filing have newer, flame-resistant siding but older asphalt or cedar shake roofs that are less flame resistant than metal, composite, or new asphalt roofs. There are many campers on lots that have hazards under and around the camper. Some homes have nonburnable barriers within HIZ 1, but almost all homes have abundant hazards in HIZ 2, including vegetation abutting homes. Some homes have hazards such as wood piles, wooden sheds, and other flammable material within 30 ft of the home.

Almost three-fourths of roads in this filing could experience non-survivable conditions during wildfires. Main roads are accessible for Type 3 engines, but many driveways are long, narrow, and have no turnarounds. Main roads can accommodate two-way traffic but have no pullovers. Wooden street signs across the filing could burn during a wildfire and would be illegible at night or through heavy smoke.

Recommendations for collective action in filing 12:

- Remove vegetation along roadways, particularly along Ottawa Way, Mescalero Drive, Catamount Way, and Shoshoni Drive. Treatments along Ottawa Way and Mescalero Drive are called out as priority project areas.
- Work with neighbors to create linked defensible space, building off existing treatments along roadways and on private land in this filing and planned treatments in CLRRA greenbelts. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractors can sometimes be shared across homeowners, reducing the cost for everyone.
- Speak with the USFS about coordinated treatments on private land and CLRRA greenbelts when work begins in the priority project area west of the CLFPD boundary.
- Target outreach and education campaigns to share the importance of replacing flammable roofs and creating defensible space around campers. Every homeowner in filing 12 should review Section 3.a. of the CWPP.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations.
- Replace wooden street signs with metal, reflective signs.
- Create pullouts to facilitate emergency traffic.





Filing 13 - High relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 13:

- 70% non-survivable roadways
- 63% of homes exposed to radiant heat from burning vegetation
- 54% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

Filing 13 has a steep valley in the center of the unit that could funnel wind and create extreme wildfire behavior. Forests at lower elevations have ponderosa pine and aspen overstories and grass and shrub understories. Most of the unit is dense lodgepole pine forests with few ladder fuels. The community and property owners have invested in some fuel treatments along roadways, in greenbelts, and around homes, and this work should continue. There is a high potential for extreme fire behavior in dense, untreated forests on steep slopes on hot, dry, and windy days.

Despite the high potential for extreme fire danger, the overall relative risk rating is "high" for filing 13 because of adequate home hardening and fuel mitigation in HIZ 1 and HIZ 2 for many homes. Non-burnable areas have been created around the base of many homes, and small trees have been thinned out and limbed. Only a handful of homes have hazards such as wood piles, wooden sheds, and other flammable material within 30 ft of the home.

Almost three-fourths of roads in this filing could experience non-survivable conditions during wildfires. Main roads are accessible for Type 3 engines, but many driveways are long, narrow, and have no turnarounds. Main roads can accommodate two-way traffic but have no pullovers. Wooden street signs across the filing could burn during a wildfire and would be illegible at night or through heavy smoke.

Recommendations for collective action in filing 13:

- Remove vegetation along roadways, particularly along Osage Trail.
- Work with neighbors to create linked defensible space, building off existing treatments along roadways and on private land in this filing and planned treatments in CLRRA greenbelts. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractor costs can sometimes be shared across homeowners, reducing the cost for everyone.
- Conduct walking tours to demonstrate defensible space practices around campers. Every homeowner in filing 13 should review and consider actions outlined in Section 3.a. of the CWPP. Even homes in the interior of this filing have the potential for ignition from longrange ember cast during wildfires.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations.
- Replace wooden street signs with metal, reflective signs.
- Create pullouts to facilitate emergency traffic.





Filing 14 - High relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 14:

- 78% non-survivable roadways
- 72% of homes exposed to radiant heat from burning vegetation
- 35% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

Most of filing 14 has shallow to moderate slopes and a mix of ponderosa pine forests with moderate to high tree density, aspen stands, and dense forests with ponderosa pine, Douglas-fir, and occasional limber pine. The interior of this filing contains a large meadow with grasses, forbs, and shrubs. Dense forests with ladder fuels and downed wood have higher potential for extreme fire behavior than other parts of the filing. There is a potential for fast rates of spread in areas with grass-shrub understories and passive crown fire. Aspen stands could slow the spread of fire.

In general, homes are older in this filing and have flammable siding and old wooden decks. Many homes have metal or new asphalt roofs. Unfortunately, most homes have abundant hazards in HIZ 1 and 2. Tree branches overhang roofs, pine needles are accumulated in gutters, and tall grass, trees, and shrubs abut many homes. Many homes have hazards such as old wooden sheds, wood piles, and other flammable material within 30 ft of the home.

Over two-thirds of roads in this filing could experience non-survivable conditions during wildfires. Almost all roads are accessible for Type 3 engines, but at least half of roads can only accommodate one-way traffic. Reflective street signs are present along CR 73C, but wooden street signs along sideroads could burn during a wildfire and would be illegible at night or through heavy smoke.

Recommendations for collective action in filing 14:

- Remove vegetation along roadways to reduce the risk of non-survivable conditions during wildfires, particularly along CR 73C, Socorro Trail, Voto Way, Yuki Drive, Menominee Circle, and Tesoque Trail. Treatments along CR 73C are called out as priority project areas for this CWPP.
- Work with neighbors to create linked defensible space. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractors can sometimes be shared across homeowners, reducing the cost for everyone.
- Conduct walking tours to demonstrate home hardening and defensible space practices. Include a discussion about HIZ creation around campers. Much work needs to be done around home hardening and defensible space creation in this filing. Every homeowner in filing 14 should review and consider actions outlined in Section 3.a. of the CWPP.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations.
- Replace wooden street signs with metal, reflective signs.





• Widen roads and create pullouts.

Filing 15 - Extreme relative risk rating

Predicted wildfire exposure under extreme fire weather in filing 15:

- 83% non-survivable roadways
- 60% of homes exposed to radiant heat from burning vegetation
- 49% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

Much of filing 15 is on a steep slope with numerous valleys creating complex topography that can exacerbate fire behavior. The northwestern part of the filing was burned in the 1980 Bear Trap Fire and is covered in thick young lodgepole pine. Other parts of the unit have older, taller lodgepole pine forests with scattered ponderosa pine, Engelmann spruce, aspen and numerous beetle-killed pines. The community and property owners have invested in some fuel treatments along roadways, in greenbelts, and around homes, and this work should continue. There is a high potential for extreme fire behavior in dense, untreated forests on hot, dry, and windy days.

Many homes are located mid-slope and several on ridgetops, which increases their potential exposure to extreme fire behavior. There are several campers on lots within this filing that do not have adequate mitigation of hazards under and around the camper. Some homes have non-burnable barriers within HIZ 1, but almost all homes have abundant hazards in HIZ 2, including trees and ladder fuels abutting homes. Some homes have hazards such as wood piles, wooden sheds, and other flammable material within 30 ft of the home.

Over three-fourths of roads in this filing could experience non-survivable conditions during wildfires, and property owners could experience particularly long evacuation times in this filing due to the road network and distance from primary points of egress out of CLFPD. Main roads are accessible for Type 3 engines, but many driveways are long, narrow, and have no turnarounds. Main roads can accommodate two-way traffic but have no pullovers. Wooden street signs across the filing could burn during a wildfire and would be illegible at night or through heavy smoke.

Recommendations for collective action in filing 15:

- Remove vegetation along roadways. Treatments along Ottawa Way and Mosquito Drive are called out as priority project areas for this CWPP. Re-treat areas along roadways thinned in 2012.
- Ensure grass is mowed and regenerating trees are cleared from around the trailer staging area in this filing.
- Work with neighbors to create linked defensible space, building off existing treatments along roadways and on private land in this filing and planned treatments in CLRRA greenbelts. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractors can sometimes be shared across homeowners, reducing costs.
- Speak with the USFS about coordinated treatments on private land and CLRRA greenbelts when work begins in the priority project area west of the CLFPD boundary.
- Conduct walking tours to demonstrate defensible space practices, particularly in HIZ 2 and around campers. Every homeowner in filing 15 should review Section 3.a. of the CWPP.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations. This filing could experience especially long evacuation times, so property owners should plan to leave early to avoid long evacuation times.
- Replace wooden street signs with metal, reflective signs.
- Create pullouts to facilitate emergency traffic.





Elkridge Ranches - High relative risk rating

Predicted wildfire exposure under extreme fire weather in Elkridge Ranches:

- 69% non-survivable roadways
- 33% of homes exposed to radiant heat from burning vegetation
- 56% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

Elkridge Ranches is located on a steep south-facing slope. Most of the unit is dense lodgepole pine forests with occasional aspen and Engelmann spruce. Much of the western part of this neighborhood was burned in the 1980 Bear Trap Fire and is covered in thick, regenerating lodgepole pine. Less dense forests at lower elevations have grass, forb, and shrub understories, and those at higher elevations have few ladder fuels. There is a high potential for extreme fire behavior in dense forests on steep slopes on hot, dry, and windy days.

Despite the high potential for extreme fire danger, the overall relative risk rating is "high" for Elkridge Ranches because of adequate home hardening and fuel mitigation in HIZ 1 and HIZ 2 for many homes. Non-burnable areas have been created around the base of most homes and campers, and small trees have been thinned out and limbed. Several homes have hazards such as wood piles, wooden sheds, and other flammable material within 30 ft of the home.

Almost three-fourths of roads in this filing could experience non-survivable conditions during wildfires, and property owners could experience particularly long evacuation times in this filing due to the road network and distance from primary points of egress out of CLFPD. Some roads are accessible for Type 3 engines, but the eastern half of the unit is inaccessible. Most roads can only accommodate one-way traffic and have no pullovers. Many driveways are long, narrow, and have no turnarounds. Wooden street signs across the filing could burn during a wildfire and would be illegible at night or through heavy smoke.

Recommendations for collective action in Elkridge Ranches:

- Remove vegetation along roadways to reduce the risk of non-survivable conditions during wildfires, particularly along Elkridge Road.
- Speak with the USFS about the potential to coordinate treatments on private land when work begins in the priority project area north of the CLFPD boundary.
- Work with neighbors to create linked defensible space. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractors can sometimes be shared across homeowners, reducing the cost for everyone.
- Every homeowner in Elkridge Ranches should review and consider actions outlined in Section 3.a. of the CWPP. Even homes in the interior of this neighborhood have the potential for ignition from long-range ember cast during wildfires.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations. This neighborhood could experience especially long evacuation times, so property owners should plan to leave early to avoid long evacuation times.
- Replace wooden street signs with metal, reflective signs.
- Create pullouts to facilitate emergency traffic.





Pearl Creek Estates - Moderate relative risk rating

Predicted wildfire exposure under extreme fire weather in Pearl Creek Estates:

- 43% non-survivable roadways
- 24% of homes exposed to radiant heat from burning vegetation
- 32% of homes exposed to short-range embers from burning vegetation
- 100% of homes exposed to long-range embers from burning vegetation

Most of Pearl Creek Estates is on moderate to steep south-facing slope with lodgepole pine and aspen overstories. Some stands have moderate tree densities but abundant regeneration that can serve as ladder fuels. Lower elevation forests have variable mixes of ponderosa pine, lodgepole pine, Douglas-fir limber pine, and aspen overstories with grass understories. The southern part of the neighborhood is a riparian area along Pearl Creek with willows and aspen. Fire risk is generally lower in this neighborhood than other parts of the CLFPD.

Most homes in this neighborhood have newer, flame-resistant siding and roofs and non-burnable barriers within HIZ 1. Several homes have abundant hazards in HIZ 2, particularly lodgepole pine regeneration that could act as a ladder fuel. Few homes have hazards such as wood piles, wooden sheds, and other flammable material within 30 ft of the home.

Less than half of roads in this filing could experience non-survivable conditions during wildfires. Almost all roads are accessible for Type 3 engines and can accommodate two-way traffic. Wooden street signs along sideroads could burn during a wildfire and would be illegible at night or through heavy smoke. Very few if any homes have reflective address signs.

Recommendations for collective action in Pearl Creek Estates:

- Remove vegetation along roadways to reduce the risk of non-survivable conditions during wildfires, particularly along Huron Road and Mosquito Drive. Retreat areas along roadways thinned in 2012 where trees are regenerating and creating ladder fuels.
- Work with neighbors to create linked defensible space, building off existing treatments along roadways in this neighborhood. Projects that span multiple properties are more effective at reducing wildfire risk and more attractive to grant funders. Contractor costs can sometimes be shared across homeowners, reducing the cost for everyone involved.
- Conduct walking tours to demonstrate defensible space practices, particularly in HIZ 2. Every homeowner in Pearl Creek Estates should review and consider actions outlined in Section 3.a. of the CWPP. Even homes in the interior of this neighborhood have the potential for ignition from long-range ember cast during wildfires.
- Encourage all property owners to develop evacuation plans for their family, sign up for emergency notifications from Larimer County, and coordinate with neighbors who might need additional support during evacuations.
- Replace wooden street signs with metal, reflective signs to make it easier for firefighters to locate homes through heavy smoke and at night.





Implementation Phases

Immediate Action

- Has the highest potential for immediate
 return-on-investment
- Can be funded within the current capacity of CLFPD and CLRRA with some supplemental funding from grants available in the next 18 – 24 months (such as CWDG)
- Can occur with modest expansion of the current CLFPD and CLRRA volunteer organizations
- Can capitalize on current relationships with emergency response partners, land management agencies, non-profit organizations

Short-Term Action

- Requires moderate expansion of financial and implementation capacity of CLFPD and CLRRA
- Requires new cooperative relationships with emergency response partners, land management agencies, and non-profit organizations
- Requires greater level of coordination among partners
- Requires greater level of community discussion and decision making

Mid-Term Action

- Requires multi-year planning and funding
- Requires extensive grant funding
- Requires substantial expansion of financial and implementation capacity of CLFPD and CLRRA
- Requires substantial coordination among partners
- Requires substantial community discussion and decision making

Implementation Activities and Responsibilities

Fire Adapted Communities

Recommendation	Responsibility	Priority
Host an annual wildfire education day that is open to all property owners within CLFPD.	CLRRA, CLFPD	Immediate
Adopt the Fire Adapted Communities as the overarching vision and strategy for CWPP implementation.	CLRRA, CLFPD, property owners	Immediate
Strive to become a Firewise community.	CLRRA, CLFPD	Short-term

District Capacity

Recommendation	Responsibility	Priority
Become a volunteer with the CLFPD to inspire fellow property owners to engage in wildfire mitigation and emergency preparedness.	Property owners	Immediate
Continue coordination between CLFPD and CLRRA around wildfire mitigation and emergency preparedness to pool resources and avoid duplicated efforts.	CLRRA, CLFPD	Immediate
Cooperate with adjacent fire protection districts to establish a cooperative paid position to increase capacity.	CLFPD	Short-term



Recommendation	Responsibility	Priority
Improve the CLRRA and CLFPD websites, social media, and other outreach materials to increase property owner awareness of wildfire risk and resources available for mitigation.	CLRRA, CLFPD	Immediate
Form a volunteer group called the CWPP Implementation Committee, or other mutually agreeable name to continue momentum developed by the CWPP. Expand CLRRA Greenbelt Management Committee to include wildfire mitigation implementation efforts.	Greenbelt Management Committee (GBC)	Immediate
Inform property owners about ecological benefits of restoration-style fuel treatments.	CLRRA, GBC, USFS, other partners	Immediate
Conduct targeted outreach efforts to property owners in all filings with special emphasis in HIZ hazards (Especially filings 3, 4, 6, 9, and 14). See Section 3.b for specific recommendations for these filings.	CLRRA, CLFPD	Immediate
Discuss shared risk and encourage neighborhood- wide implementation of defensible space, for example through walking tours of well-mitigated properties.	CLRRA, property owners	Immediate
Provide welcome packets to new property owners with information on wildfire preparedness.	CLRRA	Immediate
Encourage wider participation in the CLFPD email list so property owners can receive information on local events, fire conditions, and safety information.	CLRRA, CLFPD	Immediate
Create informational video summarizing wildfire mitigation and make it available on the CLRRA and CLFPD websites.	CLRRA, CLFPD	Short-term

Home Ignition Zone

Recommendation	Responsibility	Priority
Engage in annual maintenance of your HIZ.	Property owners	Immediate
Establish defensible space around homes, detached garages, storage buildings, barns, and other structures so that the home can stand alone without relying on limited firefighting resources. Follow recommendations in the CSFS <u>The Home</u> <u>Ignition Zone</u> and this CWPP.	Property owners	Immediate
Advocate for CLRRA regulations that align with the CSFS <u>The Home Ignition Zone</u> and more strict WUI codes. If you live in Pearl Creek Estates, Poudre Meadows, or Elkridge Ranches, speak to your HOA representatives about this.	Property owners	Immediate
Annually mow grass and remove regenerating trees from around the camper/RV/trailer staging area in filing 15.	CLRRA	Immediate
Increase capacity to conduct home assessments to provide specific recommendations to individual homeowners.	CLFPD and CLRRA volunteers, shared mitigation specialist	Short-Term
Host HIZ training for contractors so they can be familiar with best practices for defensible space creation.	CLRRA	Short-Term
Replace flammable material on the CLRRA Base Camp and strengthen defensible space so the Base Camp can serve as a model for HIZ mitigation. As maintenance is required on the building, replace older materials with non-combustible materials.	CLRRA	Mid-Term

Linked Defensible Space and Fuel Treatments

Recommendation	Responsibility	Priority
Re-activate the "Adopt a Greenbelt" program to continue mitigating fuels on CLRRA property. Consider expanding program to include volunteer days to help property owners with their own defensible space creation.	CLRRA	Immediate
Work together to pool financial and other resources and pursue grants to mitigate wildfire risk across the community.	CLRRA, CLFPD, GBC, property owners	Immediate
Continued maintenance of homes and treatments that have been implemented.	GBC, property owners, USFS, other partners	Immediate
Focus initial efforts on mitigating fire risk in CWPP priority project areas, with a focus on treatment methods to restore ecological conditions.	CLRRA, CLFPD, USFS, other partners	Short-Term
Build off the CWPP to identify projects that improve linked defensible space and create mosaic landscapes.	CLRRA, property owners	Short-Term
Continue collaborating with large landowners and public lands to conduct priority fuel treatments.	CLRRA, USFS	Short-Term



Slash Management

Recommendation	Responsibility	Priority
Re-examine the current slash management strategy in the CLFPD. Consider judiciously relaxing pile burning prohibitions in CLRRA. Pile burning can be the best and sometimes only option for slash removal in steep, inaccessible areas. Pile burning is appropriate on larger acreage parcels where piles can be burned at least 50 ft away from the nearest structure. In subdivisions made up of small parcels where homes are densely packed together, alternative slash management methods should be pursued.	CLRRA, CLFPD	Immediate
Apply for grant funding that could subsidize the costs of the current slash disposal site so it can be available to property owners at a reduced cost or even free.	CLRRA, CLFPD	Short-term
Apply for grant funding to implement a slash pick up program for property owners (to pick up and transport slash to the disposal site).	CLRRA, CLFPD	Short-term
Apply for grant funding to implement a community chipping program so property owners can chip material on their property.	CLRRA, CLFPD, potentially in coordination with surrounding FPDs	Mid-term



Evacuation Preparedness

Recommendation	Responsibility	Priority
Develop a family evacuation plan and go- bags. Plans should include considerations of pets and livestock if applicable.	Property owners	Immediate
Cooperate with neighbors to develop plans for evacuating children who may be home alone or property owners with mobility impairments or other special needs.	Property owners	Immediate
Educate property owners with campers that they need to leave during voluntary evacuation orders if they plan to haul out their camper.	CLFPD, CLRRA	Immediate
Increase property owner awareness of evacuation planning, processes, and NOCO Alert.	CLFPD, CLRRA	Immediate
Sign up for emergency notification through <u>NOCO Alert</u>	Property owners	Immediate
Provide access to water supplies when evacuating for firefighters to use if. Property owners must NOT turn on sprinklers during evacuation.	Property owners	Immediate
Cooperate with emergency response partners to conduct district-wide evacuation drills.	CLFPD, emergency response partners	Immediate
Continue conversations about evacuation planning for the community, including alternative evacuation routes.	CLPFD, CLRRA, LCSO Emergency Services	Immediate

Firefighter Access and Evacuation Safety

Recommendation	Responsibility	Priority
Replace burnable, non-reflective address numbers with reflective signs available from the CLFPD.	Property owners	Immediate
Mount address numbers on non-burnable posts or on rocks, not on stumps, and not on chains across driveways that might be taken down by firefighters during structure protection actions.	Property owners	Immediate
Develop standards for cistern and pipe compatibility to ensure that private water resources are compatible with the Crystal Lakes Fire Department's equipment.	CLFPD, CLWSA, CLRRA	Immediate
Replace wooden street signs throughout CLRRA with metal, reflective signs so they are non-flammable and visible to firefighters at night and with thick smoke from wildfires.	CLRRA	Short-term
Improve driveway access for firefighters (e.g., widen driveways, fill potholes, remove and limb trees along driveways, create turnarounds at end of driveways).	Property owners	Short-term
Create pullouts and turnarounds on narrow roads throughout CLRRA for emergency vehicles.	CLRRA	Short-term
Coordinate efforts to mitigate hazardous conditions along roadways.	CLFPD, LCSO, County Road & Bridge, USFS	Short-term

You can be a part of Crystal Lakes becoming a fire-adapted community.

What will your next step be?

