



Wildfire Risk Reduction Task Force

Working Together to Reduce the Risk of Wildfire in Jefferson County
November 10, 2020

INTRODUCTION

Jefferson County's mountain communities offer majestic views, endless hiking trails and wildlife. It's no wonder people are called to Evergreen, Conifer and Pine to live, work, and enjoy the great outdoors. However, population growth, climate change and topography all contribute to a growing threat to this idyllic way of life: catastrophic wildfire. Elephant Butte, Buffalo Creek, Lower North Fork, Hayman and High Meadow are sobering reminders of the destruction and cost of wildfires in Jefferson County.

This summer has been no exception. Damage estimates, which contain the four largest wildfires in Colorado, are upwards of \$77 million (and those estimates don't include the recent East Troublesome fire in Grand County). Those costs include aircraft, heavy equipment, firefighters, supplies and other personnel. But the expenses don't end there. The price tag of structural damage is unknown at this time. Communities ravaged by these fires will see costs rise due to economic losses from decreased tourism, damage to watersheds, ecosystem restoration, flood prevention efforts, medical costs associated with bad air quality, and more. However, the value of one's life is incalculable. Since 2000, Colorado wildfires have killed eight residents and 12 firefighters, and destroyed nearly 1,800 homes, according to *Wildfire Today*.

Experts say rebuilding a community after a devastating wildfire will likely take longer and cost more – especially during a pandemic. Interrupted supply chains, delayed delivery of building materials, and limited labor create major barriers. In Oregon, where fires have burned one million acres, a county commissioner described the destroyed lakeside community of Detroit, Oregon as “a warzone.” It was one of the hardest hit communities with more than 70 percent of businesses, public buildings (including city hall), and homes destroyed by wildfire. Public utilities have been wiped out.

It's not if, but when Jefferson County will see its next major wildland fire. The concern was underscored as the Elephant Butte fire raged on July 13 until it was fully contained by July 22. The Sheriff's Office sent evacuation notices to 1,000 homes and two popular Jefferson County Open Space parks were temporarily closed. Thanks to favorable weather and the back-breaking work of hundreds of firefighters – lives, homes and businesses were spared saving about \$48 million in potential property damages, the Jefferson County Assessor estimates.

Jefferson County ranks number one in Colorado in terms of the number of homes in high and extreme wildfire risk areas, according to [Verisk](#)/ISO Stateline Report – with Evergreen and Conifer ranking among the highest risk areas¹. That's higher than communities such as Sonoma County, Butte County or Shasta County – all of which saw major wildfire destruction in 2017-2018.

The impact of a 100,000-acre wildfire in west Jefferson County could result in the evacuation of 60,000 people; the destruction of 10,000 homes and 100 businesses; and an estimated minimum of \$5 billion

¹ 2015 Corelogic Report

in losses². The county's topography, dense conifer forests, dry weather and an abundance of lightning strikes drive wildfire risk.

Investment upfront in mitigation and community education can save lives, property and firefighting costs later. That's why the Board of County Commissioners last year approved the creation of the Jefferson County Wildfire Risk Reduction Task Force. The goal is to create a more resilient environment that keeps residents and visitors safe by reducing the density of trees and materials on the forest floor – like dead pinecones, pine needles, leaves and branches – that provide fuel for wildfires.

While long-term efforts are underway countywide to reduce wildfire risk, questions remain as the county and fire rescue districts face limited resources and other challenges:

- How do we enhance collaboration between the county and wildfire stakeholders in an environment of finite resources?
- What will ramping up the pace and scale of wildfire mitigation efforts cost, and how will we collectively prioritize and pay for those efforts?
- What is the role of county government in this effort? What is Jefferson County doing to reduce wildfire risk and where are the gaps? What can we learn from other counties?
- In what ways can the county work even more effectively with our partners to raise greater awareness about wildfire risk and mitigation?

Key to this work is the role the county plays in convening conversations to explore these and other questions in more depth as well as helping to advance wildfire risk reduction efforts already underway. The task force is made up of 31 members and chaired by Commissioner Lesley Dahlkemper, who has the majority of the Wildfire Hazard Overlay District in her district. Members represent leaders in our community, fire rescue districts, county government, law enforcement, business, forestry, water districts, and others – as well as geographic diversity. Task force meetings are coordinated by the commissioners' Chief of Staff Deborah Churchill.

² Based on fire modelling by Colorado Division of Fire Prevention and Control for Evergreen Fire Rescue and analysis using GIS of the affected areas.

BACKGROUND

After in-depth discussion and a prioritization process, task force members identified three goals for year one (2019-2020):

- Mitigation
- Community education (to raise awareness about mitigation)
- Revenue streams (to fund more mitigation)

Task force members then self-selected into one of three workings groups to dig deeper into priority areas and met monthly from November 2019 to October 2020. While these three areas were identified by the task force for 2020-2021, other issues such as fire suppression, evacuation routes and emergency notice also were raised. While COVID-19 prevented the task force from meeting for three months in the spring, members worked diligently over the summer to finalize recommendations after conducting a high-level inventory of current resources and identifying gaps. In addition, they factored in information from presentations by Colorado Division of Fire Prevention and Control, Chief of Staff Melissa Lineberger on the Colorado Fire Commission's work and Erika Roberts, Emergency Management Team, Jefferson County Sheriff's Office Jefferson County on hazard mitigation planning.

Task force meetings included public comment and a standing invitation list of other stakeholders, including:

- Becky Baker, Building Safety Director,
- Liaison, Senator Michael Bennet
- Liaison, Senator Cory Gardner
- Lisa Cutter, State Representative
- Liaison, Congressman Joe Neguse
- Liaison, Congressman Ed Perlmutter
- Liaison, Xcel Energy
- Pat O'Connell, engineering geologist
- Liaison, Jeffco Public Health
- Bret Roller, Rolling R Ranch Company
- Tammy Story, State Senator
- Fire chiefs from all mountain fire districts
- Fire chiefs from municipalities

What follows next are recommendations from task force members and the working groups on which they served. In addition, the task force recommends later in this report that it continues to meet until summer of 2021 and evolve into the Jeffco Wildfire Commission. More on this overarching recommendation in the *Next Steps* section of this report.

Lesley Dahlkemper, Commissioner and Task Force Chair
Jeff Shrader, Sheriff
Ray Fleer, Emergency Management
Aaron Betcher, Emergency Management
Kate Newman, Deputy County Manager
Jeanie Rossillon, Development & Transportation Director
Chris O'Keefe, Planning & Zoning Director
Tom Hoby, Parks Director
Jerry Bader, Natural Resources Lead, Parks
Julie Story, Public Affairs Director
Brian Banks, U.S. Forest Service
Allan Gallamore, Colorado State Forest Service
Garrett Stephens, Jefferson Conservation District
Mike Weege, Chief, Evergreen Fire
Jacob Ware, Chief, Elk Creek
Curt Rogers, Chief, North Fork Fire
Skip Shirlaw, Chief, Inter-Canyon Fire
Damian DiFeo, Chief, Golden Gate Fire
Paul Amundson, Captain, Evergreen Fire
Mike Fassula, Fire Captain, Indian Hills Fire Rescue
Jim King, Fire Marshal, Evergreen Fire
Alicia Welch, Chief, City of Golden
Leif Carlson, Citizen Appointment
Cynthia Latham, Community Leader Appointment
Michele Robbins, Community Leader Appointment
Nancy Balter, Citizen Appointment
Susan Eagle, Citizen Appointment
Shirley Johnson, Citizen Appointment
Jason Slowinski, City Manager, City of Golden
Christina Burri, Denver Water
Andy Perri, Denver Mountain Parks

MITIGATION

Forest density is unnaturally high due largely to 100 years of fire suppression, which puts wildland-urban interface communities and watersheds at greater risk for catastrophic wildfire. Mitigating the severity of wildfire means changing fire behavior, which is influenced by the complex interaction of forest fuels, weather and topography. Weather and terrain cannot be manipulated, which means fuel mitigation is our only option. Removing trees and vegetation in an ecologically appropriate manner will lessen the intensity and danger of future wildfire and ensure forest communities are more resilient to fire.

The Task Force Mitigation Team has further defined mitigation as two distinct but interacting activities, creating defensible space and addressing larger scale forest management:

- *Defensible space*: the area typically 100 feet around a structure where vegetation, debris and other combustible fuels have been treated or cleared to reduce or slow the spread of fire. Work can be completed by homeowners or contractors.
- *Forest management*: treating or clearing trees and vegetation beyond the defensible space zone, typically on the scale of multiple acres. Work is normally done with heavy equipment by contractors, and trees may be utilized for lumber, firewood, chips, etc.

Key to effective and more extensive mitigation is greater access to contractors who haul away the forest debris – logs, branches, pine cones, etc. – and can sell or use these materials for other purposes. However, this effort is expensive due to limited contractor availability. Also, mitigation cannot be limited to public lands, as fires don't know the difference between public and private property. Collaboration on public and private land results in more effective and sustainable treatments.

Inventory

1. Homeowners are implementing defensible space both voluntarily and as county permitting requires (such as new construction).
2. During the last ten years, forest management is occurring on public and private lands with increased pace, scale and collaboration. Currently, we believe less than 1,000 acres have been managed annually over the last three to five years by the Jefferson Conservation District, Denver Mountain Parks, Jefferson County Open Space, Colorado State Forest Service, Fire Districts, and other entities, though we don't have precise numbers. There is consensus that we need to treat several thousand acres a year to have the desired impact on future wildfire in our high-risk communities.



3. Prescribed fire use is very limited but sorely needed as a cost-effective and ecologically appropriate management tool.

Gaps

1. It is unknown how many homeowners in Jeffco maintain their defensible spaces. The numbers are constantly changing because of homeowner turnover, vegetation growing back and lack of ability to monitor and enforce.
2. There is a lack of a central clearinghouse for comprehensive forest management and defensible space data in Jeffco.
3. The pace and scale of forest management and defensible space is stalled somewhat by high treatment costs (\$1,500 to \$5,000 an acre). There's a lack of forestry contractors or wood utilization companies to complete this work and, as a result, this work is very expensive. More contractors and better use of our forest products would drive down high treatment costs.
4. There is a lack of public and political will as well as resources for prescribed burns.

Recommendations

1. **Create a county-wide clearinghouse for past, present and future mitigation efforts** drawing on Geographic Information Systems data – or mapping – provided by partner agencies to build collective knowledge, prioritize mitigation efforts and enhance collaboration regarding public and private land mitigation efforts. GIS data mapping is now done by Jefferson County Open Space on its land. An inventory of community mitigation efforts across Jefferson County led by different entities such as fire rescue agencies, HOAs, cities, etc. will also help expand activities into additional areas that are not currently served. For example:
 - a. Home assessment programs in process
 - b. Community Wildfire Protection Plans
 - c. Community Wildfire Protection Implementation Plans
 - d. Homeowner cost share, tax benefits and grants available

Creating a central clearinghouse for GIS data that maps mitigation efforts may also make Jefferson County more competitive for grant opportunities. Chaffee County, for example, has a GIS system that's resulted in more funding opportunities because the county has comprehensive mitigation data for potential funders. The County Auditor maintains the GIS spatial tool that shows treatments accomplished, cleared acres, wildlife corridors, utility corridors, highest risk acres for wildfire, and more. The GIS tool is used regularly by the county's forest health task force called Envision Chaffee to help plan projects and receive grant funds. More at: <https://envisionchaffeecounty.org/>.

2. **Advocate at the county, state and federal level for increased pace, scale and funding of mitigation** on public and private land in Jefferson County. Jefferson County can coordinate and convene partner agencies and organizations through the task force to support state and federal legislation surrounding forest and wildfire policy.
3. **Address in 2021 the bottleneck surrounding biomass utilization and forest industry shortages.** This may be done under a current or additional sub-group. Additional considerations may include economic incentives.
4. **Strengthen county regulations and enforcement on defensible space** that build upon efforts over the last two years by Jefferson County Planning and Zoning. Track the impact of regulation

and enforcement on the creation of defensible space and implementation of wildfire mitigation plans.

5. ***Encourage the county to more proactively promote and collaborate with fire protection districts implementing defensible space home assessment certification programs to grow these programs county-wide.*** Evergreen and Elk Creek Fire Districts are implementing home assessment programs, like that of Boulder and Summit Counties. County leadership’s engagement is needed to support and grow these programs to reach the entire county.
 - a. Explore whether the county could provide administrative support for fire departments to execute Home Assessments with homeowners.
 - b. Support Jeffco’s current pursuit of 2020 FEMA-BRIC grant funding; the grant would fund additional personnel to support home assessment and other mitigation planning.

Jefferson County took another major step toward increased mitigation on Jeffco Open Space land with the unanimous approval in July by county commissioners of the Conservation Greenprint. The five-year strategic plan calls for a reduction in tree density and fuel resources on 1,000 of 17,000 acres of forested land owned by Jeffco Open Space. That’s an increase of 900 acres or 900 percent over the previous five years.

Cost

1. The time this might require of a GIS specialist could average 10 to 20 percent or less of a full-time employee, depending on how intense the data collection/management would be.
2. Task force members would work with commissioners and other policymakers to identify state and federal legislation that advances the recommendations in this report. No additional cost expected.
3. No cost as the Biomass group would be made up of Task Force members who would invite experts to provide additional information and perspectives on this issue.
4. More staffing may be required to address this issue whether it’s at the county level, in fire districts, or other partners. To be determined.

COMMUNITY EDUCATION

Owning a home that is surrounded by wildlife, forests, hiking trails and lakes holds great appeal for many of us. But the threat of wildfire is real, especially for residents in west Jefferson County. Challenging topography, lightning strikes, dense conifer forests and increasingly hot and dry weather contribute to the heightened risk.

Community education not only helps to save lives, but it raises awareness among residents about the importance of proactively creating defensible space around their homes and understanding how they can reduce wildfire risk in their communities. Service clubs such as Rotary, businesses leaders, fire rescue agencies and others are doing extraordinary work to inform the community about wildfire risk through variety of communication tools and events, as noted in the inventory below.



However, more can be done to better coordinate these tools and make them more widely accessible and easier to find with the help of a one-stop location online and greater promotion of this user-friendly tool.

Inventory

- www.Jeffco.us website
- Terrasource - Jefferson County Open Space
- CSU Extension - Jefferson County
 - Wildfire preparedness curriculum for schools
 - Videos-home hardening & defensible space (in development)
 - Wildfire educational event support
 - Fire-resistant landscaping on-site support for homeowners
- CSU Extension – statewide
 - Wildfire preparedness educational webinars
- Colorado State Forest Service
 - Fact sheets
 - Wildfire educational event support
- Rotary Wildfire Ready (RWR)
 - Educational website rotarywildfireready.com utilizes “best in class” educational materials from Colorado State Forest Service, National Interagency Fire Center, CAL Fire and more
 - Educational materials in development by RWR
 - social media
 - virtual presentations
 - educational flyers
- Community Wildfire Protection Plans

- Involves local fire rescue districts, local government and resident associations to assess risks and values and identify priorities for mitigation projects
- Generally, the plan is a requirement for mitigation grants
- Community Wildfire Protection Implementation Plans
- Existing grant programs for homeowners
- Wildfire Prepared - Home assessment program in development by Elk Creek Fire Rescue and Evergreen Fire Rescue
- Jeffco slash program
- Community slash programs

Gaps

1. Lack of visibility and ease-of-access to mitigation information and wildfire education on Jeffco website. A resident with limited online search abilities and new residents unaware of mitigation efforts would not easily find the information.
2. Need for consistent messaging about most effective means to reduce wildfire risk across websites managed by the county, fire rescue districts and other entities.
3. Risk of future budget reductions to county’s slash program, especially if the county’s budget issues continue to worsen. This, in turn, reduces the visibility, importance and community education about the importance of mitigation.
4. Lack of consistent mitigation standards across organizations focused on forest health and the need to help the community understand the varying degrees, risks and results of mitigation efforts such a defensible space.
5. Inadequate capacity and funding for the expansion of community education programs or development of new programs.
6. Absence of distribution lists by organizations to disseminate timely, relevant information about wildfire risk reduction across Jefferson County (HOAs, Realtor groups, insurance groups, fire agencies, schools, county, etc.).



A number of existing web pages provide helpful models for what Jeffco’s one-stop web page could look like such as the highly-touted CAL FIRE at www.readyforwildfire.org or Rotary Wildfire Ready at www.rotarywildfireready.com. Jeffco Open Space recently launched TerraSource at www.jeffco.us/3928/TerraSource - a web page that more broadly promotes good land stewardship, including a section on forest health and fire mitigation.

Recommendations

1. **Create, brand, maintain and promote a one-stop web page** on reducing wildfire risk in Jefferson County that focuses largely on wildfire mitigation and emergency preparedness.
 - a. Identify the target audience and core content with the help of the Community Education working group.
 - b. Gather the best content used by the county, CSU Extension Service, Colorado State Forest Service and other resources to help populate web page.
 - c. Package content as a user-friendly “toolbox” of mitigation and emergency preparedness information.
 - d. Link to other websites focused on mitigation, wildfire prevention and emergency preparedness.

- e. Determine where this website will be housed (e.g., on www.jeffco.us, TerraSource, free-standing site, etc.).
 - f. Promote web page widely among fire rescue districts, HOAs, Chambers of Commerce, service club, real estate groups and others, and encourage them to share information with their distribution lists. Emphasize the value of consistent information when promoting web page.
 - g. Maintain and update website regularly, tapping task force members and the Task Force Community Education Team as a source and a sounding board for new content.
2. ***Create a communication calendar for the dissemination of proactive mitigation content*** targeted at specific audiences for distribution throughout the year.
- Identify key dates, content, target audiences and communications tools.
 - Disseminate information via the media and organizations' newsletters, social media platforms and distribution lists.
 - Include mitigation topics such as home hardening, defensible space, fire resistant landscaping, existing slash program, burn bans, water quality impact of forest fires and emergency preparedness. Look for corresponding time pegs as needed.

Cost

To be determined.

REVENUE STREAMS

Every dollar spent on mitigation on the front end can save multiple dollars on fire suppression on the back end. One of the biggest challenges facing the task force is how we best leverage existing resources and uncover new sources of funding to address improved forest health and mitigation to reduce the spread of wildfire.

The Task Force Revenue Streams Team explored multiple avenues – from grants to sustainable funding to best practices in other counties. What’s more, a group of counties created the Emergency Fire Fund in 1967 to pool funds to pay for large wildfires that exceed any one county’s resources. However, the fund largely focuses on suppression, not mitigation, and can easily be wiped out by one major catastrophic fire.

Several efforts are underway to help address revenue concerns. The Colorado Fire Commission recently submitted recommendations to the Colorado Legislature to modernize the Emergency Fire Fund, which focuses largely on fighting wildfires with some dollars earmarked for mitigation. Also, Colorado Concerns released a major report this summer advocating the 2020 Forest Action Plan developed by the Colorado State Forest Service be fully funded to include forest health, wildfire mitigation and watershed protection. We are also encouraged by the level of support in Congress for investing in wildfire mitigation, including a proposal for \$4 billion for landscape restoration and forest health.

What we don’t know is just how much of this proposed funding Jefferson County may realize – or when. Identifying sources of sustainable funding to address increased mitigation countywide remains a top priority for task force members.

Inventory

- Forest Service - larger mitigation projects but only tied to federal lands and not private property
- Evergreen Fire Protection Dist. - Fuels Program and Chipping Program
- Jefferson County Sheriff’s Office - Fire Management Officer
- Elk Creek Fire Rescue - Wildland Fire Suppression Module, Fuels Program, and Chipping Program
- Jefferson County Open Space - starting large scale mitigation projects that increase number of acres significantly over previous years
- Colorado State Forest Service - funding source for projects
- Upper South Platte Partnership - funding source for projects



Gaps

1. No dedicated sustainable county source for funding the work of different entities - such as fire protection districts, Jeffco Open Space and others - working on mitigation.
2. No continuity and no comprehensive plan for mitigation countywide, except individual efforts by fire departments, Jeffco Open Space and other partners. There is no common place for all the organizations to share projects for information and for working together.
3. No overall database with funding mechanisms and grants that could also house local and fire rescue district programs that could assist in mitigation and forest restoration planning.
4. The Community Wildfire Protection Plan, which addresses wildfire risk areas in the county, is out of date. Clearly defining the wildland-urban interface will be critical to defining the WUI's boundaries in Jeffco for funding and grant purposes.

Recommendations

1. **Define what the wildland-urban interface is** in Jefferson County and provide a physical description of where it is based on current science and fire behavior to create clear boundaries for mitigation and forest restoration efforts.
2. **Update the Community Wildfire Protection Plan (CWPP) at the county level** to address and prioritize risk areas and guide development and growth in those areas of the county. This effort can also help complement the county's Comprehensive Master Plan, which guides development and growth. This work should include coordinating local fire protection districts' CWPPs.
3. **Hire a full-time grant writer to research and write grants** as well as have grant projects developed ahead of time using county expertise (e.g., Planning & Zoning, fire districts, etc.). In addition, explore the feasibility of applying for FEMA's Building Resilient Infrastructures and Communities or BRIC grant, which could generate up to \$50 million in funding. Larger grants require a lot of administrative work and bandwidth to successfully complete.
4. **Research tax options for sustainable funding for mitigation** (e.g., Summit and Chafee Counties) and whether a tax increase or new tax would be countywide or only in the WUI to support wildfire risk reduction. Tax options could include one or more of the following, such as a mill levy increase, sales tax, visitors' impact tax, etc.

Last November, Summit County voters approved a ballot to renew a tax on property owners to help pay for wildfire mitigation and other public programs and services. The continuation of the tax was approved with 78 percent of the vote – 18 percent more support than what the tax received in 2008, according to the *Summit Daily*.

Cost

1. This would be more labor and research intensive than hard costs.
2. The cost of updating the CWPP is approximately \$74,000 - \$100,000.
3. The cost of a compensation package for a full-time grant writer may range from \$75,000 to \$100,000.
4. A ballot initiative would require a self-funded, independent campaign as no taxpayer dollars may be used for this effort.

NEXT STEPS

The chairs of the task force's three teams – along with task force members – will present these recommendations to the Jeffco Board of County Commissioners during a briefing on November 10. Commissioners will give chairs feedback and direction on the recommendations.

With the commissioners' approval, the task force recommends continuing its work in 2021 with a look at upcoming state and federal legislation, advocacy efforts and continued work on the recommendations in this report. We recommend current task force continue in their roles unless circumstances have changed and they can no longer fulfill their obligations and time commitments. Next summer, we propose that the task force evolve into a Wildfire Commission with membership following the application process for other county boards and commissions, and the stakeholder groups outlined in the task force resolution approved last year by commissioners.

In addition, the task force will meet with members of the Upper South Platte Partnership to learn more about the group's proposed efforts to create a Wildfire Partners program, which also embraces mitigation as its core work. Other speakers will include Congressman Joe Neguse on federal mitigation efforts and what federal funding could mean for Jefferson County as well as a conversation with the Colorado Fire Commission to learn more about how our efforts may align and advocacy strategies as the 2021 legislative session gets underway.

Task force members wish to thank the county commissioners for support of their efforts and look forward to continuing this important work to keep Jeffco residents safe and reduce wildfire risk in the years ahead.

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