Jefferson County Wildfire Mitigation and Evacuation Briefing

Wildfire Matters Subcommittee

July 2024







Wildfire Mitigation

General Description

Jefferson County covers 764 square miles of the Front Range foothills, nestled between the capital City of Denver to the east and the mountain town of Idaho Springs to the west. It runs from the Rocky Flats Wildlife Refuge to the north down to Cheeseman Reservoir in the south.

It is a populated county with approximately 575,000 residents as of 2022, and the County hosts many tourists and visitors all year long. 18% of residents are over the age of 65, and 18% are under the age of 18. 11% of residents have a disability, 6.5% of residents live below the poverty line, and 29% of residents rent the place they live. Approximately 0.5% of residents have no telephone service available at their home, 6% have no broadband internet, and 4.5% have no computer in their home. To view updated demographics, visit lefferson County's Demographics website.

- Approximately 204,160 acres of land 41% of Jefferson County is publicly managed land.
- Jefferson County is home to many popular parks and open spaces, including the Rocky Flats and Two Ponds National Wildlife Refuges, Red Rocks Parks and Amphitheater, and portions of Golden Gate Canyon, Staunton, and Chatfield State Parks, and portions of the Arapaho-Roosevelt and the Pike-San Isabel National Forests.
- Jefferson County Open Space manages 56,000 acres of preserved land, with 27 parks and 261 miles of trails open to the public.

Vegetation varies vastly across Jefferson County, from primarily grasslands at lower elevations to dense lodgepole pine forests at higher elevations in the west. Almost half of the county is forested, a quarter is developed, about 15% is grassland, and 12% is shrubland. The most abundant forest types are ponderosa pine, mixed conifer, and lodgepole pine. The variation in vegetation equates to highly variable fuel conditions across Jefferson County, and in combination with complex topography and variable wind and fire weather, this can result in highly diverse fire behavior.

The WUI is any area where the built environment meets wildfire-prone areas—places where wildland fire can move between natural vegetation and the built environment and result in negative impacts on the community (Forge, 2018).

WILDFIRE IGNITIONS IN JEFFERSON COUNTY

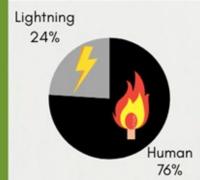
FIRE IGNITIONS

Fire management agencies reported 1,575 ignitions in Jefferson County between 2000–2020 (average of 75/year) that could have spread through wildland vegetation and/or adjacent neighborhoods.*



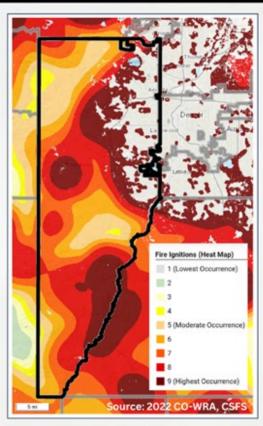
87% of ignitions were quickly extinguished at <0.25 acres

IGNITION CAUSES



Human activities were the primary cause of ignitions, such as accidental ignitions from vehicles, equipment, and campfires.

IGNITION HOT SPOTS

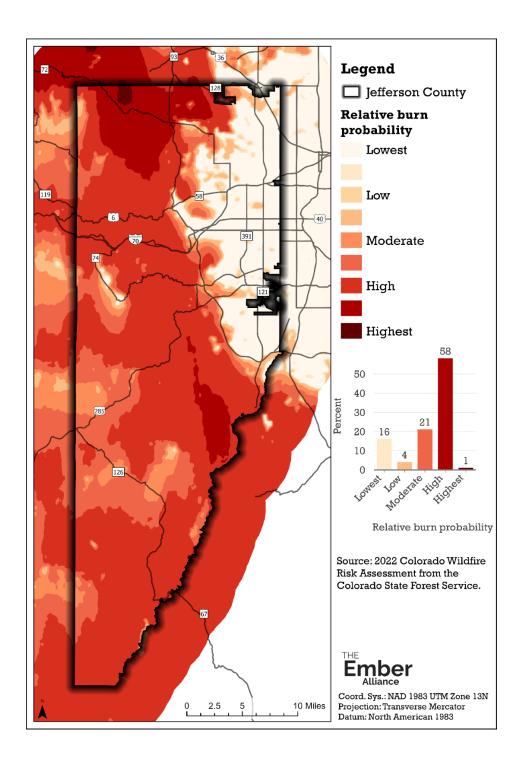


Most ignitions occur along the Front Range and in recreation areas, such as Cub Creek and Bell Parks and on the Pike National Forest along CO Hwy 67.

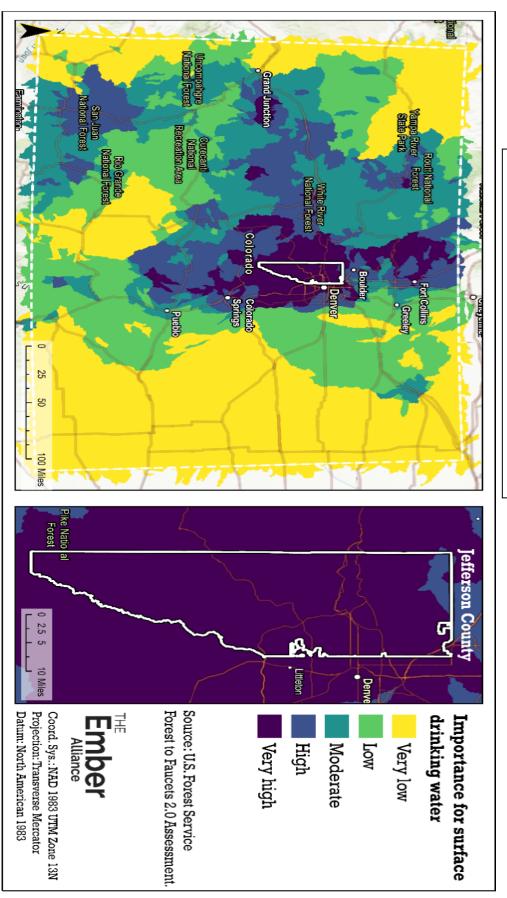


*Note: Ignition locations from the Fire Program Analysis fireoccurrence database, 6th edition (Short, 2022) were filtered to include only those between 2000-2020 in burnable areas per the 2022 Colorado Wildfire Risk Assessment (CO-WRA).





According to the 2024 Wildfire Risk to Communities, an analysis by the U.S. Forest Service, populated areas in Jefferson County are at greater risk to wildfire than 98% of counties in the United States and 98% of counties in Colorado (Scott et al., 2024).



Watersheds in Jefferson County are exceptionally important for the provisioning of clean surface drinking water in the state of Colorado. Source: U.S. Forest Service Forest to Faucets 2.0 assessment (Mack et al., 2022).

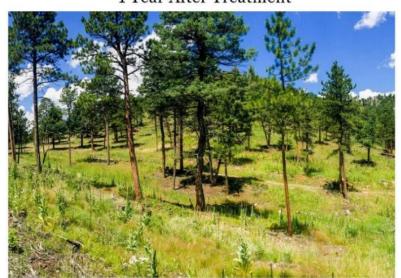
Before Treatment



Immediately After Treatment

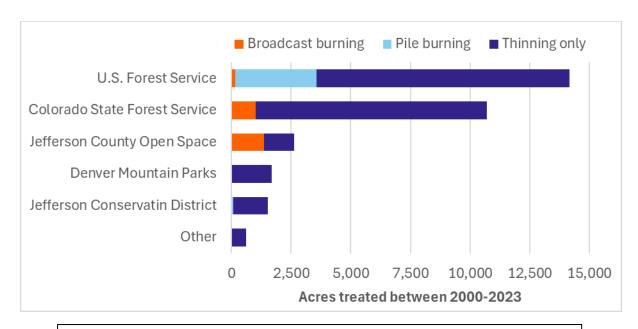


1 Year After Treatment

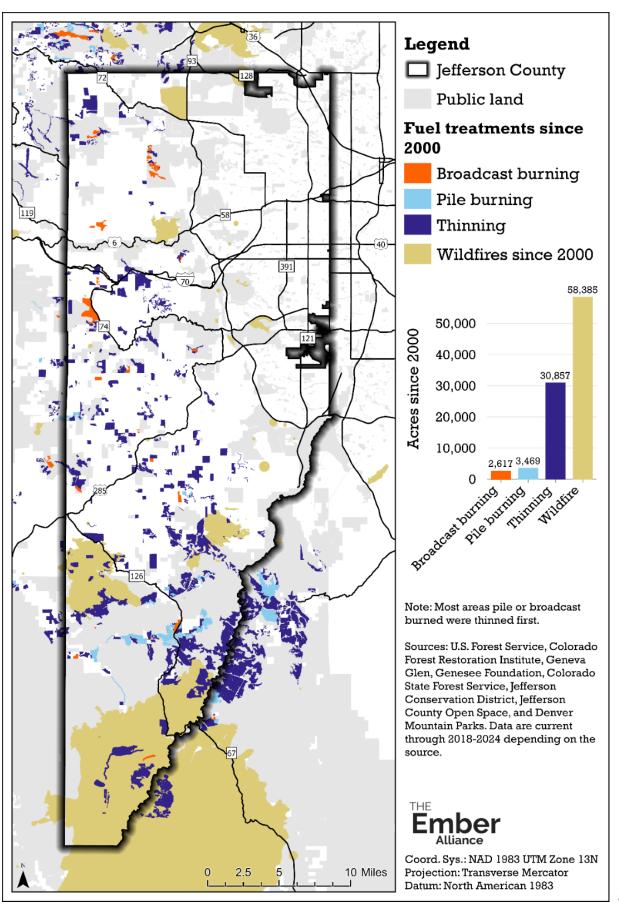


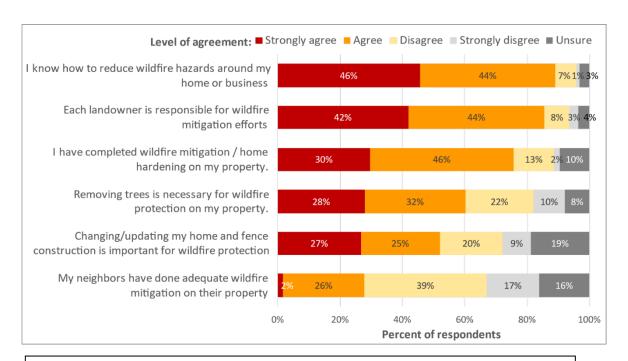
Public land managers and private residents in and around Jefferson County have conducted fuel treatments on about 31,350 acres since 2000 to reduce wildfire risk and restore ecosystem health. Thinning without burning was the primary mode of fuel treatment, accounting for 80% of treated acres. The U.S. Forest Service treated 45% of treated acres between 2000-2023 and the Colorado State Forest Service treated 35%

The pace and scale of fuel treatments was outpaced by the size of wildfires in Jefferson County between 2000-2023; wildfires burned 2.5 times more area than fuel treatments mitigated. Burned areas can serve as an effective fuel treatment modifying wildfire behavior for years to come, as evidenced by reduced fire severity in the areas burned by the 1996 Buffalo Creek and 2002 Hayman Fires



Acres treated by different methods by agency/organization between 2000-2024 in Jefferson County. Many areas that were pile burned or broadcast prescribed burned were thinned first.





residents were asked the degree to which they agree or disagree to a series of statements pertaining to wildfire risk mitigation

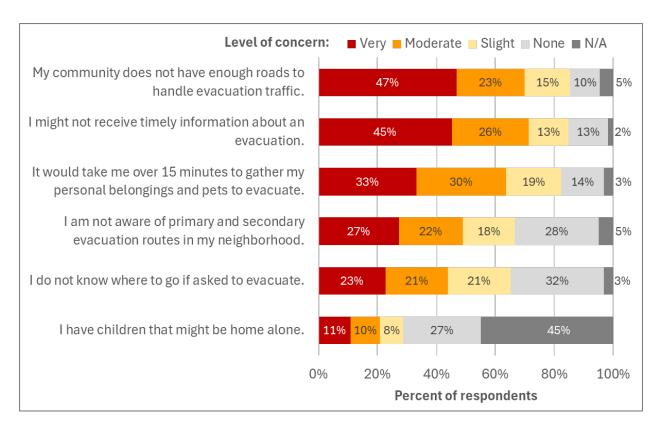
Evacuation Work

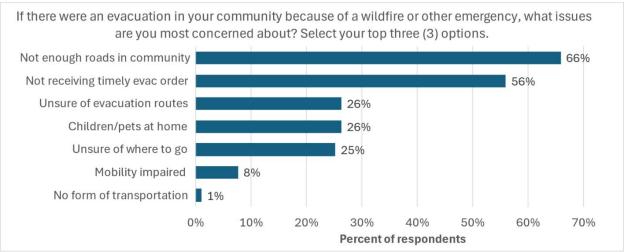


Click here to sign up for Lookout Alert

For more information, visit the Jefferson County Sheriff's Office website on emergency notifications.

Emergency Notification Terminology: Jefferson County Sheriff's Office	
	Advisories provide information but do not require any action on your part.
	Instruction messages provide information AND require you to take some action to be safe. There are three types of standard instructions: shelter in place, pre-evacuation, and evacuation.
	There is a hazard in your area, and you should remain or go indoors, not go outdoors, and not evacuate the area. This may be the safest strategy for hazardous materials, law enforcement, or other incidents wherein an evacuation could actually increase the danger to you.
	There is a hazard in your area that may require you to evacuate in the near future. Everyone should be prepared to leave at a moment's notice. If you feel you are in danger and want to leave, do so. If you need additional time to evacuate, you should consider leaving now. If you need to arrange for transportation assistance, you should do so immediately. If you have livestock or other large animals, you should consider removing them from the hazard area now.
	There is a hazard in your area, and you have been ordered to evacuate immediately. If you need assistance evacuating yourself or need help evacuating animals, call 911. You will be provided the safest escape routes known, so make sure you follow the instructions as other routes may be closed or unpassable. You will also be told where an evacuation point has been established to provide information and a safe place if you have nowhere else to go. Do not delay – evacuation means you need to leave immediately!





residents were asked "If there were an evacuation in the community because of wildfire, how concerned are you about the following issues?" Top concerns of residents were not enough roads in their community and not receiving timely evacuation orders.