

# Identifying Public Concerns about Prescribed Fire in Utah

Prescribed fire is seen by many as an effective tool for reducing wildfire risk, improving wildlife habitat, and restoring watersheds. However, widespread use of prescribed fire in Utah is most likely if there also is an increase in public acceptance. Campaigns to bolster public support must not only emphasize the benefits of prescribed burning but also address people's concerns about it. In a multi-phase study, we identified the issues most likely to lead people to object to prescribed fire projects in their community. The research goal was to inform messaging that could be used to address those concern and build support for prescribed fire as a management practice.

In this Utah State University study, we began by reviewing published academic literature, focusing on the few studies conducted in Utah. To dig deeper, we focused on concerns raised in Summit County, where prescribed burning has drawn considerable public attention and occasional opposition. Finally, we conducted a preliminary online survey of wildland-urban interface (WUI) residents across the state to assess initial levels of concern and/or support for prescribed fire.

**Summit County** was selected as a study site because it is growing in population and has numerous rural subdivisions set into forests that could be at risk of wildfire, posing a potential threat to lives, high-value residential properties, and eight headwaters of watersheds serving 1.2 million downstream users.

Working in cooperation with county officials, homeowners' associations in the Park City and Parleys Canyon areas have launched aggressive fuels-reduction campaigns. The method of choice has been mechanical slashing of understory vegetation and some trees, with debris then piled for later burning. Piles are covered with polyethylene plastic to keep them dry, and the plastic is burned along with the dry wood when piles are ignited.

We examined newspaper opinion articles, social media posts, and email communications, and comments at community meetings to develop a comprehensive list of concerns. We also convened a focus group meeting with land and fire managers to learn what comments they hear most often.



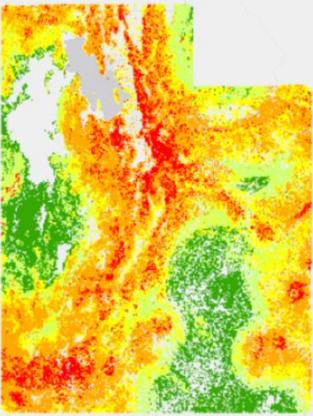
Slash piles burning in late fall after a snowfall (photo from Utah Fire Info's Facebook page, posted Nov. 18, 2024)

## Key concerns expressed in Summit County

- Air quality, including health effects of smoke from burning wood and/or plastic.
- Incomplete information about planned activities and their effects on trees within the community
- Aesthetic impact on forests and scenic views
- Cost-effectiveness of practices used
- Impacts on wildlife during cutting and burning

## What does prior published research tell us?

Studies conducted across the western U.S. have repeatedly found that most people - including in Utah – have a **generally positive opinion** about prescribed fire. There is strong support for its use in carefully controlled circumstances, and many people (though not quite a majority) believe it should be used wherever land and fire managers see fit. However, beliefs about fuels-reduction practices are **not strongly held**, and can be affected positively or negatively by events (e.g., an escaped burn). Opinions very much depend on **how much trust** people have in the forest managers charged with planning and implementing a prescribed fire project. When people have had **prior experience** with a burn project, they are more likely to support additional use of prescribed fire.



UWRAP map showing the communities at greatest risk of fire (shown in red)

## Preliminary survey of at-risk homeowners

We designed an online survey about attitudes toward prescribed fire, and measured acceptance before and after participants read an informational message about prescribed fire. We invited people to participate from 59 zip codes identified by the Utah Wildfire Risk Assessment Portal (UWRAP) as being at greatest risk of a forest fire. Response to the survey was very low, perhaps because prescribed fire is not a topic that draws interest unless a project is ongoing in their town. While we did not get enough responses to test the effects of the messages we crafted, we did find that **70% of respondents felt very positively toward prescribed fire**. While respondents said they do have some concerns about its use, **59% said they supported using it in their town or near their homes if needed to reduce wildfire risk**.

## Messages that can address public concerns

### Health and Safety

Smoke impacts exist, but wildfire smoke would likely be worse.  
Fire managers carefully monitor conditions to prevent escapes.

### Professionalism

Extensive planning occurs before a prescribed fire is ignited.  
Prescribed fire can be the most cost-effective tool to reduce fuels.

### Scenic Impacts

A burned forest “greens up” quickly after a fire.  
Post-burn rehabilitation can help to quickly restore scenic quality.

### Trees and Wildlife

Trees may be lost to fire, but most surviving trees will thrive.  
Most wild animals will escape a fire and return to better habitat.

### For further information

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