



# GREATER SANTA FE FIRESHED COALITION

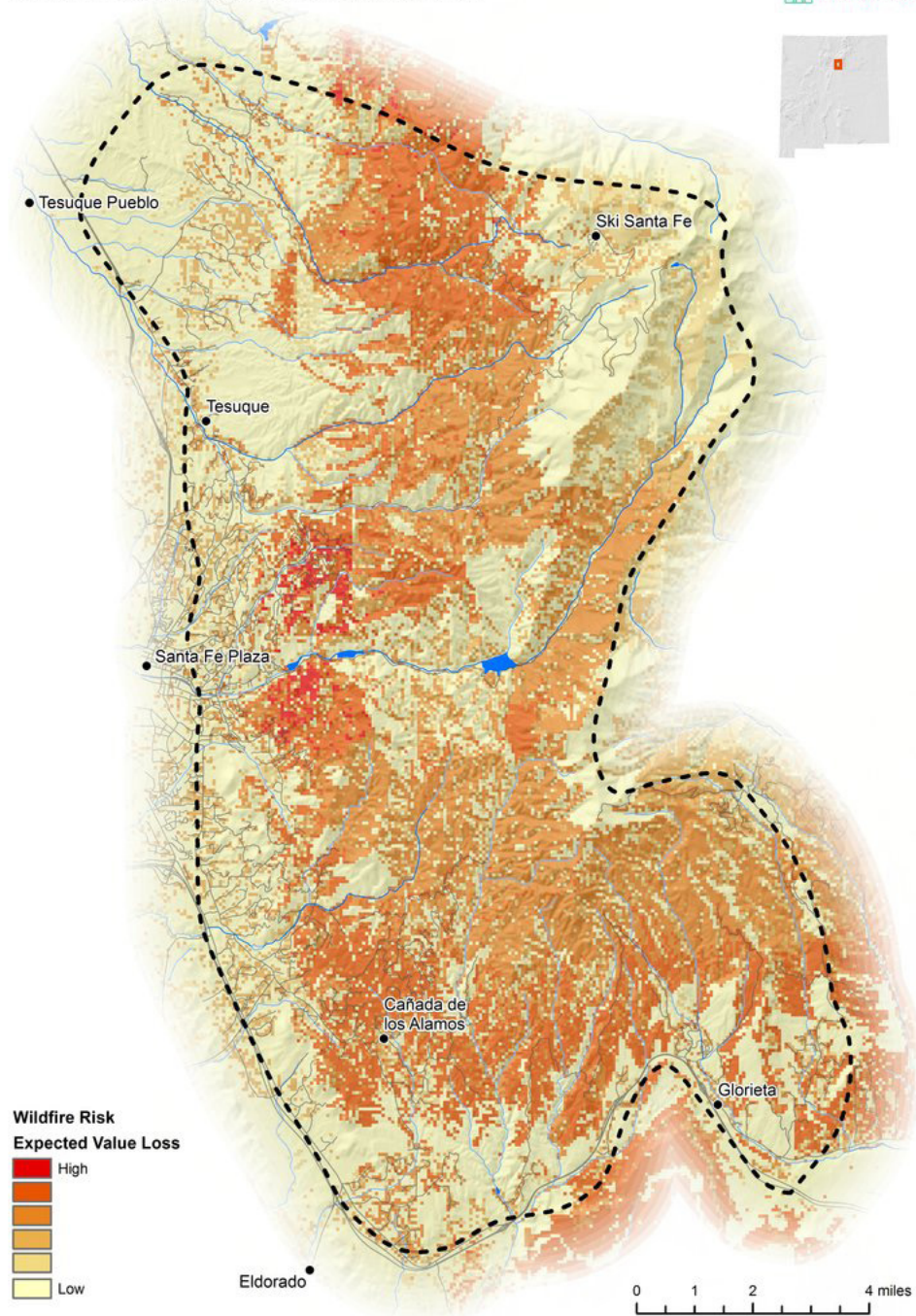
## COLLABORATIVE OUTCOMES REPORT

Spring 2023





## Wildfire Risk in the Santa Fe Fireshed



## WHAT IS THE SANTA FE FIRESHED?

A 'Fireshed' is a delineation of where fires ignite and are likely - or not - to spread to wild areas and communities. The Greater Santa Fe Fireshed is a 107,000-acre landscape in the southern Sangre de Cristo Mountains where social and ecological concerns regarding wildfire overlap and are intertwined. The Greater Santa Fe Fireshed Coalition was formed in 2015 as a collaborative effort between New Mexico State Forestry, the Santa Fe Fire Department, and many other partners. In 2016 both the City and County of Santa Fe adopted the Greater Santa Fe Fireshed Resolution.

## MISSION

The Greater Santa Fe Fireshed Coalition is comprised of public and private organizations in and around Santa Fe that use a proactive, collaborative approach to improve the health and long-term resilience of forested watersheds and communities by addressing wildfire. Our primary goal is to identify and implement high priority on-the-ground projects at the scale needed to address the risk posed by wildfire to the water supply, critical infrastructure, and cultural values in the Fireshed. This goal will be realized when fire is used as a tool for management throughout our forests, and communities in and adjacent to these forests are fire-adapted, meaning they understand the role of fire and are prepared for its occurrence.





## NATIVE LANDS

The Greater Santa Fe Fireshed sits on the ancestral lands of the Keres, Tiwa, Tewa and Towa-speaking Pueblos, and the Jicarilla Apache. Through our actions we aim to carry on their legacy of dynamic stewardship of these ecosystems where fire has been used as a management tool since time immemorial. The replacement of traditional Indigenous fire knowledge and cultural burning with policies devised by state and federal agencies around concepts of fire suppression and fire fighting have directly contributed to the extreme wildfire risk now threatening the Fireshed. As a founding member and leader of the Fireshed Coalition, the Pueblo of Tesuque is deeply invested in place-based, long-term stewardship of these lands.

## FIRE-ADAPTED LANDSCAPES

Fire has long played a fundamental role in the ecology of the forested landscapes of the Santa Fe Fireshed. It once moved unencumbered across this landscape when dry conditions and lightning aligned with receptive fuels, wind, and terrain. Fire occurrence here is associated with anomalously wet (usually El Niño) years preceding anomalously dry (usually La Niña) years in both ponderosa pine and mixed conifer forests, where 79% of historic fires burned in the spring or early summer. With the exception of prescribed burns associated with management of Santa Fe's municipal water supply, this area has now experienced more than a century of fire exclusion, significantly elevating the risk of catastrophic wildfire. Prescribed fire is a critical tool that managers can use to reduce the intensity of subsequent wildfires while increasing suppression success, decreasing suppression costs, and reducing firefighter risk.







## PROTECTING WATER

The Greater Santa Fe Fireshed Coalition works with the City, County, and Santa Fe National Forest to restore resilience to the municipal watershed's forests in order to protect Santa Fe's water supply. Santa Fe continues to source a significant portion - 40% - of its water from the forested municipal watershed. Ultimately, the groundwater supply, Santa Fe River, and city wellfield are also dependent upon recharge that occurs in the watershed. This watershed is at risk, as less than 1.7 inches of rain in an hour, particularly after a wildfire, could trigger debris flows that fill Nichols and McClure reservoirs with sediment, rendering the emergency release valve unusable. Since 2003 the Forest Service has been conducting prescribed burns in this area, significantly decreasing the risk of catastrophic wildfire and associated impacts.







## PACHECO CANYON FOREST RESILIENCE PROJECT

Since 2018 the Pacheco Canyon Forest Resilience Project has demonstrated that a collaborative approach to wildfire resilience can be successful. Led by the Pueblo of Tesuque in partnership with the City of Santa Fe, County of Santa Fe, Forest Stewards Guild, Santa Fe National Forest, and others, this project has reintroduced low to moderate intensity prescribed fire (Rx) to more than 1,000 acres of the Santa Fe Fireshed, including the 2019 Pacheco Rx which provided an anchor point from which the 2020 Medio Fire was successfully contained. This project's next goal is to safely conduct a broadcast burn on the south side of Pacheco Canyon, where nearly 1,000 acres of small-diameter trees have been thinned and 500 acres of piles burned in preparation. These efforts extend to Pueblo of Tesuque Reserved Treaty Right Lands where more than 100 acres of piles were burned in 2021. Additionally, mechanical mastication has been completed on several ridgelines and nine miles of fire line have been installed to prepare for future broadcast burns, such as the SW Pacheco Rx, Vigil Grant Rx, and Aspen Ranch Rx.



# RESILIENCE STRATEGY

In 2022 the Greater Santa Fe Fireshed Coalition completed its Resilience Strategy. This Strategy articulates the purpose of the Coalition and makes recommendations about actions that can be taken to reduce the risk of catastrophic wildfire in the Fireshed.

The Strategy includes four parts that serve as the foundation for the Coalition's collaborative work:

1) Coalition members' collective understanding of current landscape conditions, both ecological and social. The Strategy recommends that efforts be focused in frequent-fire forests where restoring fire as a key process is the best way to increase landscape resilience.

2) A definition of desired conditions to help Coalition partners track progress. As envisioned in the Strategy, the desired landscape would have well-functioning watersheds and forests that are resilient to disturbance while maintaining biodiversity.

3) A description of target methods to improve landscape resilience, including thinning and prescribed burning. The Strategy also highlights the importance of coordination so that the work of each partner builds on the work of all others.

4) The division of the Fireshed into 18 focal areas. Rural public lands comprise about half of these, while fire-adapted communities - primarily suburban and urban areas where lands are under private ownership - comprise the other half. The Strategy is founded on the idea that the people most affected by mitigation actions, or the lack thereof, should be the most involved in risk reduction.

Beyond these, the Coalition recognizes the importance of adaptation as environmental conditions change and scientific advances offer new opportunities to refine the Strategy. This adaptive process allows for the framework developed to be used well into the future.







## AMBASSADOR PROGRAM

The Ambassador approach involves engaging our neighbors to help them understand their wildfire risk and encourage them to take action to reduce that risk. The Santa Fe Fireshed Ambassador program was founded in 2018 and is coordinated by the Forest Stewards Guild and the City of Santa Fe Fire Department. Ambassadors receive education and training on topics such as evacuation preparedness and egress strategies, fire behavior, home hardening, and fuels reduction. Acting at the neighborhood scale, Ambassadors increase community capacity and preparedness in the event of a wildfire.



## COMMUNITY OUTREACH

Since 2016 the Greater Santa Fe Fireshed Coalition has taken an innovative and broad approach to community outreach, with the goal of conveying a nuanced message around wildfire while increasing first-hand knowledge of forested watershed management among the public. Coalition members have led many field trips into the Fireshed, including to areas that have recently experienced thinning and prescribed fire treatments. Through seminar series, a common ground event, and movie nights with panels, the Coalition has created numerous opportunities for experts to interface with the public, while also hosting wildfire preparedness days with interactive sessions, including Simtable demonstrations. The Coalition has conducted direct outreach at the Santa Fe Farmers' Market and elsewhere, and created a series of briefing papers and story maps that summarize key actions and concepts. It also advertises with permanent kiosk signs at trailheads and on pedicabs and buses, and even co-created a Fireshed themed beer! At the outset of COVID-19, the Coalition began publishing an online newsletter which now has over 100 issues. In addition, Coalition members have given countless media interviews that play a key role in disseminating science-based information about fire ecology and related topics. These efforts represent a suite of outreach strategies that the Coalition is excited to build on moving forward.





## EMBRACING AN UNCERTAIN FUTURE

In order to prepare for climate change, it is critical that we have a solid understanding of what to expect. Climate models for the southwest project temperature increases of up to 9.5°F by the end of this century, with droughts becoming more frequent, more intense, and longer. Commensurate with drought, we expect increases in the frequency and intensity of wildfires, as well as tree diseases and pests, the combination of which creates significant potential for “type conversion” of southwest forests into shrub- and grass-dominated ecosystems. Conserving our forests into the future will require concerted effort and a variety of local approaches, from forest thinning to prescribed burning to reforestation. We must integrate science with Indigenous knowledge and management approaches if we are to restore resilient forested ecosystems and communities in the Greater Santa Fe Fireshed and beyond.

The Coalition’s Resilience Strategy recognizes the importance of adaptation, laying out a suite of approaches the Coalition can use to improve forest and community resilience, including forest management, infrastructure protection, and outreach and education to build fire-adapted communities. Holding support for and working with land managers is also critical for accomplishing work at the scale necessary to keep pace with a changing climate. Monitoring is an additional tool we can employ to track changing conditions of forested ecosystems; pilot studies as part of a Multi-Party Monitoring Plan in the Fireshed are currently underway.

By supporting the Greater Santa Fe Fireshed Coalition, you help us work towards a livable future for our diverse communities in balance with the fire-adapted ecosystems that surround us.





# PARTNER SPOTLIGHT

Mori Hensley is a third-generation New Mexican and lifelong lover of wild beings and sacred landscapes. She earned her B.S. and M.S. degrees in Environmental Sciences with a concentration in Ecology and Conservation from Emory University, where her thesis focused on human-wildlife conflict in Ladakh, India. She also has a background in community-based conservation, religion, and Tibetan Studies, having merged these interests as a Fulbright-Nehru scholar in India after completing her Master's. Mori joined the Santa Fe Watershed Association (SFWA) in 2019 as Program Coordinator and stepped into the role of Executive Director in 2022. SFWA works to protect and restore the health and vibrancy of the Santa Fe River and its watershed for the benefit of people and the environment. Since 1997, SFWA has partnered on projects throughout the Santa Fe watershed - their My Water, My Watershed field trips have brought more than 10,000 public school students to the upper watershed to see where their water comes from and learn how healthy forests are essential to protecting our most precious resource! SFWA also leads adult trips to teach community members about forest management and watershed health. SFWA is thrilled to be a member of the Fireshed Coalition, whose goals align with their values of science-based management, collaboration, and deep care for our mountains, forests, watersheds, and cultures.



# COALITION PARTNERS

