TRI-STATE

WILDFIRE MITIGATION FOR RURAL UTILITY COOPERATIVES



Since 2020, approximately 243,503 wildfires have burned over 27 million acres of land in the United States, with the frequency and severity of fires expected to grow, especially in the rural West.

Sources: science.nasa.gov/earth/natural-disasters/wildfires/six-trends-to-knowabout-fire-season-in-the-western-us and wildfirerisk.org/explore

Rural co-ops like Tri-State are disproportionately effected by wildfire risk

1/6th

We have 5,000+ miles of line, including 31,000 wooden structures across four states. Our members average five customers per mile, one-sixth of the national average. That's because we serve the rural West, which includes small towns and agricultural, mountain and tribal communities.

WE SERVE THE RURAL WEST

15%

Our service territory is almost 200,000mi², or 15% of land in the contiguous U.S. This includes over 26,000mi² of forests and 900mi² of national parks. This diversity in landscape and ownership drives us to create site-specific wildfire mitigation plans and actions.

WE ARE STEWARDS OF THE LAND

55%

Over half of our communities are considered disadvantaged, including the 18 Native nations we share geography with. Tri-State spends 25% of our annual transmission maintenance budget on wildfire mitigation, and any increase places additional cost burdens directly on these communities.

WE ARE NOT-FOR-PROFIT



BIGHORN NTL FOREST, SERVED BY BIGHORN REA



2018 BLUE MESA-LAKE CITY 33.29MI PROJECT

What is Tri-State doing?

TYPICALLY, OUR CREWS AVERAGE 3,500+ MAN HOURS EACH YEAR PERFORMING VEGETATION MANAGEMENT PROJECTS AND DANGER TREE REMOVAL

The top priorities of our wildfire mitigation plan are protecting our transmission system and keeping our communities safe. This starts with reducing the threat of wildfires while lowering the risk of catastrophic damage. By taking proactive measures to address potential fire ignition risks around our transmission line right-of-ways, we're not only safeguarding the public but also ensuring the reliability of our electric infrastructure and protecting natural resources.

To do this, we've constructed and deployed a multi-layered mitigation plan, focusing on two main categories: situational awareness and risk reduction.

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Fraser-Mill 115-kV (2014) 21.4 miles in Grand County, CO

Mancos-Shenandoah 115-kV (2015) 20.83 miles in Montezuma and La Plata Counties, CO

Bayfield-Pagosa 115-kV (2016-2017) 36.71 miles in La Plata and Archuleta Counties, CO

Blue Mesa-Lake City 115-kV (2018) 33.29 miles in Hinsdale and Gunnison Counties, CO

North Fork-Juanita 115-kV (2020, joint project) 1.47 miles in Delta County, CO

Montrose-Maverick-Cahone (2018 & 2019) 78.66 miles in Montrose, San Miguel, and Dolores Counties, CO

Poncha-San Luis Valley 230-kV line (2018) 13 miles in Saguache County, CO

Ames Hyrdo-Burro Bridge (2022 and 2023) 3.05 miles in San Miguel and San Juan Counties, CO

Burro Bridge-Silverton-Molas Tap 115-kV (2024) 8.74 miles in San JuanCounty, CO

Hesperus-160 345-kV (2024) 12.77 miles in La Plata County, CO

UPCOMING LARGE SCALE PROJECTS

Black Lake-Taos (Taos, NM) Gore Pass-Windy Gap (Kremmling, CO) Molas Tap-Cascade (CO)

What is Tri-State doing? (continued)

SITUATIONAL AWARENESS

The foundation of our program is situational awareness, and we employ a multi-layered approach. Seasonally, we study wildfire risk drivers like fuels, topography and previous fire history at a landscape level to determine where fire is likely to occur. Daily, we monitor fire weather conditions including temperature, windspeed and relative humidity. Additionally, we conduct detailed annual inspections, and we use satellite and drone technology to proactively identify maintenance needs and prevent system failure. Our situational awareness tools include:

- System-wide Wildfire Risk and Hazard Identification Modeling
- Internal GIS platforms and All Hazard Alert software
- Detecting voltage fluctuations with operational controls
- Intelligent Vegetation Management System imaging
- Satellite and Drone Transmission Line Inspections
- Collaboration and information sharing with partners

PROGRAM ASSESSMENT AND REVISION

We are committed to the evolution of the program as wildfire risk changes in the communities we serve. Not only do wildfire conditions change, but population in these high-risk areas has also evolved. To meet these changes, we routinely evaluate our Wildfire Mitigation Plan and identify areas in which we can increase our effectiveness. Our situational awareness program will evolve to incorporate new technology to remotely sense system responses to wildfire conditions. Increased use of satellite and drone technology will allow us to more quickly assess our assets and prioritize our vegetation management and system hardening. The wildfire risk in the areas we serve will continue to evolve and Tri-State will rise to meet these challenges to provide the safety, reliability and costs our members need.

RISK REDUCTION

We proactively reduce risk across our service territory based on the data generated in our situational awareness programs. We have a robust vegetation management program and schedule to address shrubs, trees and fire fuels that risk encroaching, damaging or interfering with our system. We also harden the system to sustain the effects of fire, with a variety of tools at our disposal. Replacing wood poles with steel and investing in other fire-resistant hardware protects our assets from encroaching wildfire. These processes are time, labor and capital-intensive, therefore protecting our physical structures involves extensive planning and permitting in conjunction with federal, state and environmental groups. We dedicate heavy equipment such as helicopters, masticators and bucket trucks to perform this work in challenging topographical settings. System hardening includes:

- Asset inspection, replacement and fire hardening
- Vegetation management and wildfire fuel reduction
- Adapting field employee techniques based on wildfire risk

Electricity is a basic need

Further collaboration on insurance, liability standards, permitting and funding is critical as utilities address fire mitigation and vegetation management on their lines. Together, we can better protect these communities while delivering reliable, affordable, responsible power.







ABOUT US

VEG MGMT

WILDFIRE