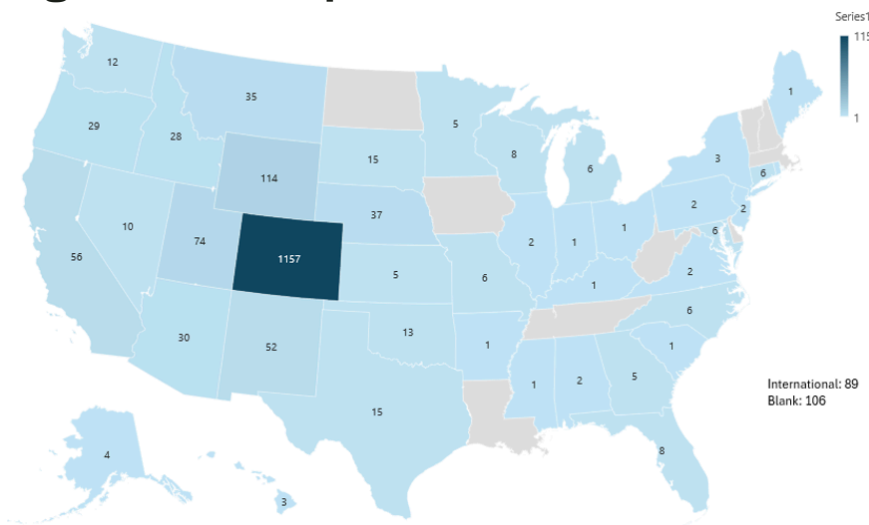


## HIGHLIGHTS

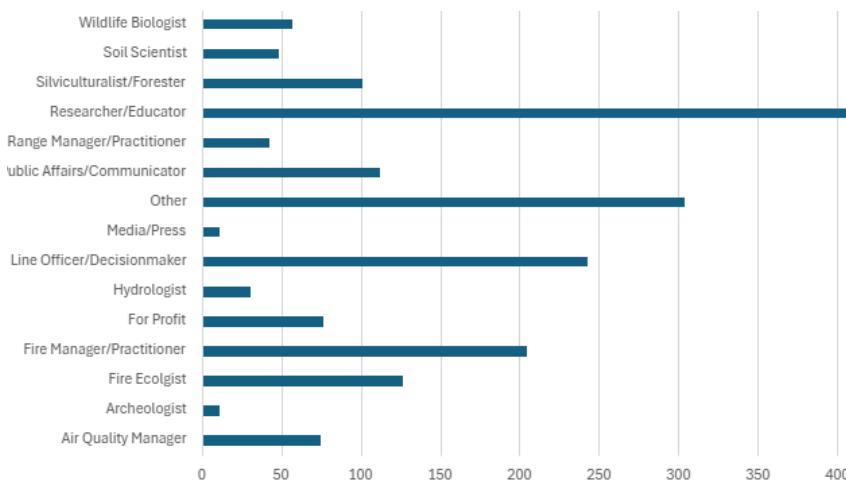
In the recent federal fiscal year (October 1, 2023 - September 20, 2024), Southern Rockies Fire Science Network (SRFSN) created, facilitated, or contributed to a total of 25 in-person or face-to-face events (including webinars) for a total of over 3,000 participants. Online engagement and resources reached over 46,765 national and international participants. Our newest focus areas included communication on grassland fires, past and present vegetation modeling, high altitude revegetation, and Indigenous perspectives in ecological and cultural research.

**Figure 1: Participation and Growth:**



**Figure 1** shows SRFSN subscribers represented by state, plus 89 additional international subscribers. Total online subscribers for SRFSN communications currently equal 1,828. Colorado has the highest number of subscribers due to higher population, numerous academic institutions, federal agencies and non-governmental organizations. However, many states follow SRFSN for the latest regional news and research. International followers often represent those nations experiencing increasing wildfire issues, including Spain, Portugal, South Africa, and even Nordic countries such as Sweden.

**Figure 2: Network Users by Occupation:**



**Figure 2** shows SRFSN subscribers by occupation. We continue to have subscribers from across the spectrum of natural resource professions. The largest user groups continue to include federal and state agencies, municipalities, and NGO's, indicating that SRFSN meets our mission of science exchange between researchers, managers, and communities.

## KEY FIRE SCIENCE TOPICS ADDRESSED IN FY 2024:

- Invasive plant species
- Vegetation
- Postfire recovery and management
- Fuels Management
- Soil
- Indigenous knowledge
- Fire Regimes
- Prescribed fire
- Fire behavior
- Watershed Processes

# SUCCESS STORY 1: Aspen Workshop

## BACKGROUND

Aspen trees are critical to the ecosystems and communities of western North America, but they face significant challenges (diseases, pests, and climate) requiring updated science and management methods. There is growing concern among land managers, tribes, private landowners, and other groups to understand these changes and take action. However, barriers hinder effective forest stewardship, including: lack of awareness about best practices and current research, few opportunities for collaboration and knowledge-sharing, trust issues - particularly between non-Indigenous people and tribes - and limited time and funding resources.

Since 2022, SRFSN has worked with a variety of regional partners to host annual aspen science and management workshops throughout the state to develop approaches that are effective climate-smart and culturally sustaining management practices.



## 5 JFSP-designated societal impact areas

This SRFSN activity met 4 of the 5 JFSP-designated societal impact areas.

- Instrumental
- Conceptual
- Capacity-Building
- Connectivity
- Socio-Environmental



## INNOVATION

Considering increasing disturbances from fire, as well as insects and pathogens, heavy herbivory leading to widespread declines in recruitment, the role of natural resource managers – foresters, wildlife biologists, scientists, and land managers – has never been more important for aspen. The Aspen Climate Smart and Culturally Sustainable Workshop examined emerging trends that will influence actions to appropriately manage and sustain aspen forests into the future.

The planning team was awarded a USDA Agroforestry grant that provided travel, housing and food for selected land managers, researchers, and tribal members working in conservation and management. Prior to the workshop, an online reading library was established, and two pre-workshop online discussion meetings were held to review the readings to provide a common knowledge foundation for attendees.

## IMPACT

It is no exaggeration to state that this workshop was one of the most impactful and profound experiences for SRFSN in cross-cultural knowledge exchange, not only on the topic of aspen ecology, but also on the broader paradigm of research design and indigenous knowledge. Indigenous participation, research and cultural perspectives were integrated throughout the event, challenging and suggesting changes for conventional research and presentation methods. Afterwards, a LinkedIn discussion and connection group was established to provide a platform for further communication and learning. While the 2024 grant was limited to this event, we are seeking to move forward with additional funders and support.



# SUCCESS STORY 2: Grassland Fire Workshop

## BACKGROUND

In the last 20 years, wildfires have scorched more land in non-forested areas than in forests across both the continental and western US. For 14 of the past 21 years, the annual burned area was greater in non-forest lands than in forested areas. Overall, non-forest lands in the continental US burned an additional 7.5 million acres, while in the western US, the difference was 3.7 million acres.






In late 2021, severe grassland fires impacted areas in Montana, Kansas, and Colorado. The 2021 Marshall fire in Boulder County burned over 6,000 acres and 1,084 structures.

The Front Range can present unique fuel and weather conditions for wildfires. Combined with numerous wildland/urban interface and intermix settings, these conditions can be critical in wildfire management.



## 5 JFSP-designated societal impact areas

This SRFSN activity met 5 of the 5 JFSP-designated societal impact areas.

-  **Instrumental**
-  **Conceptual**
-  **Capacity-Building**
-  **Connectivity**
-  **Socio-Environmantal**



## INNOVATION

The Front Range Grassland Fire Workshop aimed to increase participants knowledge and understanding of the ecology, behavior, risks, and management of grassfire conditions on the Front Range.

Speakers were recruited from both the Front Range and the Great Plains to discuss grassland fire ecology, history, current conditions, prescribed fire and management for urban, rural, and intermix areas. Great Plains speakers shared established strategies for effective grassland fire management with attendees.

## IMPACT

A collaborative discussion group has been established to work on Front Range fire and mitigation issues and opportunities for further knowledge exchange events on this topic.

SRFSN also worked with the Colorado State Forest Service to create a web page outlining best practicing in mitigating and managing grassland fires. This will be followed up with printed outreach materials.

The Front Range Grassland Fire Workshop also provided the framework for a follow-up Northern Colorado Grassland Fire Prescribed Fire workshop coordinated by The Ember Alliance in September 2024. This workshop extended the discussions established by the previous event into regionally-focused ecology, history of prescribed fire, and a non-fire TRES training.

Additionally, SRFSN spearheaded the development of an educational grassland fire storymap to show managers, policymakers, and the public realistic information about the types and proportion of grassland and range fires compared to forest fires in the continental U.S.



# SUCCESS STORY 3:

## Colorado Wildland Fire Conference

### BACKGROUND

SRFSN has been a major planning member and supporter of the Colorado Wildland Fire Conference since 2013, contributing time and resources to 8 consecutive conferences. The CWFC is geared toward professionals working proactively to improve wildfire outcomes in Colorado communities and landscapes such as Mitigation Specialists, Emergency Managers, Firefighters, Researchers, Foresters, Developers and Policy Makers. The event is open to anyone wishing to learn more about how to reduce their community's vulnerability to wildfire.

SRFSN has given presentations, contributed to speaker recruitment and selection, marketing and outreach, scholarships and travel stipends, and has provided fire science information through booths and displays at each event.



### 5 JFSP-designated societal impact areas

This SRFSN activity met 5 of the 5 JFSP-designated societal impact areas.

- ✓ Instrumental
- ✓ Conceptual
- ✓ Capacity-Building
- ✓ Connectivity
- ✓ Socio-Environmental



### INNOVATION

In an era where wildfires are both more frequent and intense, the 2024 Colorado Wildland Fire Conference was focused on meeting the challenges of our time, with the implementation of robust strategies to help our communities to adapt and live with wildfire, exploring the conference theme of “Meeting the Moment”.

The 2024 CWFC, held in Snowmass Village, Colorado, ranked among our best-attended events with 251 attendees. Presentations featured insurance trends, actionable insights for community and landscape planning, livestock evacuations, and potential operations delineations. A neighborhood ambassador training, screening of the FireForest film, and a tour of the Lake Christine Fire and Rx burn were also included in the conference.

### IMPACT

The CWFC has helped shape strategies for integrating fire management into community planning, land use, and building design, as well as raising policy awareness about wildfire risks. The impact extends beyond educational sessions, with networking opportunities that help drive real-world solutions to reduce wildfire threats and improve emergency response systems across Colorado and beyond.

At the 2024 CWFC, the Southern Rockies Fire Science Network was awarded “Recognition for Connecting Science and Practice” in observance of time, knowledge, and fiscal support contributing to social and ecological wildfire resilience.





## Connecting Short-Term and Long-Term Objectives:

- **Improved policies for wildfire management; landscapes, healthy watersheds, and communities**
- **Efficient landscape management resulting in reduced loss of fire and property**
- **Productive exchange and use of science-based wildfire knowledge among researchers, managers, communities**

Long-term outcomes in our logic model (shown at left) remain relevant to the region's ongoing challenges with education on fuels, fire, restoration, and management. Taken together, the impacts outlined above illustrate the importance of careful communication in partnerships across agencies, working groups, and cultural expectations. Providing these opportunities improves planning, policies, and increased efficiency in management, resulting in more efficient and effective pre- and post-fire response. Continuing to imbue diversity and perspectives into the planning process as well as regional knowledge needs leads to improved policies for resilient social and ecological landscapes.

SRFSN has faced challenges in reaching and building knowledge exchange communities in remote areas of the region. New steering committee members are bringing fresh energy and new ideas for increasing engagement to these areas, particularly in Utah, Wyoming, and the Black Hills.

## RESOURCES

### Aspen Science and Management Workshops:

<https://www.southernrockiesfirescience.org/event/colorado-aspen-summit-2023/>

<https://www.southernrockiesfirescience.org/event/colorado-aspen-summit/>

### Colorado Wildland Fire Conference:

[fireadaptedco.com](http://fireadaptedco.com)

### Did You Know Wildfires Burn More Rangelands?:

<https://storymaps.arcgis.com/stories/554774f928fa4f2590b7eb028f2b4d23>

### FireForest Film:

<https://www.fireforestphoto.com/film>

### Front Range Grassland Fire Workshop:

<https://www.southernrockiesfirescience.org/event/front-range-grassland-fire-workshop/>

### Wildfire in Grass-Dominated Landscapes:

<https://csfs.colostate.edu/wildfire-mitigation/grasslands/overview/>

### LANDFIRE landscape assessments:

<https://www.southernrockiesfirescience.org/why-subregions/>

