



## Annual Report October 2022 – September 2023

### HIGHLIGHTS

In the recent 2023 federal fiscal year, SRFSN created, facilitated, or contributed to a total of 35 in-person or face-to-face events (including webinars) for a total of 7,570 participants. These webinars were well-attended by hundreds of participants and viewed online. Partnership continues in supporting the **Colorado Wildland Fire Conference**, recently held in Ft. Collins in April of 2023 and resulting in 350 attendees and 30 vendors. We created or contributed to 7 online and print resources accessed by at least 1,393 users. Social media posts and other online learning totaled engaging a total reach of 78,573.

**Table 1: Key fire science topics addressed by SRFSN products and activities in federal fiscal year 2023\***

<i>Wildlife</i>	<i>Fire regimes</i>
<i>Invasive plant species</i>	<i>Fuels management</i>
<i>Vegetation</i>	<i>Prescribed fire</i>
<i>Soil</i>	<i>Smoke, air quality, and health</i>
<i>Watershed processes</i>	<i>Wildland urban interface and infrastructure</i>
<i>Postfire recovery and management</i>	<i>Social science and human dimensions</i>
<i>Fire behavior</i>	<i>Indigenous knowledge</i>

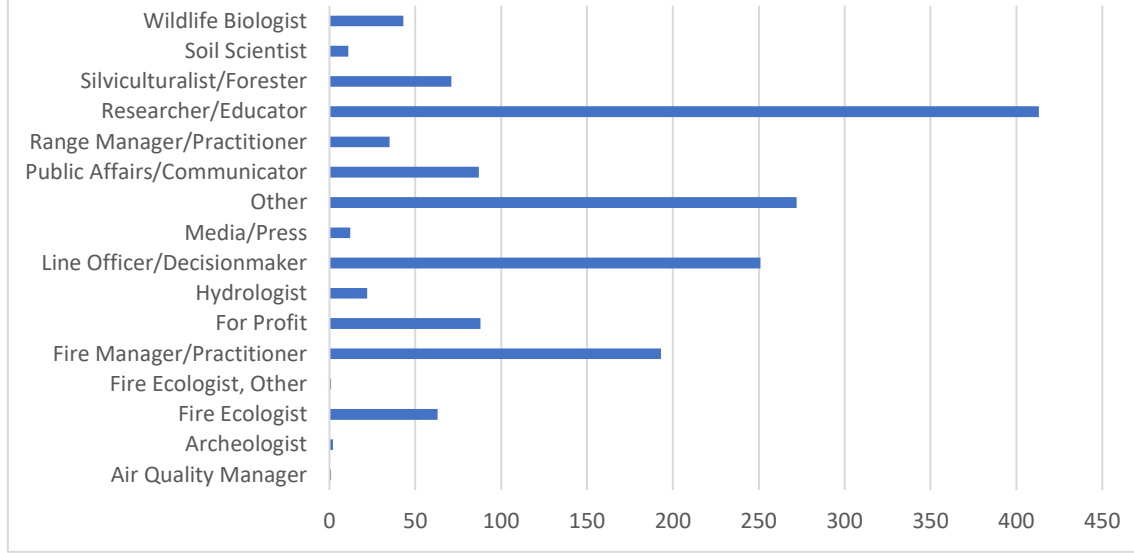
\*As presented in: Collins, N., Meldrum, J., Schuster, R., and Burkardt, N. 2022. 2021 Assessment of the Joint Fire Science Program's Fire Science Exchange Network: U.S. Geological Survey Scientific Investigations Report 2022-5052. <https://doi.org/10.3133/sir20225052>

**Organization:** SRFSN continues to share organizational capacity by sharing time and expense for two professional program assistants with the Colorado Forest Restoration Institute (= .25 to .5 FTE). These assistants use professional experience in social media applications, graphic design, events, and publication production resulting in social media engagement and event capacity.

SRFSN continues to use and improve on workflow to ensure activity and budget tracking. Teams\_messaging platform is used to communicate and track social media, newsletter, and event projects. [Smartsheets](#) is used to follow our proposed budget narrative compared to our actual activities and expenses, including budget tracking independent from the Warner College of Natural Resources accounting system so that we may track encumbered amounts and balances more rapidly. Data for all activity tracking has been provided by these spreadsheets and combined in firescience.gov Table 2. SRFSN can make this structure and template available to other exchanges upon request.

**Lessons Learned:** Outreach trips coordinated between SRFSN and GPFSE continue to result in increased exposure to the FSEs to new organizations that can leverage our services and information for increased exchange about conifer/grassland/intermix fire conditions and WUI science and education. More outreach for practitioner groups continues to be needed. And finally, engaging and listening to underrepresented groups at the outset of project planning is imperative to increase wildfire science meaning and relevance to these communities. Increases in diversity are occurring with planning conversations with local tribal members, publications in Spanish, and supporting women in STEM and natural resources through employment and science exchange opportunities.

**Figure 1: Subscribers by Occupation**

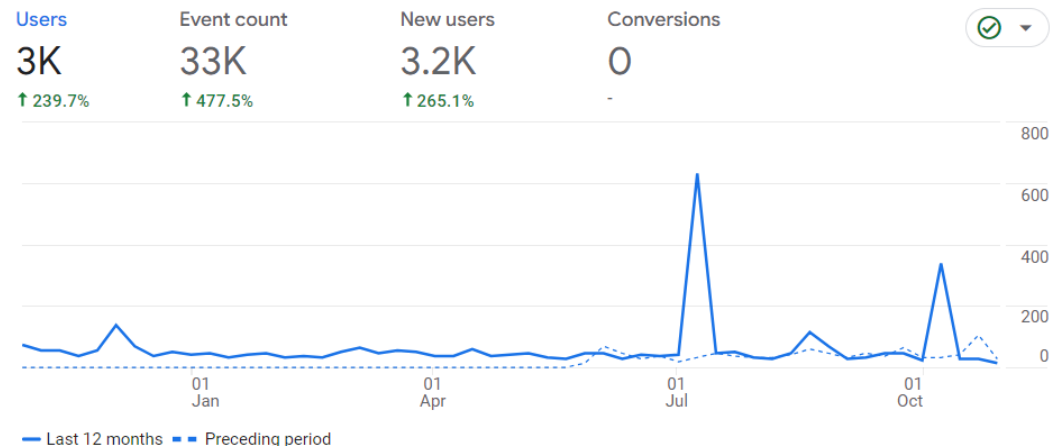


Metrics for subscribers and social media followers reflect recent shifts in agency policies regarding online access as well as changes to social media platforms. In preparation for this report, SRFSN staff spent considerable time reviewing subscribers in Mail Chimp; almost 300 entries were likely to be from bots or phishing attempts and were removed. Additionally, the combined impact of the US Forest Service changing the e-mail extension from fs.fed.gov to usda.gov has resulted in searches for the correct affiliations for subscribers. Many agency personnel appear to be using their personal email accounts to be able to access images and content often blocked with federal email servers. Moving forward, SRFSN will examine ways to accurately capture affiliation and occupation regardless of e-mail source, and work with Mail Chimp to apply increased security measures to our listserv.

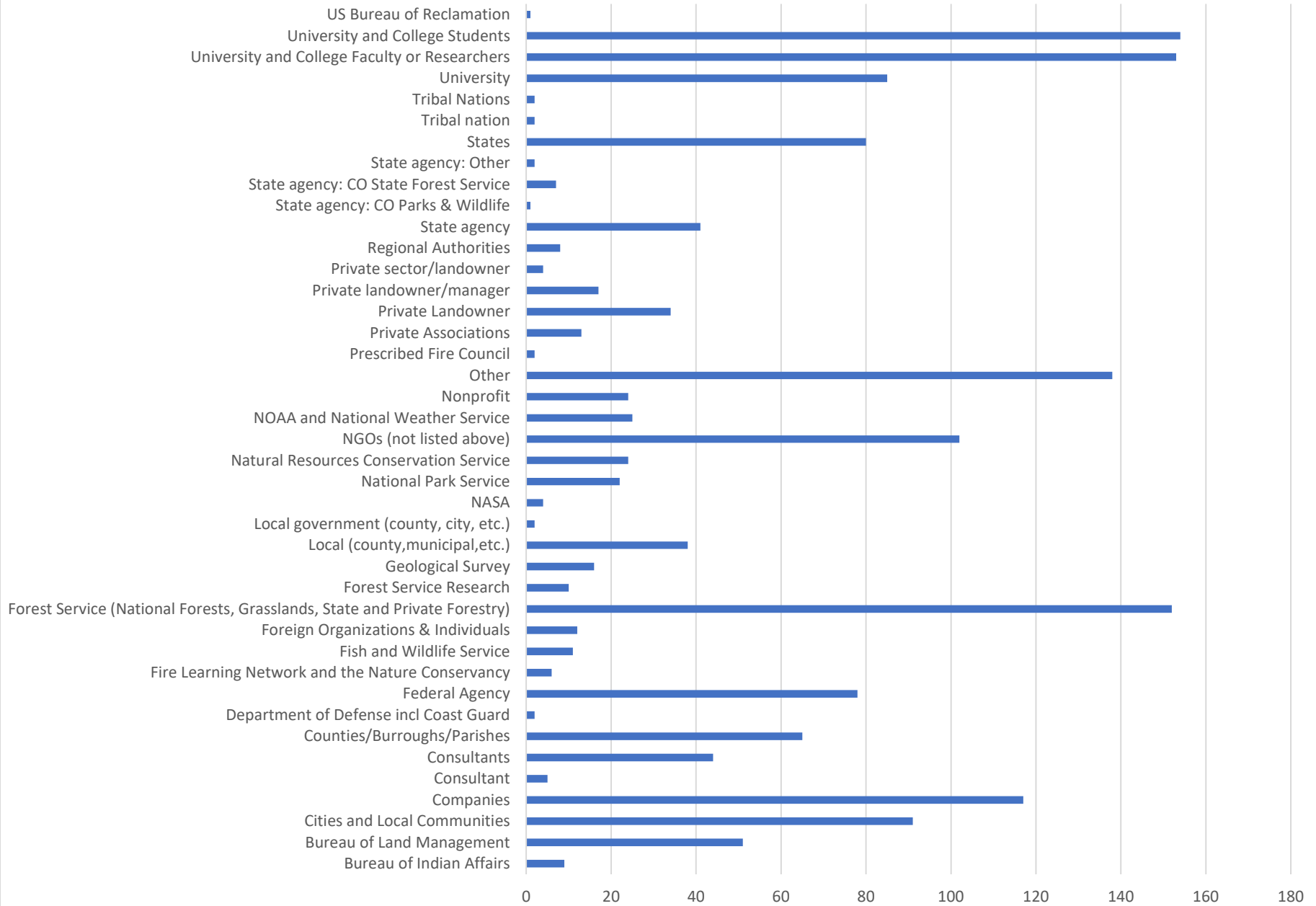
Figure 1: Subscribers by Occupation illustrates predominant follower categories are educators, line officers/decisionmakers, and various practitioner categories, indicating that our outreach and information exchange are serving multiple intended audiences. Figure 2: Subscribers by Affiliation (shown next page) shows that SRFSN continues to meet original audiences of both researchers and managers, with significant growth in non-federal audiences such as the private sector, NGO's and non-profits. Figure 2 also shows variations in ways in which subscribers self-identify affiliation. We will continue to work on identifying affiliations and occupations currently in the "Other" categories for both tables.

Website: Our new website design and resources continue to grow and be a reference point for the region. Analytics for the website are shown in Figure 3. While use appears relatively flat (~100 users/month), overall numbers indicate that the website has been accessed 33,000 times in the past 12 months. Several FSENs have adopted some of the website approach and design. Topics accessed include searches for wildfire/wildlife interactions, climate change, WUI mitigation, and fire behavior modeling.

**Figure 3: Access activity for www.southernrockiesfirescience.org**



## Figure 2: Subscribers by Affiliation



**Webinars:** SRFSN directly supported five webinars with regional scientists and entities. Continuing education credits through the Society of American Foresters were offered through 3 webinars. Total attendance for all webinars totaled 711.

- *Colorado Wildfire Risk Assessment:* A two-part series reviewing updates to this regional tool, as well as special breakout sessions for technical questions and problems solving.
- *Fuel Treatment Effectiveness:* A webinar produced by multiple FSEs, with numerous presenters from various locations in the USFS presented science and case studies on recent science and assessments of fuel treatments.
- *Post-fire regeneration management strategies:* Multiple presenters from both federal and NGO groups presenting recent studies on post-fire seedling recruitment, regeneration, and management.
- *Western Wildfires Story Map:* Contributing FSEs worked with LANDFIRE to produce both a story map and webinar reviewing purpose and highlights of the fires included in the story map.

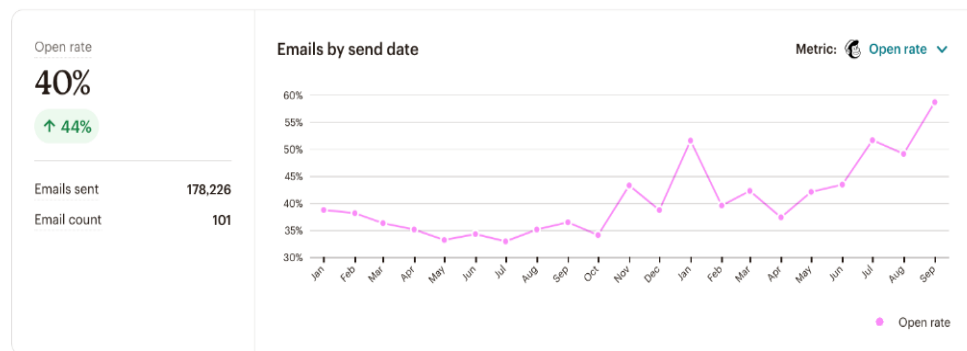
**E-mails, Newsletters & Announcements:** We have continued the newsletter schedule and format established in the previous fiscal year, alternating full e-news (announcements, news, events, online learning, and publications) every other week with a single topic e-news that focuses on a regional highlight (webinars, databases or research/mapping tools, or special events). SRFSN sent a total of 61 newsletters and announcements through the last fiscal year (each with associated social media posts) to a subscribed audience of 1,654. However, data from MailChimp indicates that sharing across networks has resulted in a total of 94,871 total e-mails with an open rate of 78,121, and a total click rate of 55,998. Figure 4 shows a continued increase in open rates. Figure 5 indicates that the majority of subscribers continue to be older men, with a slight increase in female

subscribers compared to last year.

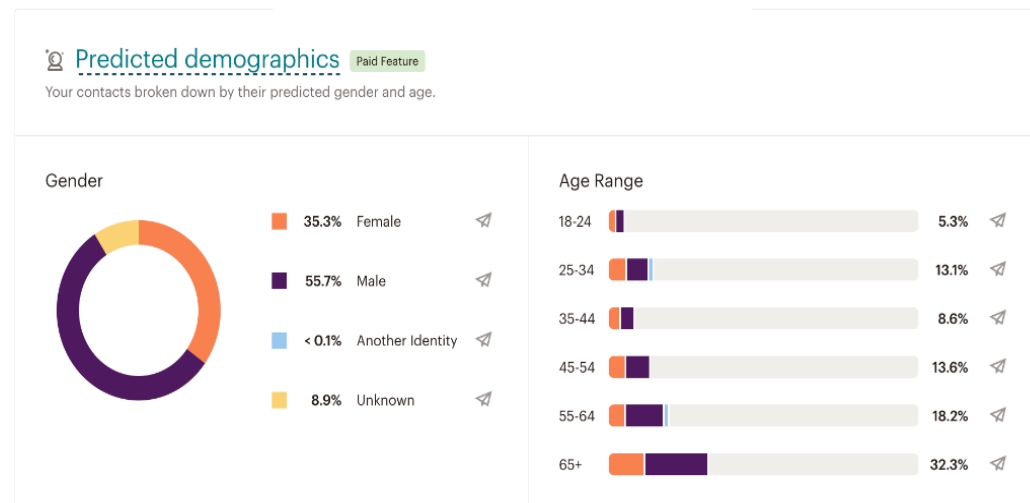
**X/ Twitter:** We posted a total of 101 tweets in FY 2023. With the ownership change of Twitter, followers have decreased a small amount, from 1869 in September 2022 to 1838 as of October 30, 2023. Twitter/X metrics may be incomplete and in different formats than previous years. However, available metrics (Figure 6) from the last 91-day period show a total of 3.8 thousand impressions (people who can see the posts). Analytics indicate that SRFSN Twitter/X followers engage primarily around major announcements of funding, and news of larger import

**Figure 4: E-news opens in FY 2023**

Performance over time



**Figure 5: Subscriber demographics**



appear to create more engagement. (Western Wildfires Story Map, Marshall fire reporting). News that provides applied information also show higher engagement (biomass technology, Spanish translation of Wildfire: Preparing the Ranch and Farm). Current online platforms may be available to synchronize X/Twitter postings with other online social media platforms such as Mastodon. SRFSN will examine these options in the coming months.

Facebook: 563 followers, up 40 followers from 2022 YouTube: Total views 2023 250 (Total of 12,123 for the SRFSN channel), Total subscribers: 195 (up from 29 in 2022).

**IMPACT**

Out of all 2023 SRFSN activities and products, 13 SRFSN activities met 3 or more of the 5 JFSP-designated societal impact areas per project. SRFSN conducted over 23 leadership briefings this past year, solidifying commitment with both agency and NGO partners for capacity building and connectivity.

**Table 2: Selected Successes by Categories of Social Impact (adapted and modified Meadow and Owen 2021):**

<p><b>Instrumental, Conceptual, Capacity Building, Connectivity, and Socio-Environmental</b></p>	<p>The <a href="#">After The Disaster Guidebook: Boulder County</a> was developed from the previous years’ ATD Guidebook for Mesa County and was immediately modified and applied in cooperation with Boulder County Extension in response to the late 2021 Marshall Fire. Since then, 6 more counties in Colorado have completed their own ATD guidebooks, as well as accompanying version in Spanish. After the devastating Lahaina fire in August 2023, SRFSN made a point to share many post-disaster materials and sources with the Pacific Fire Exchange (“Please keep sending me stuff! Thanks for the LANDCOVER two pager. I took a quick peak at Colo extension after-disaster handbook you sent early on. It’s awesome.”). By mid-August, Colorado County Extension sent the template to the director of Maui County Extension to help with recovery efforts.</p>
<p><b>Instrumental, Conceptual, Socio-Environmental</b></p>	<p>The Western Wildfires Story Map ‘<a href="#">Fire in the Western U.S.: Big fires, big challenges, big need for regional learning and action</a>’ after years of coordination and work across 5 western FSEs (California, Northwest, Great Basin, Southern Rockies), this story map was introduced to network users and the public to highlight relevant dynamics, issues, and paths forward regarding 5 major wildfire events since 2019. The FSEs worked closely with 2 contractors and LANDFIRE to design cohesive images and content across all events. We also worked with LANDFIRE to present and discuss the Story Map over a LANDFIRE Office Hour webinar. The Story Map has been viewed and referenced 3,085 times in FY 2023.</p>
<p><b>Conceptual, Capacity Building, Connectivity, Socio-environmental</b></p>	<p>Although SRFSN contributed to numerous in-person and online events, the April 2023 <a href="#">Colorado Wildland Fire Conference</a> was the seventh and largest one in the seven that SRFSN has supported in cooperation with numerous partners. With 350 people in attendance and 30 vendors, the CWFC has made a significant impact on knowledge exchange throughout the region and nationally. The latest case studies and research on wildfire mitigation, modeling, communication, and management were highlighted across agencies, NGO’s, companies, and citizens. The GPFSE made a significant contribution with presentations on grassland fire and management.</p>

*“We are so grateful that your organization is here! At the CSFS, we have found that utilizing your network and reputation helps connect us with many of our external partners to share knowledge and understand needs. Without SRFSN, the CSFS would have had a difficult time sharing information from our 2022 Colorado Wildfire Risk Assessment, they were instrumental in that roll-out. SRFSN has helped the CSFS to engage in the grassland wildfire arena, as we are now collaborating on developing technical guidance for those issues. Thanks SRFSN!” – Chad Julian, Wildfire Mitigation Program Specialist, Colorado State Forest Service*