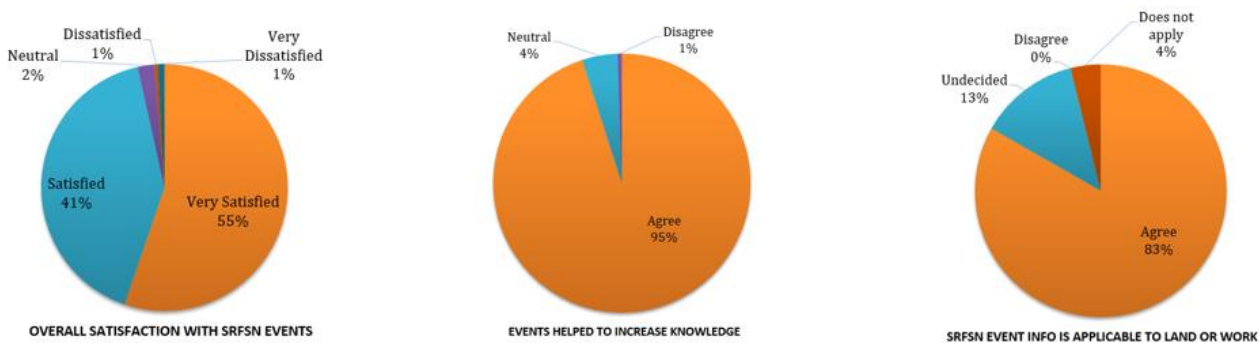


### Priorities and Initiatives

A summary of SRFSN evaluations illustrate that the majority of participants respond with “satisfied” to “very satisfied” experience with both in-person and online SRFSN activities:

**Figure 1: Combined Feedback Evaluations**



Priorities for SRFSN this last fiscal year included:

- Continue to expand outreach across remote areas of the region as well as cultivate key liaisons and fire science champions
- Improve and expand SRFSN-supported programs at partnering Institutions (USU, UWY, CO Rx Fire Council)
- Create opportunities for science exchange supporting long-term social and policy change addressing prescribed fire, forest restoration, wildland fire management, and landscape restoration issues
- Develop more user-friendly and effective content on SRFSN website and social media

### Highlights & Achievements

In 2018, SRFSN had an exceptional year across all growth categories of subscribership, event participation, and online activities such as national E-Extension webinars. Our programming is successfully moving into Medium-term (attitudes/behaviors) and Long-term (societal conditions) outcomes as highlighted on the SRFSN logic model (Table 1).

**Table 1: SRFSN Activity Highlights and Relationship to Logic Model Outcomes:**

Activity	Logic Model Category (Short, Medium, Long-term Outcomes)	Number of Participants
<b>In-Person:</b>		
Patch Burn Grazing Workshop and Field Trips	Medium	80
Keynote Speaker: Inaugural Hawaii Wildfire Summit, Hawai'i	Medium	120
Wildland Fire Tour: Brianhead Fire of 2018 – Utah State University Forestry Extension	Short-Medium	32
Colorado Wildland Fire Conference – co-planning and logistics	Medium	165
Pagosa Signage Project: fire use and forest restoration, Pagosa Town Park (Completed)	Long	unlimited

Utah Biomass Resources Group: Do-it- Yourself Biochar Kiln Workshops	Long	200
Triple Threat Invasive Grasses Tour	Short-Medium	40
West Fork Fire/Million Fire Workshop and Field Tour	Medium-Long	150
Timber/Forest Practices Tour - Utah State University Forestry Extension	Medium	30
SRFSN at National Conferences: SAF, SRM, AFE, Grasslands Symposium, Restoring the West, Fire Continuum	Medium-Long	500
Colorado and Wyoming Prescribed Fire Councils: supporting meetings, speakers, agendas, social media	Long	30
<b>Media &amp; Online Resources:</b>		
Webinar Symposium: Triple Threat Invasive Grasses	Short-Medium	331
Webinar: Post-fire conifer regeneration in ponderosa pine forests in the Southern Rocky Mountains	Medium	186

## Success Stories:



### DIY Kilns:

Utah State University Forestry Extension supports the Utah Biomass Resources Group (UBRG), addressing biochar production since 2011. This program has introduced mobile pyrolysis and gasification technologies to forestry and agricultural audiences across the western United States. A more recent focus is the use of low-tech and low cost flame-cap biochar kilns to make biochar in forest and agricultural settings from woody biomass. The primary benefit of this approach is accessibility; almost anyone can do it, often with materials and

equipment they have on hand. This method allows for small-scale biochar production across a wide variety of uses and users. Instead of open pile burning of forest residues, we put the fire in a box, or a flame-cap kiln, which reduces damage to the soil and protects air quality. SRFSN-supported USU Extension sponsored numerous DIY biochar kiln events throughout the state, which now also practiced at the Utah state level. YouTube videos of these events have been viewed almost 2,000 times.

**Colorado Wildland Fire Conference 2018:** SRFSN has partnered with Fire Adapted Colorado and other non-profits and agencies to produce another successful conference. One hundred sixty-five people were in attendance from California to Massachusetts, addressing issues of overcoming barriers and developing teamwork in addressing public involvement in mitigation and forest health. Interviews with SRFSN and organizers were posted by the local radio station KKBUT. Selected videos are in development for further online engagement.

**Webinar Partnerships:** Utah State University Forestry Extension and SRFSN partnered with Bayer Corporation, Colorado Forest Restoration Institute, and national E-Extension to expand our webinar audiences and participation. We successfully implemented a new model of “webinar symposium” – developing and recording a webinar with numerous on-site and remote speakers. The Invasive Grasses webinar was also complemented by a local field trip with additional speakers. We are currently developing another webinar symposium on Gambel Oak management in cooperation with USU FE and UC Boulder.

**Patch-Burn Grazing Workshop and Field Trip:** This event captured existing and new audiences between SRFSN and the Great Plains Fire Science Exchange interested in research and strategies in applying prescribed fire techniques to range and shortgrass open spaces, attracting both agency staff and ranchers. This was a

successful growth and outreach event for both Exchanges. We are seeking to leverage this event with a research needs brief and possibly Training Exchange for range producers in the shortgrass.

### *Comparison with Planned Work*

Table 2 shows selected activities listed as not completed in the SRFSN Planned Activity Table submitted with our 2016 renewal proposal. Reasons and status are shown below. The majority of the proposed activities are now completed, included in new activities, or delivery method has been modified.

**Table 2: Incomplete activities:**

Activity	Date	Reason
<b>Workshop:</b> Chadron Cable System Demonstration, Fuels Reduction Methods	summer 16?	Re-assessing resources. New steep-slope harvesting/fuels reduction system
<b>Summit</b> - Mastication & Chipping Review paper	summer 16	In final edits. New research is being incorporated
<b>Workshop/Discussion:</b> Pile burn management in Wyoming (RMRS, SRFSN Outreach)	Feb-16	Will re-assess need or combine with another activity
<b>SRFSN sponsors manager/agency meeting</b> in NW Colorado/SD - what are knowledge needs in WUI or other topics?	2016-2017	Complete in spring 2019 – developing a knowledge exchange event in Steamboat
<b>Webinar:</b> Fire and Sage grouse: Derek Scasta and Dr. Jeff Beck	winter '17	Aim for Spring 2019
<b>Online product:</b> Summary of grazing and fuels modeling, fire behavior, fire effects in ponderosa pine	2017	Schedule for Spring 2019
<b>Short Video / Pamphlet:</b> Public Education about firefighter safety (Structural and wildland) engage with RMRS, human performance; our DNA	2017+	Re-assess, project leader now in new position
<b>Workshop/Paper:</b> Spruce-Fir Fire Behavior and Ecology	2017/18	West Fork/Million Fire content addressed this, as well as research brief in final edits.

### *Participation & Growth*

Growth for SRFSN is evidenced through increases in number of and participation in both in-person and online events as well as requests for information and support. In the last federal fiscal year, SRFSN has developed, collaborated, or sponsored over 51 in-person activities within our region and beyond- reaching over 4,100 participants. Additionally, several fact sheets and research briefs are in development. Requests for information and assistance have risen to over 30 and have resulted in extended on-the-ground wildfire knowledge and planning support.

Subscribership has now grown to *1,350 members* per Mail Chimp Main List (Figure 3). This may vary from JFSP Annual Report Table 1 due to variations in self-reporting by registrants.

**Figure 3: Subscribership by State (“Other” Category includes international followers)**

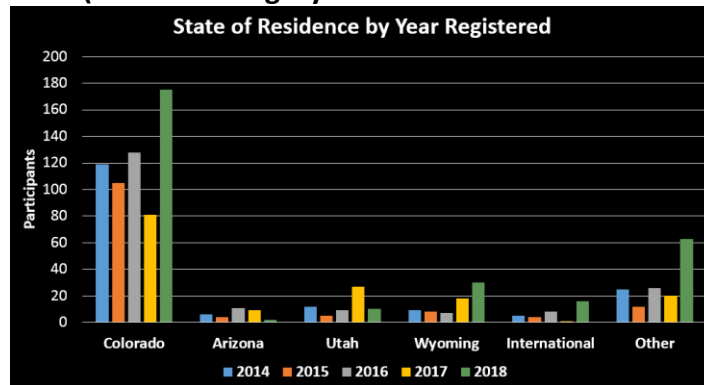
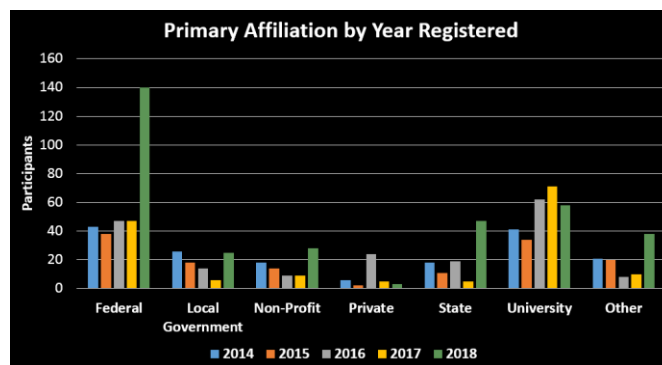


Figure 4 shows substantial increase in interest and participation with federal agencies. Growth continues in the local government, non-profit, state, university, and international sectors (included in “Other”).

**Figure 4: Subscriber affiliation**



Through the development of in-person and online activities, SRFSN now has a stronger partnership with Great Basin and Great Plains FSEs. Our new partnership with Bayer Corporation, Coalition of Collaboratives, Wyoming Prescribed Fire Council, and Forest Guild promise to leverage our resources, expand our activities, and increase our effectiveness within and beyond the state of Colorado.

### Regional Trends

Regional trends identified in our 2017 report (wildfire behavior/home ignition, fuels management, sagebrush and fire, invasives, grazing effects) continue to dominate knowledge exchange activities, with more opportunities and knowledge needs around sagebrush and invasives. Also coming to the forefront is wildfire behavior and effects of beetle mortality in spruce-fir forests that have experienced extensive mortality. Little is known about this fuel model, which may have no regional historical analog. These topics, and others presented to SRFSN through the national survey and other feedback surveys, will be addressed in our renewal proposal for 2019.

### Challenges

Building on-going capacity continues to be a SRFSN challenge. SRFSN initiated a contract relationship with Coalition of Collaboratives in Lake George, Co – who provided a part-time program assistant for social media, event, and videography support. This contract has been used up and SRFSN is fortunate to have CSU interns

and students supporting the program. SRFSN is in the process of examining a new budget and staff structure to allow for an assistant 2 to 3 days per week, possibly sharing with CSU Extension or another state or non-profit fire or land management program. SRFSN will also be assessing our travel budget and working to identify high-priority travel, while working to keep travel flexible to meet spontaneous regional needs.

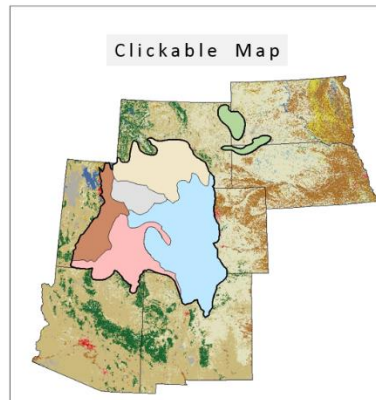
## Online Learning

### Website

Work for re-structuring our website is almost complete. We are working on identifying representatives of the Desert Montane, Wasatch Mountains/Plateau, and Uintah basin areas, and refining our subregion contents (Figure 5). After this content is complete we will be able to make out new subregion navigation and content live by December 2018. We have re-tagged existing website content for shorter, simpler tag list as well as simpler content for the ABOUT section.

New Southern Rockies Region clickable map displays each SUBREGION identified by color and name.

- Black Hills (green)
- Wyoming Sagebrush (tan)
- Uintah Basin (grey)
- Wasatch Plateaus/Mountains (orange)
- Rocky Mountains (blue)
- Canyonlands/Desert Montane (pink)



Each subregion has a general environmental and fire potential description, as well as a sub-regional contact/representative for each area for visitors to follow up with question about wildfire and knowledge needs in that subregion.

Figure 5: Updated Subregion Interactive Map

### Webinars

SRFSN had significant growth in webinars this year, in particularly in partnership with Utah State University Forestry Extension (USU FE), which shares their Zoom license and E-Extension subscription, while SRFSN provides recommendations for topics and speakers as well as planning, marketing, and logistics support. This partnership has produced noteworthy webinars, including the Triple Threat webinar symposium (highlighting ecology, spread, and treatment of invasive winter grasses (cheatgrass, ventenata, and medusahead). SRFSN and USU FE are expanding on the webinar symposia model to increase access to knowledge exchange, circumvent travel restrictions, and archive the presentations for viewing at any time by any number of viewers. Two more webinars of this type are planned for November 2018.

### E-mail List, Newsletters & Announcements

SRFSN currently has 1,350 subscribers on our e-mail listserve. Content shared through this network has ultimately been shared 23,125 times (Figure 6). E-news templates were re-designed for simplicity, ease of reading, and more mobile/cell-phone friendly.

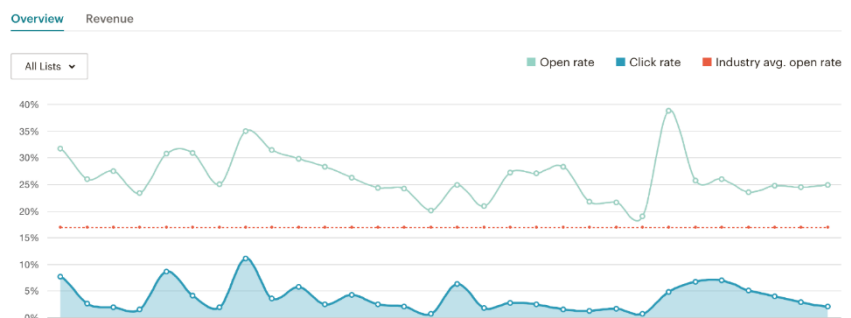


Figure 6. E-news open rates (light blue), industry average (red) & click rates (darker blue)

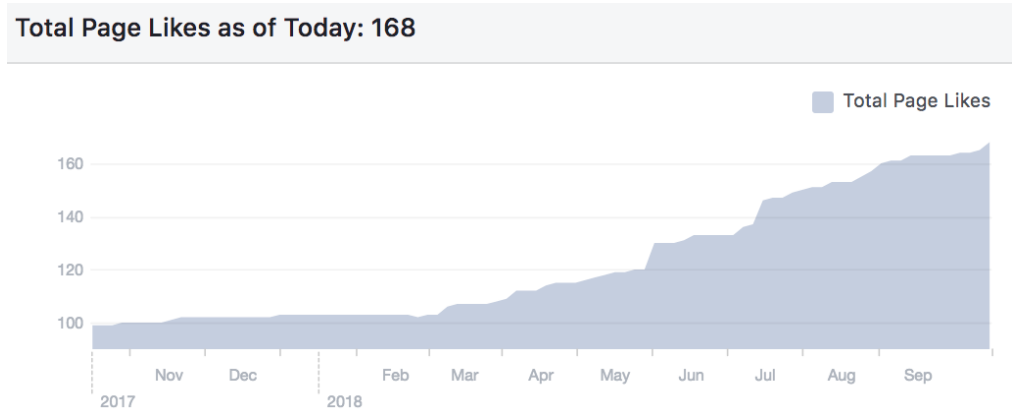
**Twitter:**

Twitter is becoming one of most successful means of knowledge sharing. SRFSN currently has 1,294 followers and is following 445 accounts. SRFSN has posted 3,630 tweets as of this writing. We are considering using a basic paid account to get better analytics for this social media platform.

**Facebook:**

Our Network “Like” trend is continuing to increase, and we are assessing the benefit of starting an Instagram page. Posts have reached up to about 700 Facebook accounts.

**Figure 7. Trends in SRFSN Facebook “likes” since November 2017:**



**Figure 8. SRFSN’s Facebook post reach since November 2017.**



**SRFSN YouTube Channel:**

- Total minutes watched – 2,800 minutes
- Total views – 1,100
- Subscribers gained – 8
- Three videos posted to USU FE – total of 370 views

Watch time (minutes)	Views	Subscribers
2.8K	1.1K	+8

**Figure 9. SRFSN YouTube analytics since October 1, 2017 - total watch time, views, & subscribers gained.**



FY 2018 analytics indicate that SRFSN continues to grow on all social media platforms. Plans continue to improve outreach through social media posts during in-person events and program assistance as well as improved social media platforms and sharing tools.

### *Testimonials*

*"Thanks again for the awesome meeting. You guys did a great job putting that together. It really was one of the best meetings that I've been to for a long time."* – M. Bain, Attendee at the Patch Burn Grazing Workshop

*"Thanks, glad to help pull this together! It would be a terrible move to downsize the Fire Science program with all the benefits you all provide, and hard to believe that is even in question."* D. Sebastian, Bayer Stewardship and Development Team

*"The SoRock YouTube page has allowed a very wide distribution of useful knowledge for fire managers and community members alike. I have used products from SoRock to help train my employees, particularly to inform them of unique social perspectives that are commonly misunderstood by the wildland fire community. Additionally, monthly + newsletters from SoRock have provided valuable reminders of current research, trainings, and relevant topics to our work unit."* – D. Beveridge, Former Module Captain for Department of Fire Prevention and Control

*"I have a 35 year career in forestry that includes time as a Consultant, Hotshot Crew Foreman, and Biomass leader. I believe that linking wildland fire hazard reduction to biomass utilization by developing and promoting products like biochar and cross laminated timber, is a key strategy for managing forestland of the western United States. My work with the Southern Rockies Fire Science Network, funded by the Joint Fire Science Program, is a critical piece of the network that allows me to tie these two important fields together; biomass utilization and fire hazard reduction are two fields that need each other, like I need the network of the Southern Rockies Fire Science Network to be successful."* D. McAvoy, Utah State University Extension Forester