



## Annual Activity Summary

October 2016 – September 2017

The California Fire Science Consortium (CFSC) continued to push for more in-person events while maintaining a strong base of online products during the previous fiscal year. The numbers and activities represented in this annual progress report displays continued engagement from our core stakeholders with some expansion into new partnerships and new audiences.

### **Statewide Advisory Board Input**

The statewide advisory board of the CFSC is made up of representatives of state, federal, and local fire staff as well UC Cooperative Extension. In June 2017, an NGO member was added to the advisory committee as recommended during the in-person meeting.

**Table 1. Current membership of the CFSC Statewide Advisory Committee (\*change from last year)**

<b>Name</b>	<b>Affiliation</b>
<b>David Passovoy (chair)</b>	<i>CalFire, FRAP</i>
<b>Robyn Woods-Adams</b>	<i>USFS, Region 5 Incident Business Mgmt. Specialist</i>
<b>J Lopez</b>	<i>LA County Fire</i>
<b>James Savage*</b>	<i>BLM, Fuels Specialist</i>
<b>Robin Wills</b>	<i>NPS, Western Region Fire Management</i>
<b>Dan O'Connor</b>	<i>USFS, Forest Fuels/Prevention Officer, San Bernardino National Forest</i>
<b>Tomas Gonzalez</b>	<i>USFS, District AFMO Fuels, Sierra National Forest</i>
<b>Susie Kocher</b>	<i>UC Cooperative Extension, Forestry/Natural Resources Advisor</i>
<b>Ryan Burnett*</b>	<i>Point Blue (NGO), Sierra Nevada Group Director</i>

This year, the annual in-person meetings for the statewide advisory committee and the CFSC team were held simultaneously in December 2016. This format was highly productive and will continue to be used in the future. We have also begun rotating the annual meetings to different subregions each year, allowing us to tour the unique aspects of the subregions and to identify the unique challenges and opportunities for the local team.

Overall, the statewide advisory committee is supportive and content with the current activities, priorities, and future directions discussed by the CFSC team. It was noted at the end of the meeting that while we still have challenges ahead, the CFSC is doing well and should continue some “business as usual” aspects because it is reaching many of the major goals laid out. A continuing effort to reduce information burden through syntheses and targeted outreach as opportunities present themselves remains a major push for the CFSC.

New recommendations from the advisory team included finding new audiences, focusing outreach to lower and mid-level managers who will then move into higher positions, and “training the trainers” including media contacts and teachers. To broaden our reach, our team has attended new events and meetings with CFSC information and expertise. Target groups over the last year included ranchers,

congressional staffers, military (e.g. airbase events), energy groups, state regulatory and policy groups, and local fire and education groups (including K-12 education curriculum). We also continue to build on resources jointly produced with University of California Cooperative Extension. We are non-voting members on numerous organizations related to fire and natural resource issues. We also had a record number of media requests during the 2017 fire season. We found that additional media resources are needed moving forward. One possible solution is to feature a “question of the week/month” on our website homepage, making the fire science basics most pertinent to the current fire activity more accessible. We felt that many media pieces, including those aimed at national audiences, were better grounded in scientific understanding during this fire season than in previous years.

Finally, enabling managers and other “boots on the ground” personnel to tell their story through our communication methods was suggested as a way to give a voice to not just the science community, but also to managers. We now feature at least one non-academic speaker in our webinar series each year and are looking to expand this if possible. The WUI team is also working on a video interview series that highlights the stories and experiences of firefighters and managers.

### **Customer Reach**

We have over 1,700 individuals on our CFSC email list (see Table 2). The organizations with the largest presences are the US Forest Service (517), not able to determine (239) university researchers (228), the state of California (115), local government (81), NGOs (87), and the National Park Service (50). According to Mailchimp, list performance has remained remarkably consistent with a balance of subscribers adding and dropping over time. Mailchimp automatically monitors when email addresses are inactive and removes them from the list. For this reason, the numbers noted in this table are a fairly accurate measure of interested audiences. 666 members have been deleted by Mailchimp since the initial list start in 2012. Over the last 5 years, only 184 have unsubscribed on their own.

About 340 subscribers, or 20%, opening our monthly newsletter. This does not reflect when the newsletter is forwarded or accessed through the archive or through social media. This opening rate is lower than the last reporting period by almost 10%, even after a targeted effort in July to contact members with instructions on how to move the newsletter onto their safe lists. With newsletters, there is always a risk of delivery into spam, forum, or other folders not often checked. The number of organizations using newsletters may also be impacting the opening rate as subscribers’ inboxes may be overrun with information. Mailchimp recently changed the requirement for new subscribers to verify their address, removing a possible barrier to new subscribers.

**Table 2. Participations by Organization (as shown from mailing list subscribers)**

<b>Tribal Nations</b>	7
<b>States</b>	115
<b>Counties/Burroughs/Parishes</b>	81
<b>Cities and Local Communities</b>	35
<b>Regional Authorities</b>	22
<b>Private Landowner</b>	23

Private Associations	13
Companies	41
Consultants	19
Foreign Organizations & Individuals	26
University and College Faculty or Researchers	228
University and College Students	34
Prescribed Fire Councils	9
Fire Learning Network and The Nature Conservancy	38
NGOs (not listed above)	87
Bureau of Indian Affairs	8
Bureau of Land Management	39
Fish and Wildlife Service	30
Forest Service (National Forests, Grasslands, State and Private Forestry)	517
Forest Service Research	11
Geological Survey	14
National Park Service	50
Natural Resources Conservation Service	8
US Bureau of Reclamation	4
NOAA and National Weather Service	3
ARS	0
NASA	0
Department of Defense including Coast Guard	5
United States Fire Administration	5
Other: Not able to determine affiliation	239
<b>Total</b>	<b>1,711</b>

Table 2 Notes:

- Tribes are likely under-reported here because not all tribal members use tribal email addresses on our list.
- States: CAL FIRE staff represent a number of our subscribers and were included in the “states” category.
- Other: All private emails unassociated were listed under “Other: Not able to determine affiliation” as we were unable to categorize when members declined to provide affiliation.

In addition to the Mailchimp list, the CFSC has a strong social media presence with notices going beyond our newsletter subscribers. Please see social media notes in the next section for additional metrics. This past year we used the Buffer program to schedule Facebook and Twitter posts.

### **Selected Highlights and Achievements of the CFSC**

A major strength of the CFSC and the subregional structure is the extensive and diverse array of outreach opportunities and products reaching over 35,000 total participants. Table 3 clearly shows that almost all outreach types are being used by CFSC team members somewhere in the state. Indeed, our challenge often lies in having not just a diversity of products at a state level but also at a subregional

level. This year we achieved our goal of having at least one in-person event or field trip in each of our subregions while still continuing our high productivity in briefs, webinars, and other products.

**Table 3. CFSC Activities for FY 2016-2017**

<b>Activity (Conducted, Hosted, Facilitated or Sponsored)</b>	<b>Total completed Activities</b>	<b>Total # of Participants</b>
Talks and personal briefings about the exchange	65	459
Newsletters produced (printed or electronic distribution)*	13	1,863
Fact sheets and handouts produced	35	500
Tweets	444	1,917
Facebook postings	328	2,579
Other social media (please identify e.g. added to YouTube videos)	-	-
Blog posts	13	6,025
Webinars	11	369
Guidelines or guidebooks	-	-
Syntheses	2	140
Database	3	-
Conferences/Workshops	22	648
Conferences or symposia presentation (note participants are for the talk not the entire conference)	74	3,864
Poster presentation (note persons engaged not the entire conference)	8	519
Short courses, continuing education units	4	90
Academic credit courses	6	195
Bibliography or annotated bibliography	1	-
Video/Vimeo productions	31	2,331
Requests for information, assistance, or referrals	76	2,904
Field trip, tour, demonstration or roadshow	23	716
Field consultations and expert cadres	2	29
Training sessions	2	115
Leadership briefings	3	31
<i>Other -classroom outreach</i>	25	10,480
<b>Column Total</b>	<b>1,191</b>	<b>35,774</b>

*\*“The CFSC newsletter is the best way to connect to fire science”-USFS staff during field trip*

Table 3 Notes:

- Blogs and Newsletters: The table includes the social media activity of the CFSC page and related accounts run by CFSC staff such as the fire science Tuesday blog sent nationally through the FAC Network and fire-related University of California Cooperative Extension content when CFSC staff collaborated on or created the resource.
- Social Media: The total number of participants for social media includes only direct “likes” or “follows” of the CFSC and Northern CA Prescribed fire accounts.
  - Twitter: 95,560 Engagement: 3,019 Engagement rate average : 3%
  - Facebook: Total impressions: 115,904 Post reach: 63,707
- Database and Bibliography: Participation was difficult to estimate, so it was left as zero.
- Research Briefs and Synthesis: Participation estimates here are based loosely on google analytic unique pageviews of landing pages. It may be under estimation.
- Video productions: Older webinars were transitioned from our website through Adobe Connect to our more accessible YouTube account. The participation listed is the number of views for each video posted within the last year.
- Request for information: Media requests were added to “Requests for information...” when the reporter/individual was referred to an outside party.
- Other: This includes media requests directly interviewing CFSC staff. The estimates for participants are highly estimated, assuming large readerships/listeners NPR, local NPR, The New York Times, Time magazine, Aljazeera, and many other national organizations that contacted us.

Our webinars continue to be well received with over 80% of respondents agreeing that the webinar provided useful information, was presented effectively, had knowledgeable presenters, and had content that met expectations (Figure 1). Over the summer, we added past webinars recorded from 2013-2016 to our YouTube channel. These webinars, along with those produced during FY 17, had thousands of cumulative views.

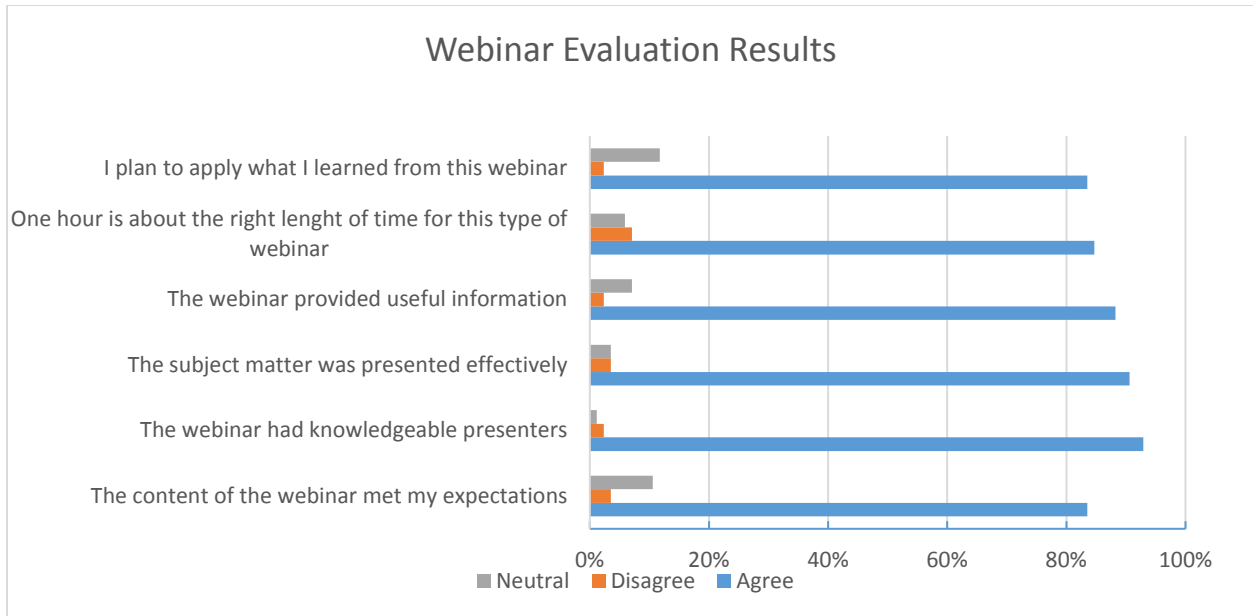


Figure 1. Webinar Evaluation Results FY 17

### **Subregional highlights**

*Mojave and Sonoran Desert-* As we renew interest in the desert subregion, one area of success has been connecting with local media about restoration projects near Las Vegas. We are also continuously exploring options for in-person events such as a field tour or workshop. We collaborated with Joshua Tree National Park in May 2017 to assess effectiveness of restoration and fire hazard reduction activities in the field. We were able to take advantage of one of the best wildflower seasons in 10 years, which is especially important in deserts with ephemeral fuels linked to precipitation. This work was presented at the 2017 California Invasive Plant Council symposium. We also had a booth at this event where we distributed CFSC and JFSP outreach material and added new members to the email list. This was the second year for the new subregional team lead from the University of Nevada, Las Vegas and we hope to continue to expand our audience and reach in the Mojave and Sonoran desert subregion.

*Central and Southern-* A major goal has been to host in-person events, especially field trips. Our subregion hosted the Southern California South Coast Region Fire Science and Management Information Exchange & Field Trip in June 2017. Common themes that emerged during this trip are the need to inform local city councils, boards of supervisors and planning commissions on how best to reduce fire risk and provide for habitat conservation; how to better implement defensible space, possibly through incentive and insurance programs; how to better prevent ignitions, especially under severe weather conditions. A participant in the field trip, invited us to speak at a meeting of local NGO's, federal, state and regional programs through the Western Riverside County Multiple Species Habitat Conservation Program. The presentation was well received *"Thanks so much for speaking at our meeting today. Everyone really enjoyed it! I find it so interesting how much recent research is really changing our*

*perception of fire management.*”- Monitoring Program Administrator. Production of research briefs and an annual synthesis continues to be done in this subregion.

*Sierra Nevada* – The Region 5 Ecology team continues to offer great assistance in both our research brief production and through our in-person events. We had a great diversity of events this past fiscal year including a symposium for the 10 year anniversary of the Angora fire, a field trip to the Clark fire area which incorporated Traditional Ecological Knowledge, and in-person events targeted at educators, a state oversight agency, and ecology groups. Three webinars were also organized to highlight recent research results from this region in addition to numerous briefs.

*Nor Cal*- A major focus for this region has been connecting California ranchers to fire science. This has included sharing resources and personnel with the Prescribed Burn Associations of the Great Plains, including a trip to Nebraska. Combining efforts with the UC Cooperative Extension Fire Advisor and other resources has greatly improved our ability to reach additional audiences in this subregion. Work through the Northern California Prescribed Fire Council has included a recent TREX and the annual meeting, with a wide variety of science presentations and a field tour to Point Reyes. The second Women’s TREX was completed in Yosemite National Park in October. Other work has focused on engaging foresters and managers during the science development stage at the Pacific Southwest Research Station.

*WUI*-Our field trip to the Chimney Fire in San Luis Obispo County was quickly filled to capacity and even given the record high temperature in the area, was a great success. This year, we’re also working to produce short fire science videos to be used in training and education and to help capture fire knowledge through interviews with retired fire staff who have stories to tell. Given the geographic span of the WUI issue, we continue to utilize the webinar format for our WUI webinar series, which always produces diverse and interested audiences.

*Statewide*- This year, the statewide team increased efforts to produce research briefs and synthesis and connect with researchers for webinars. This was both targeted to fill major gaps in knowledge and opportunistic (when the researcher contacted the statewide coordinator to present). This work will continue with additional research briefs that are more focused on social science, an area recommended for additional work by the advisory committee. The statewide coordinator continues to balance participation in local events such as the Rustici Rangeland Science Symposium (presenter) and the Yosemite Hydroclimate Symposium (logistic support) with a few national events including Association for Fire Ecology (Program committee) and International Association of Wildland fire (presenter). While not in the reporting period, our ability to mobilize CFSC resources and expertise in the wake of the Northern California October 2017 wildfires was invaluable and will be discussed in future reports.