

California Fire Science Consortium Funding Extension Proposal

Existing JFSP project number: 09-S-04-18

Name of Exchange: The California Fire Science Consortium

Principal Investigator: Scott Stephens, UC Berkeley

Consortium Coordinator: Stacey Sargent Frederick, UC Berkeley

Consortium Progress Reporting Lead: Susie Kocher, UC Cooperative Extension

I. Key accomplishments, challenges and lessons learned

The California Fire Science Consortium (CFSC) continues to grow with increased membership, participation, and accomplishments. A strong focus on providing a variety of products and events that met our stakeholder's needs is reflected in Table 1. Activities include a considerable amount of written, web-based, and in-person outreach to managers and stakeholders in the region. These outputs exceed or meet most of the plans included in the CFSC's targets from 2011 and 2013 proposal made to JFSP.

Table 1 – CFSC Activity Summary FY 2013 and 2014

Activity (conducted, hosted, facilitated, or sponsored)	# of activities offered FY 2013 & FY 2014	Total # participants (estimated)
<i>In-person outreach</i>		
Field trips, tours, demonstrations, and roadshows	23	822
Talks and personal briefings about consortium	51	1764
Field consultations	1	10
Workshops	6	537
Conferences and symposia	40	26,70
Poster presentations	1	30
<i>Written resources</i>		
Research briefs	111	15,000
Bibliography or annotated bibliography	24	6,700
Newsletters (printed or electronic distribution)	26	36,236
<i>Web resources</i>		
Webinars	23	572
Tweets	391	1000
Blog Posts	38	450

Activities and Outcomes:

The effects of all this activity are documented here with data from the California respondents to the 2012 and 2014 national evaluation survey. Californians taking this survey had a variety of affiliations. In 2014, two-thirds (62%, 63 participants) were managers (consumers) with the remaining split fairly evenly between landowners (16%, 17 participants) and science producers (22%, 22 participants). The membership between our "sub-regions" is fairly equally divided with the lowest representation by the Mojave and Sonoran desert region (only 13%) and the greatest in the Central and Southern region.

Consortium effectiveness: Survey responses show that the activities of the Consortium are needed, useful, reliable and applicable to participants' work. Percentages agreeing that the CFSC had positive outcomes also grew from the 2012 to 2014 national evaluation survey. Agreement that the CFSC has helped improve accessibility of fire science information grew from 75% to 81% in 2014. The percentage agreeing that the CFSC helped improve the use and application of fire science grew from 62% to 69%. Those agreeing that it helped improve communication between managers and scientists grew from 55% to 61%. 83% taking the 2014 national evaluation survey would recommend involvement with the Consortium to co-workers (up from 81% in 2012).

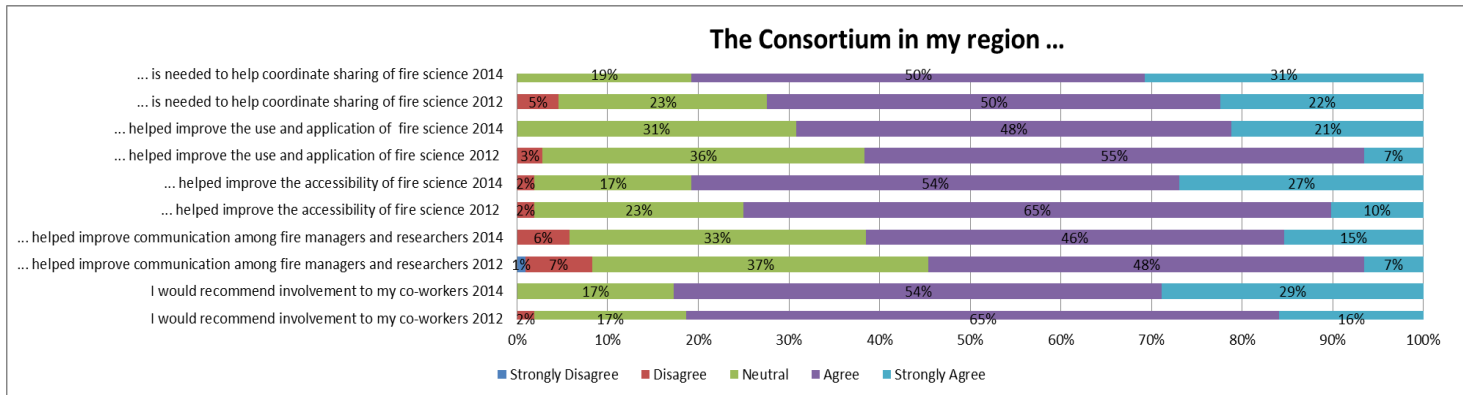


Figure 1 – Consortium effects ($n=108$ in 2012, $n=52$ in 2014). JFSP National Evaluation Survey.

There was, however, disagreement on the CFSC's ability to improve policy. The percentage agreeing that we have helped improve policy on fire management decreased slightly from 2012 (26%) to 2014 (24%). Given the self-imposed restriction of CFSC's impartiality, this result is understandable. Instead of striving for political influence we have worked to provide the best science to outside organizations, such as the prescribed fire councils and the peer-review panel provided to CalFire, who can then translate the science into policy in a more direct manner.

Website Effectiveness: The CFSC website (<http://www.cafiresci.org/>) has received favorable reviews and has around 600 visits each month (Google analytics). Survey respondents agree it is user friendly (79% in 2014 up from 69% in the 2012 national evaluation survey). Other percentages agreeing on the site's favorable characteristics also grew. More fire science consumers agreed that it provides up to date information (from 77% to 85%), a wide variety of fire science information (from 74% to 87%), and practical information they can use in their jobs (from 67% to 77%).

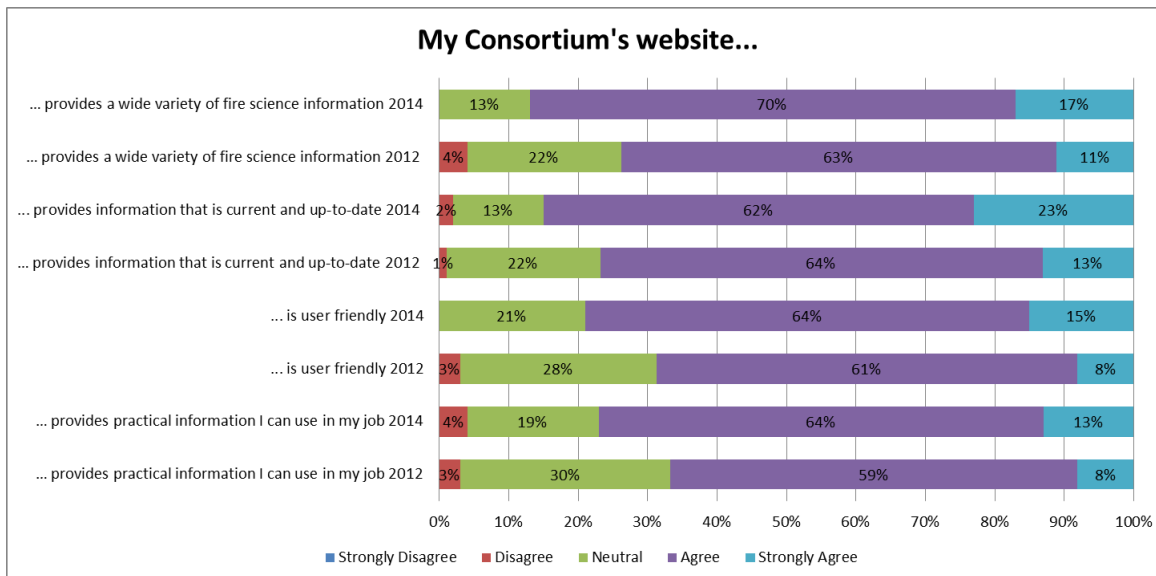


Figure 2 – Website ratings ($n=108$ in 2012, $n=47$ in 2014). JFSP National Evaluation Survey.

Survey results also highlight the need for a more organized website. The percentage agreeing that the site organizes the information needed in one convenient place decreased from 62% in 2012 to 51% in 2014. It is our hope that this need will be remedied by the new website design team hired through JFSP and it is currently being implemented.

We have increased our efforts in the use of social media to provide additional outreach and awareness opportunities. We now have a new (2014) Facebook page for the CFSC (394 “likes”), a continued presence on the Northern California Prescribed Fire Council (managed by CFSC staff with 409 “likes”). Our Twitter account has shown a steady increase in followers since the accounts inception in 2013 (Figure 3). This growth is likely due to the increase in tweets from 46 “tweets” in 2013 to 140 “tweets” in 2014-present (with an estimated 30,000 impressions).

683 followers as of 2/8/2015 (days shown in Pacific time)

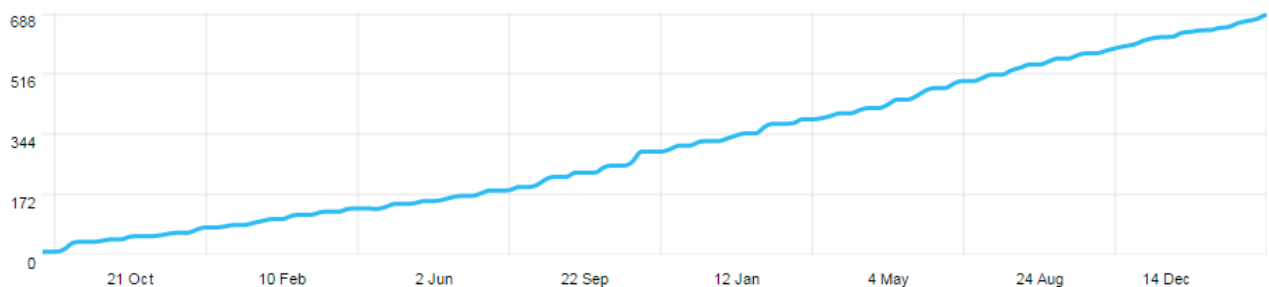


Figure 3. Number of twitter following from Oct 2013-Feb 2015. Source: Twitter analytics (<https://analytics.twitter.com>)

Field trips and workshops: With over 100 events that involved face-to-face interaction, in-person outreach continues to be one of our most well received and prioritized outreach methods. Of these, field visits are highly valued by participants and CFSC organizers. Not only do site visits encourage experiential learning through on-the-ground examples of new science, they also provide a forum for networking. Specific knowledge, being able to see applied science, to get outside, and overall quality and diversity of speakers were all common themes when respondents

stated their favorite aspects of the event. But many responses also referred to the value of networking with diverse peers, showing the value of such events to provide the opportunity for deeper learning and connections. A common suggestion for future events was to include more time for networking or, in one participant's words- "*more time to schmooze with folks.*"

Other quotes of what participants appreciated most about the event are:

- "*The applied science; learning about other managers experiences.*"
- "*Learning about fire issues, getting new ideas, enthusiasm of speakers!*"
- "*Information from both on the ground scientists and managers. Good mix of professionals, students, novices, interested public.*"

When asked to state their least favorite parts of the event, most respondents gave no answer. The most common answers given were related to either organizational issues (i.e. driving time or number of breaks) or elements outside our control (i.e. a hot day, early morning). Providing better details of the field trip stops and topics was also requested more than once and is something the CFSC can strive to provide in future events.

Evaluation results from three field trips in the Sierra Nevada region yielded the following cumulative results (N=70). The average response of "How would you rate today's event overall?" was 4.4 on a scale of 1-5 (1= Poor...Excellent=5). The vast majority (at least 81%) agreed that the event: helped use fire science information for work, taught them something new, and had easy to understand information.

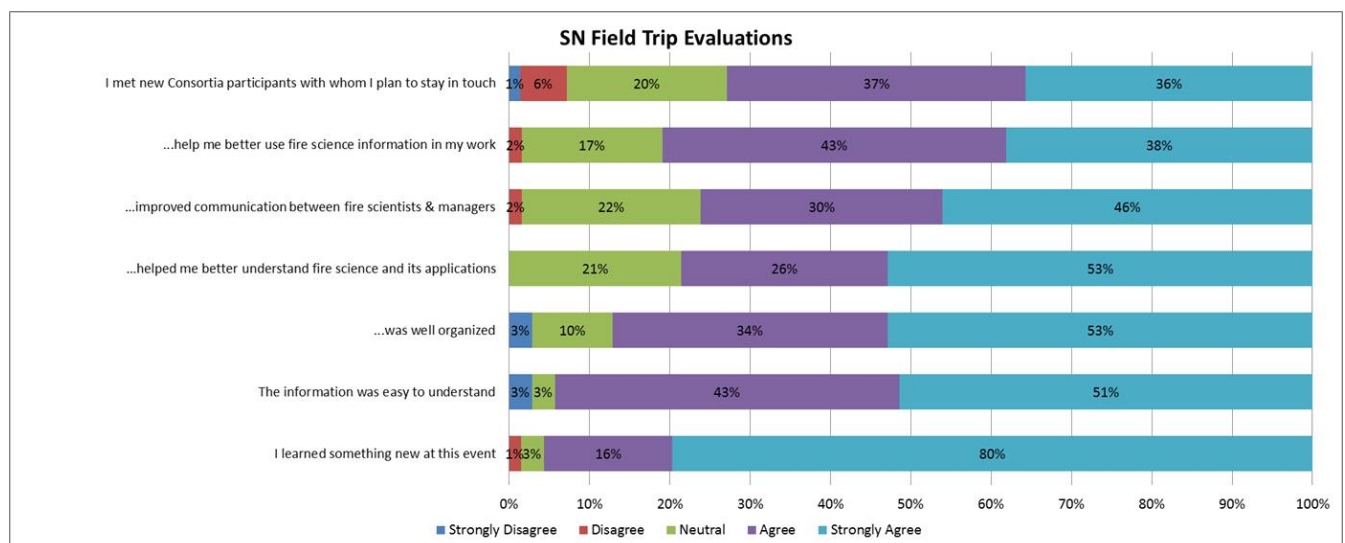


Figure 4. Combined evaluations from three 2014 field trips in the Sierra Nevada.

Exhibits: In 2014, posters and exhibit booths were presented at a number of events, conferences, and other in-person meetings. Having a presence such events and presenting or handing out informational materials has greatly increased awareness of our organization. During these times, a number of users approached CFSC staff specifically to state their appreciation for the work CFSC does. Highly positive feedback on the useful information and the need for the CFSC was expressed informally at these times.

Outreach products: One of our most successfully received products continues to be our research briefs (see Figure 5). Emailed newsletters, webinars and recordings of these are also highly rated tools. 2014 national evaluation survey respondents said that research briefs and syntheses were

the most relevant to their work (59%) and 57% had used them. 48% said email newsletters, live webinars, and workshops, symposiums, or local meetings were relevant to their work. 43% said webinar recordings were relevant. While there was a shift in priorities of the CFSC towards in-person events, the CFSC still recognizes the useful outreach tool of webinars. During this funding period, the CFSC hosted 23 webinars. Webinars covered diverse topics including WUI topics, wildlife, and Rim fire issues among others.

Additionally 36% said bibliographies were relevant and 31% said the same of field tours though only 21% had attended. Only 3% said Twitter posts were relevant and 78% this was not applicable to them, implying they are not users of Twitter.

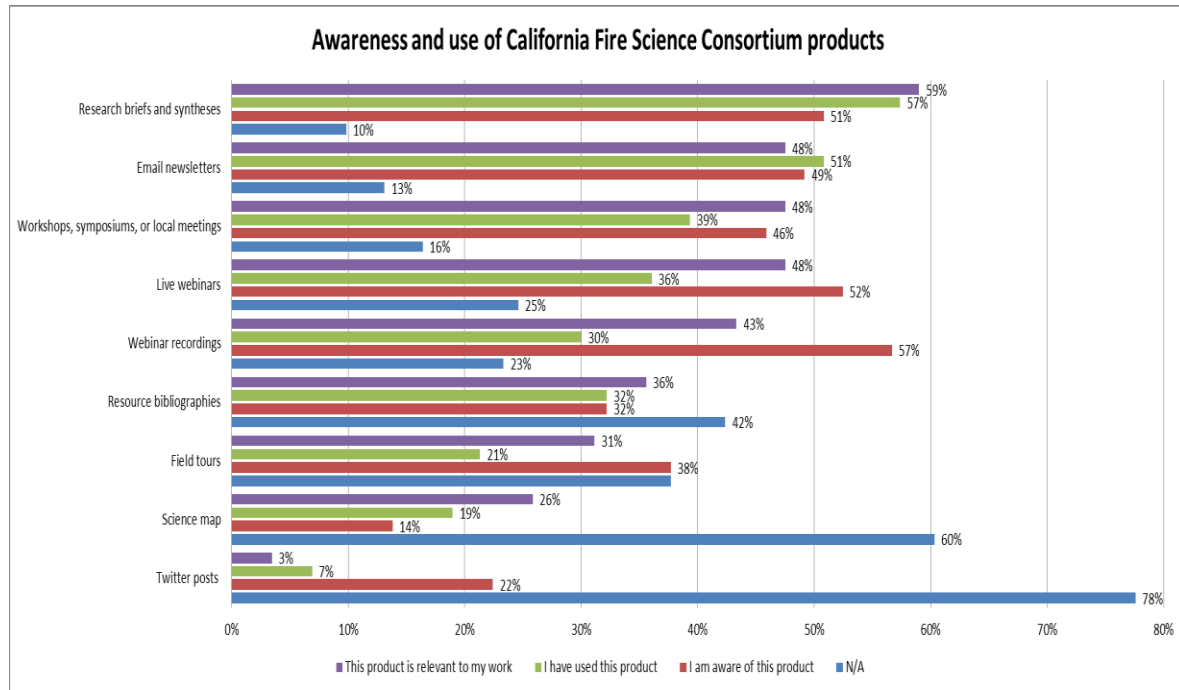


Figure 5 – Relevance of CFSC outreach products (n=61) from the 2014 JFSP National Evaluation Survey.

Outcome summary: These evaluation data show success for many of the short and medium-term outcomes included in the CFSC’s logic models. These include: 1) Improved communication between scientists and managers; 2) Increased access to fire science information; 3) Increased understanding of fire science information; 4) Improved use of fire science information; and 5) Improved relevance of fire science information to land management problems. The continued and more complete achievement of these outcomes will necessitate ongoing and dynamic outreach. Other medium and long-term outcomes for the Consortium are yet to be accomplished at a meaningful level including helping improve policy regarding fire management in the region.

CFSC Partnerships:

The inter-agency nature of the CFSC’s structure allows for built-in partnerships with other non-consortium projects and employees in the agencies that staff the subregional teams. These include the UC Agriculture and Natural Resources program (UC Cooperative Extension), the US Forest Service Region Five Ecology Program, USFS PSW Research Station, the National Park Service, California Polytechnic Institute, and UC Berkeley College of Natural Resources. For example, the Sierra Nevada region of the Consortium combines efforts with existing USFS Regional

Ecology staff to write research briefs and plan consortium activities, in effect multiplying the efforts of what consortium staff alone could accomplish.

Great strides were made during this grant period in the relationship between the CFSC and a state agency that does not participate in staffing the Consortium, the California Department of Forestry and Fire Protection (CalFire). The CFSC was contracted by CalFire to assemble and coordinate a peer-review of a major environmental document (the Statewide Draft Vegetation Treatment Plan Environmental Impact Report - VTP EIR). The collaboration between CFSC and CalFire in revising the VTP EIR is a breakthrough in science application to fire management planning. Future plans for a partnership with the CFSC and CalFire will include continued involvement with document revisions and outreach targeted to CalFire staff. This partnership includes external funding from CalFire for the CFSC to complete these tasks and to provide compensation for the peer-review members with a total amount of \$171,918 for April 8, 2014-Aug 31, 2015.

CFSC staff has numerous additional associations and partnerships. Foremost of these are the associations with the Prescribed Fire Councils and the Fire Safe Council. These partnerships are major resources in addressing the situations outlined in the logic model (III, pg. 9), especially those associated with the problems in the WUI and the struggle to return California wildlands to a more historic fire regime. By working with these organizations, we can reach a much a broader audience and can provide science to affect policy indirectly.

Challenges:

The CFSC has a decentralized structure with funds disbursed to five different subregions and seven different institutions (see Figure 6). Coordinating all of these moving parts into a cohesive and effective organization continues to be a major challenge at the statewide level. For some subregions, having a balance of written and in-person products has been difficult. Creating new outreach opportunities and products while still maintaining the existing relationships and commitments, all with the limited time of the CFSC staff, is also a major challenge at the state and subregional levels. Maintaining active members on the advisory committee and finding replacements has proved a challenge for both the state and subregional groups.

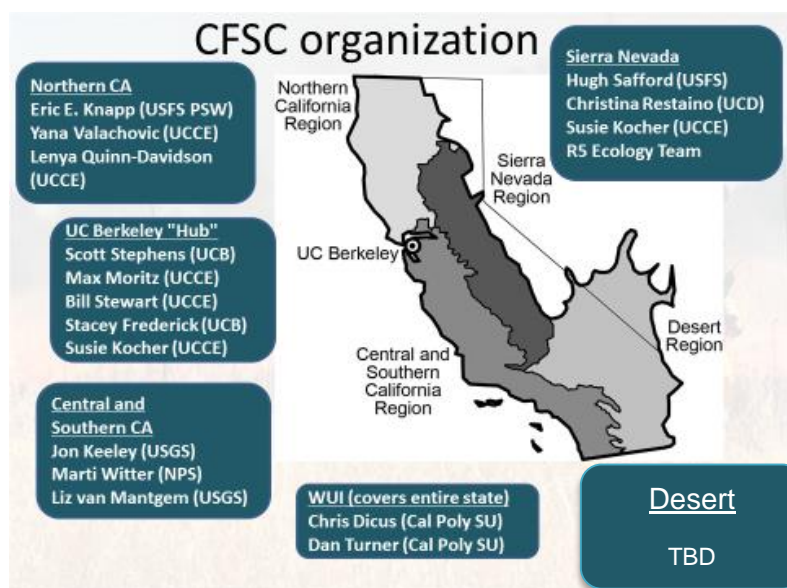


Figure 6 – California Fire Science Consortium organizational structure

Another major challenge has been the lack of fire in our desert subregion. This absence of fire and new fire science, has led to a lack of outreach opportunities. For further information on how this challenge will be addressed, please see 'IV. Future Directions-Desert' pg. 14-15.

Lessons learned:

Years of experience have shown that having active, subregional advisory committees and a diverse set of outreach products are key to a successful operation. Different subregions are at various stages in achieving these goals. The success of having an active advisory committee for each subregion has encouraged all subregions to implement this policy in the next year if they do not already have one.

Along with this diversity of subregions comes differences in priorities on the products produced by each subregion. Another ideal is to have a diverse set of outreach activities that meet the diverse needs of our users. Again, different subregions have achieved different levels of success with this ideal and gaps remain that need to be rectified in the future.

Subregional input:

In order to include feedback from the subregional teams of the CFSC, each active subregion has contributed, in abbreviated form, their main challenges, success, and lessons learned.

Northern California

Main challenge: Our main challenge is discovering the most effective and innovative methods to deliver the most relevant fire science to users as their time and budget continue to be restricted.

Main success: Our most important success has been creating and maintaining a strong network of fire science users, producers, and partners using diverse outreach methods (especially one-day events).

Lesson learned: Having one day, free, in-person events coupled with written materials (i.e. briefs, brochures) is a more effective outreach strategy than either of these as stand-alone products.

Sierra Nevada

Main challenge: Our main challenge is having time and resources to complete all of the activities and events that are desired by our audience and advisory committee. We try and do three in-person activities/field trips per year, but there is a demand for more.

Main success: Successful field/in-person activities have engaged a wide audience and have been very successful. Examples have included a Rim Fire field trip and aspen management workshop.

Lesson learned: Written deliverables are highly desired. We need to put more effort into producing high quality research briefs.

Central and Southern California

Challenge: The major challenge for the region is the assumption that fire management is fuels management of chaparral that needs to burn. Despite new scientific paradigms that have been well established over the past two decades and that continue to be advanced by recent research, these beliefs persist in fire management organizations throughout the region.

Main success: The greatest success continues to be the very positive response from managers, FireSafe community representatives, NGO's, and scientists on the wealth of scientific information available from our webpage, especially our one-page publication briefs. This solid scientific

foundation has provided support for many individuals from different organizations and agencies to challenge ineffective practices to improve community wildfire safety and resource protection. **Lesson learned:** The most important lesson learned is that our CFSC activities fill a void and provide a reliable source of scientific evidence that individuals within organizations can use to support changes in fire management practices and policy.

Wildland-Urban Interface

Challenge: A challenge that continues to affect the WUI Module is finding competent people to write the science briefs. We've hired individuals for whom we had great hope, but had to do major rewrites of the drafts that were submitted.

Main success: We deem the greatest success over the last year to be partnering with the California Fire Safe Council to develop and deliver multiple field tours with citizens and professionals alike, representing a diverse group of expertise and experiences. We intend to utilize the pilot project in other areas in the state.

Lessons learned: The most efficient way to use CFSC resources is to present CFSC information at conferences we already attending and use academic credit as student incentive rather than funds. Also, it is important to recruit the best human capital possible for both the advisory committee and the brief-writers.

II. Governance

The Consortium is run by a Leadership Committee comprised of PI Scott Stephens (UCB), co-PIs Max Moritz and Bill Stewart (UCB), progress evaluation lead Susie Kocher (UCCE), coordinator Stacey Sargent Frederick (UCB), and the 5 leaders of the subregional modules: Eric Knapp (USFS- PSW), Hugh Safford (USFS- Region 5), Jon Keeley (USGS), Chris Dicus (Cal Poly), and a to be determined Desert PI (please see 'IV. Future Directions' section for more information on the Desert subregion plans). Statewide and subregional coordinators initiate activities on the recommendation of the PIs and advisory committees of their subregions, as well as produce and plan consortium resources and activities.

There are currently three regional advisory committees (for the Nor Cal, WUI, and Sierra Nevada subregions) and a statewide advisory committee. Efforts to create advisory committees for the remaining subregions are currently underway. These groups are comprised of managers and researchers from various local, state and federal agencies and universities, and help the consortium staff by suggesting areas of focus, as well as specific activities. The statewide advisory committee was also instrumental in assembling the review panel team for the CalFire project. The Advisory Committee is comprised of a minimum of 5 and maximum of 9 resource and fire managers from different local, state, federal, and/or private entities (Table 2). This past year, a number of our original advisory committee members were replaced in time for the CFSC Statewide Advisory committee meeting in 2015. We are looking to add a non-profit presence to our advisory statewide committee in the future.

Table 2. *Current CFSC-wide Advisory Committee members*

Name	Affiliation
Robin Wills (chair)	NPS, Western Region Fire Management
Neil Sugihara	USFS, Region 5 Fire Ecologist
Jay Lopez	LA County Fire
David Passovoy	CalFire, FRAP
Chris Keithley	CalFire, FRAP Research Manager
James Newman	BLM, Fire Management Specialist

III. LOGIC MODEL for California Fire Science Consortium

SITUATION	INPUTS	OUTPUTS	OUTCOMES		
			Short	Medium	Long
Many individuals remain unaware of the resources available through the CFSC.	<ul style="list-style-type: none"> -Staff time to manage social media, website, and newsletters -Staff time to attend events -Travel and registration costs to events -Sponsorship/exhibit costs at events 	<p>-Outreach activities targeting all interested individuals:</p> <ul style="list-style-type: none"> • Newsletters about new resources • Social media (facebook/twitter) • Participate in outside educational efforts • K-12 fire education opportunities • Other in-person advertising and discussions i.e. leadership briefings or county fairs 	Increased awareness of accessible fire science information and CFSC resources	<p>Increased understanding of fire science leading to improved land management decision-making</p> <p>Science informed policies</p>	Improved environmental conditions in California wildlands
Vast amounts of fire science exists but it is often overwhelming, technical, or inaccessible.	<ul style="list-style-type: none"> -Staff time and expertise on resource issues - Staff time and expertise for technical writing - Staff web design and maintenance time - Consortium member time responding to information queries -Website and alerts to deliver written products 	<ul style="list-style-type: none"> -Consolidated source of fire science information through CFSC website - Live and archived webinars -Approx. 3 syntheses/year - Approx. 20 research briefs/year -Updated topic bibliographies -Develop partnerships with researchers/universities to create products from their research that are easy to understand -Explore additional forms of media (i.e. podcasts, videos) 	Increased awareness of accessible fire science information and CFSC resources	<p>Increased understanding of fire science leading to improved land management decision-making</p> <p>Science informed policies</p>	<p>Reduced negative effects from wildland fire</p> <p>Improved environmental conditions in California wildlands</p>
Inadequate opportunities currently exist for learners to interact and to achieve higher learning phases.	<ul style="list-style-type: none"> -Time and funding to host events - Knowledge of key participants and science users - Participation by managers in group and educational activities 	<ul style="list-style-type: none"> - Host in-person educational events including workshops and field trips to present science to end-users -The opportunity for participants to meet each other and possibly form future collaborations -Capacity to capitalize on “learning moments” i.e. post-fire workshop a few weeks after a fire 	Improved networks between experts (i.e. science-informed opinions and manager-informed science)	<p>Increased understanding of fire science leading to improved land management decision-making</p>	<p>Improved relevance of fire science to land management problems</p> <p>Improved environmental conditions in California wildlands</p>
California’s vast geographic area contains diverse	- Regional groups	- Regionally advised goals	Increased awareness of	Science informed policies	Improved networks between experts Improved

SITUATION	INPUTS	OUTPUTS	OUTCOMES		
			Short	Medium	Long
ecosystems and peoples with diverse challenges.	<ul style="list-style-type: none"> -Diverse staff (diverse locations, expertise, and organizational associations) -Regional and state-wide Advisory committees -Central coordination team 	<ul style="list-style-type: none"> - Input on CalFire’s statewide Veg Treatment plan reflecting California’s diversity -Trainings 	<p>accessible fire science information and CFSC resources (esp. regionally specific information sources & expertise)</p>	<p>(regionally specific)</p>	<p>environmental conditions in California wildlands</p>
California has more homes in the Wildland Urban Interface than any other state, resulting in costly and damaging wildland fires.	<ul style="list-style-type: none"> - Staff and consortium time and expertise - Web design and technical writing time -Time and funding to host events - Participation by planners, decision makers and residents in educational activities 	<ul style="list-style-type: none"> - Syntheses, bibliographies, & webinars for WUI issues - Coordinate special sessions at relevant conferences (i.e. WUI in Reno Conference) - Give field tours to show communities how to reduce fire losses -WUI products/knowledge that can be extended to a national level 	<p>Increased awareness of accessible fire science information and CFSC resources (esp. WUI-relate)</p>	<p>Science informed policies (esp. adoption of WUI policies & procedures by California residents, communities, and agencies)</p>	<p>Reduced negative effects from wildland fire. (esp. in WUI)</p>
Fire return intervals are inconsistent with historical fire patterns in many areas.	<ul style="list-style-type: none"> -Partnerships with NGO’s, state, tribes, and federal agencies -Staff time given to prescribed fire councils -Staff expertise on fire return intervals 	<ul style="list-style-type: none"> -Assistance to prescribed fire councils with events (i.e. TREX, conferences) -Research briefs/webinars specific to ecoregions in California -Public outreach about fire history and ignition sources 	<p>More capacity for prescribed burning through trained professionals, partnerships, and resource sharing</p>	<p>Increased understanding of fire science (esp. fire history) leading to improved land management decision-making</p> <p>Science informed policies (esp. for prescribed fire and fuel reduction activities/limiting ignition sources)</p>	<p>Improved environmental conditions in California wildlands (e.g. fire returns more consistent with historical frequencies)</p> <p>Reduced negative effects from wildland fire</p>

IV. Future direction

UC Berkeley/Statewide hub: The UCB hub of the California Fire Consortium plans to continue overall coordination for the CFSC including support for advisory committees, social media, newsletters, outreach to conferences and K-12 students, and maintaining and expanding partnerships with CalFire, prescribed fire councils and others. We also plan to assist sub regions with their programs as appropriate. A more detailed list is described in the table below.

Planned Activity	Proposed Schedule	Sub region	Comment	Communication Phase
Research Briefs & Syntheses	Ongoing-Monthly	All regions	Expected 20 briefs/year and at least 4 syntheses/year	Understanding
Advisory steering committee recruitment and meetings	Ongoing-Quarterly call/annual meeting; establish committee for all regions by 2016.	State level and all subregions	Create advisory committees for 2 subregions, maintain committees for other subregions and Statewide	Awareness
Increase/maintain social media presence	Ongoing-As information becomes available	State level	Recurring daily or weekly for entire period	Awareness
Newsletter	Ongoing-Monthly	State level	Recurring monthly; strive to maintain current membership 1600 subscribers	Awareness
Explore other technological opportunities	2015-2016	State level, possible others (Northern for podcasts; WUI video clips)	Continue to explore new avenues of outreach including possible new methods such as podcasts to reach a broader audience	Awareness
Develop stronger TEK webpage	2016	State level	Coordinate with a number of CFSC staff/associates to update the TEK webpage	Understanding
K-12 fire science education programs	2015-2016	State & Sierra Nevada	Assist Student Association for Fire Ecology/Bay Area Science in Schools 3 times a year; develop partnerships with K-12 outreach in Sierra Nevada region	Awareness
CalFire Partnership	Jan 2015-Aug 2015	State level	Through a contract with CalFire, continue to provide feedback,	Understanding

			science, and assistance to the CalFire revision team working on the Veg. Treatment Mgmt. Plan EIR.	
Prescribed Fire Councils	Ongoing	Northern & State	Continue to provide personnel resources for both the Northern and Southern Sierra Prescribed fire. Assist with conference proceedings and meeting planning each year.	Awareness
CA-NV-HI Fire and Fuels Conference	2015-2016	State	Serve on leadership board; assist with meeting tasks; attend and present CFSC/Fire Science Exchange information	Awareness
CalFire trainings and workshops	Spring 2015-Fall 2015	State Level	Hold a series of trainings specifically targeting CalFire employees to improve their collaboration abilities with communities and thus to promote fuel reduction in the WUI that is science based	Learning
UC Center for Fire	Ongoing	State level	Serve on Board, assist with LiDAR science workshop Spring 2015	Partnership
Other meetings/ events/ conferences	Ongoing 2015-2017	State and all regions	Additional meetings that have yet to be scheduled that will provide the opportunity for future collaboration, partnership, and awareness building. The specific meetings will be outlined in our updated plans of work (i.e. SAF regional meetings, prescribed fire council meetings, etc.)	Understanding/ learning
CFSC presentation and leadership briefings	Ongoing, multiple a year	State and all regions	Federal fire managers awareness and outreach about resources	Awareness

Wildland Urban Interface: New to the WUI Module, we plan on utilizing Cal Poly Communications students to produce 90-second “videettes” of specific issues germane to lowering WUI risk (e.g., landscaping, vents, windows, etc.), which we will place on a WUI Module YouTube page. We will continue to utilize leaders in the profession to present webinars, which will cover a diversity of relevant subject areas within the broader WUI problem. These webinars will be archived on the CA Fire Science consortium website for later download and viewing. Following the success of the pilot field workshops, we intend to provide a workshop once a year in varying parts of the state (i.e., southern California, Sierra Nevada, Cascades, etc.) We will continue to present the WUI Module poster at professional meetings. Beginning this year, we also plan on presenting it at a specially constructed Fire Safe demonstration house

(manned by CalFire firefighters) at the Mid-Coast Fair. The Fire Safe Council estimates that almost 50,000 people annually tour the site over the 2-week fair. We will continue to foster synergistic partnerships with relevant entities so as to maximize the impact of dissemination efforts.

Planned Activity	Proposed Schedule	Sub region	Comment	Communication Phase
Update bibliography	Spring 2015/ Ongoing	WUI	Working on updating and posting an updated database	Understanding
Webinar series	Winter 2015, 2016, 2017	WUI	Continue producing a webinar series	Understanding
Field tour/ demonstration	Ongoing	WUI	In 2014, a series of WUI Field Tours were tested that will now be delivered in other areas of the state (in cooperation with the San Luis Obispo Fire Safe Council and UC-Cooperative Extension).	Learning

Sierra Nevada: We will continue to organize three or more field trips a year. We are planning to have more multi-day field trips than we had in the past. The number of briefs produced will be expanded to 10 per year, with three additional research syntheses. We will expand our use of the website (especially after the new site is developed) to include synopses of our field trips and more webinars.

Planned Activity	Proposed Schedule	Sub region	Comment	Communication Phase
3-4 field trips/ year	Ongoing 2015-2017	Sierra Nevada	For 2015: Beaver Creek Pinery - Lassen National Forest; Mammoth Lakes Ranger District - Inyo National Forest; Sierra San Pedro Martir National Park	Learning
Webinar series	Spring 2015	Sierra Nevada	Possible topics: (1) Ecological impacts of salvage logging (2) Interactions between active management and insect populations (3) Increases in fire severity in California	Learning

Northern: The northern subregion plans to continue to produce outreach materials such as syntheses and research briefs and in person events such as field trips and workshops as in the past. We plan to produce several podcasts as an experiment in new technology for us. In addition, we will be working on mentorships with graduate students and training exchanges through the prescribed fire Councils.

Planned Activity	Proposed Schedule	Sub region	Comment	Communication Phase
Mentorships with Graduate Students	Ongoing/ Spring 2015	Northern	Programs like the UCB Graduate Group in Cooperative Extension will provide opportunities to mentor grad students. Chaparral event spring 2015.	Understanding/ Partnership
TREX training exchange through the Northern California Rx Council	Fall 2015, 2016, 2017	Northern	Coordinate two week intensive training event and bring in fire researchers to add the science component to the event	Learning

Central and Southern Region: We plan to continue to provide relevant research findings to support sound management decisions with both briefs and webinars and to incorporate feedback from our new advisory committee and the regional users on activities that would be most effective for better understanding and adoption in our regional fire community. We will also continue to develop our expanding bibliography and work on means for distributing them more widely. We plan to complete 5 synthesis papers, two of which are already started but require outside review and revision. And we plan to conduct a workshop dealing with the contrasts between fire regimes in the central coast and southern California.

Planned Activity	Proposed Schedule	Sub region	Comment	Communication Phase
Webinar series	Winter 2016	Central & Southern	TBD topic	Learning
Update topic specific bibliographies	Spring 2015/ Ongoing	Central & Southern	Increase usability of bibliographies by keeping this more up-to-date; explore more automatic update system.	Understanding
Webinar series	Winter 2016	Central & Southern	Conduct workshop dealing with the contrasts between fire regimes in the central coast and southern California	Understanding

Desert: Following the advice of our statewide advisory committee and JFSP leadership, the CFSC is currently organizing a new plan for the Desert subregion. Rather than committing an equal share of resources, less funds will be channeled to the Desert in 2015-2017. Currently, the desert funds have been placed in the UCB budget with an expected amendment process to occur once a new Desert team has been selected. The funds for the new desert leadership will only

provide for minimal time and support of desert region. The funds diverted from the desert subregion will be channeled to the WUI subregion to develop products with usability for other states/Fire Science Exchanges and the Statewide fund for event support in subregions.

This plan will allow the desert subregion to still be part of the CFSC with the ability to step in with outreach when fire returns to the desert. This plan also creates more reasonable expectations of fire science products given the current state of the desert ecosystem and fire. In the event of fire returning to the desert, funds from the statewide team will be given in support of such events. If fire remains the non-issue it has in the past few years, these additional funds will be given to the subregions based on an application process, as suggested by the statewide advisory committee (who will also assist with selection of successful applications).

Planned Activity	Proposed Schedule	Sub region	Comment	Communication Phase
1-2 fieldtrip/ workshop per year	2015-2017, Annually,	Desert	Topic / location to be developed by new lead	Learning
1-2 research brief and one synthesis per year	2015-17, Annually	Desert	Topic / location to be developed by new lead	Understanding