Existing JFSP Project Number: 09-S-04-18

Name of Exchange: California Fire Science Consortium

Principal Investigator: Dr. Scott S. Stephens

Coordinator: Stacey S. Frederick

I. Governance

We are currently in the process of filing advisory board membership positions for both the BLM and the LA County fire department after they were vacated this summer. Once replacements have been selected, the CV's of such persons can be forwarded to the JFSP board if desired.

II. Logic model

The updated logic model (attached) shows that our priority is continuing to meet our customers where they are at. Whether this means using social media or building new partnerships, we have planned a diverse set of activities to reach a wide audience. The key to our future plan is diversity; by having a variety of products, topics, and inputs, we can provide knowledge of interest to anyone from an interested private party visiting us for the first time to a manager who has been following us from our commencement.

III. Future direction

The success of many of our programs encourages us to continue to meet our users' needs in the same way, but still leaves room for new and innovative ideas. The production of research briefs/synthesis, webinars, workshops, and field trips will continue to be a major focal point of our efforts. While the type of outreach will remain similar to the past, future topics will be selected to meet the changing needs of our audience. For example, as new fire science emerges or as the environmental crisis of climate change and drought continue, we will adjust our content to incorporate the most up-to-date knowledge and needs.

As mentioned, we are exploring new forms of partnership and knowledge exchange methods. One of these is exploring the use of podcasts to deliver presentations in a format that is quick and easy to access. The transition of our websites to the new format is also offering new tools, including the ability to preview all website information as it would appear on a mobile device. A renewed

focus on social media with increased sharing and presence will continue to grow and diversify our audience. We will continue to seek out and nurture partnerships with prescribed fire councils, CAL FIRE (state fire agency), and other organizations. In addition, 2015 will include many outreach activities to other organizations to build awareness in members who may benefit from our resources and provide valuable input on how we can better meet their fire science needs. Examples of such organizations include The Nature Conservancy, Society for Range Management, the California Native Plant Society, the American Geophysical Union, and others. For further examples of future planned activities, please see the table.

Testimonial from TREX participant: "I wanted to extend my gratitude for the opportunity to participate in TREX. Hands down, it was the best training I have ever experienced, with an excellent balance of the science and application of Rx fire management, and a wonderful group of people to build working relationships with. I learned a ton, and I feel like I formed many lifelong friendships. I am very impressed with the quantity and quality of unique learning experiences you guys were able to offer in a 2 week session, and am so grateful for all the work you put into it. This was definitely a major highlight of my career so far, and I will always remember it fondly. I would also greatly appreciate an opportunity to participate in future TREXs, anytime, anyplace."

IV. Budget

There is no change in the budget at this time. However, the Consortium has received and distributed funds through the CAL FIRE VTPEIR (Vegetation Treatment Plan Environmental Impact Report) panel review project. This amounted to \$50,000 in 2014 for travel, honorariums, supplies and salary. A new contract is still being finalized that will include additional funds for continued oversight of the VTPEIR project.

Planned Activity	Proposed Schedule	Subregion	Comment	Communication Phase	
20-30 expected briefs and research synthesis from the sub-regions	Ongoing	All regions	Predominantly briefs but also some syntheses	Understanding	
Advisory steering committee recruitment	Ongoing	State level, Northern, Sierra Nevada, WUI, possible others	Discuss methods to keep an active and useful advisory committee and the benefits this brings.	Awareness	
Increase social media presence and explore other technological opportunities	Ongoing	State level, possible others (Northern for podcasts)	Continue to explore new avenues of outreach including social media and possible new methods such as podcasts to reach a broader audience	Awareness	
Develop stronger TEK webpage	Ongoing	State level	Coordinate with a number of CFSC staff/associates to update the TEK webpage	Understanding	
Society of Range Management Annual Meeting	January 31-Feb 6	State level	Organize a special "fire" symposium; including a panel and discussion of fire science needs for range management	Understanding	
California Native Plants Society Conservation Conference	January 15-17, 2015	State level	Poster presentation to raise awareness of Consortium	Awareness	
Student Association for Fire Ecology/Bay Area Science in Schools	Fall 2014	State level	Present one-hour fire science lessons to Elementary students	Awareness	
AGU Conference	Dec 15-19	State level	Assisting in the staffing of the JFSP Fire Science Knowledge Exchange exhibit booth	Awareness	
CAL FIRE Partnership	Ongoing	State level	Through a contract with CAL FIRE, continue to provide feedback, science, and assistance to the CAL FIRE revision team working on the Veg. Treatment Mgmt. Plan EIR	Understanding	

Planned Activity Proposed Subregion Comment Schedule				Communication Phase	
TREX: Southern Sierra Prescribed Fire Council Training Exchange	Feb 1-14 2015	State level	Assist with this intensive two week training event near Fresno, CA. Connect the participants to fire science and research by assisting with the recruitment of fire researcher presentations.	Learning	
A Future with Fire: Exploring Opportunities for a More Resilient California.	Dec 2-3, 2014	Northern	Prescribed Fire Council meeting for the Northern and Southern Sierra Prescribed Fire Councils	Understanding	
CA-NV-HI Fire and Fuels Conference	Oct 20- 21, 2014	State level	Attend and present CFSC/Fire Science Exchange information; joined committee	Awareness	
CAL FIRE trainings and workshops	Spring 2015	State Level	Hold a series of traninigs specifically targeting CAL FIRE employees to improve their collaboration abilities with communities and thus to promote fuel reduction in the WUI that is science based	Learning	
LiDAR 2-day Workshop	Winter 2015	State level LiDAR science presentations followed by discussion of needs/usability		Understanding	
Mentorships with Graduate Students	Ongoing	Northern Programs like the <u>UCB Graduate Group in Cooperative</u> LEXTENSION WILL PROVIDE OPPORTUNITIES TO MENTOR PROPERTY IN THE PROPERTY OF THE PROPERTY IN THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF T		Understanding	
TREX training exchange through the Northern California Prescribed Fire Council	Oct 1-11, 2014	Northern	Coordinate Two week intensive training event and bring in fire researchers to add the science component to the event	Learning	
3-4 field trips	Spring- Fall	Sierra Nevada	Possible locations: Beaver Creek Pinery - Lassen National Forest; Mammoth Lakes Ranger District - Inyo National Forest; Sierra San Pedro Martir National Park	Learning	

Planned Activity	Proposed Schedule	Subregion	Comment	Communication Phase		
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		
Aspen Ecology Workshop	Oct 28-29	Sierra Nevada	Organize workshop that covers a range of topics with Aspen Ecology, including fire and fuels, and a field trip	Understanding		
CFSC presentation at the Fire and Fuels committee	Fall 2014	Sierra Nevada	Federal fire mangers awareness and outreach about resources	Awareness		
Webinar series	Winter 2015	Central/Southern	entral/Southern TBD topic			
Update topic specific bibliographies	Winter 2015	Central/Southern Increase usability of bibliographies by keeping this more up-to-date; explore more automatic update system.		Understanding		
Desert Tortoise Council Symposium	Feb 20- 22, 2015	Desert/Mojave Attendance, networking, and presentation		Awareness		
Science for Parks, Parks for Science: The Next Century	March 25- 27	Desert/Mojave	Attendance, networking, and presentation	Awareness		
PECORA 19	Nov 17- Desert/Mojave 20, 2014		Attendance, networking, and presentation	Awareness		
Update bibliography	Winter 2015	WUI	Working on updating and posting an updated database	Understanding		
Webinar series	Winter 2015	WUI	Continue producing a webinar series	Understanding		

Planned Activity	Proposed Schedule	Subregion	Comment	Communication Phase
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 Council FireSafe Council and UC-Cooperative Extension).	Learning
Other meetings/events/ conferences	Ongoing	All regions	Additional meetings that have yet to be scheduled (i.e. SAF regional meetings, prescribed fire council meetings, etc.) will be attended that provide the opportunity for future collaboration, partnership, and awareness building	Understanding/learning

LOGIC MODEL for California Fire Science Consortium

SITUATION		INPUTS	H	OUTPUTS	-\	OUTCOMES			
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1) Web-based resources: The abundance of fire science information can be confusing to access as dissemination is uncoordinated across producers. Coordination of current resources through one central website will make end user access easier.		- Staff web design and maintenance time -New website design - Collection of web resources - Consortium member time to respond to information queries - Consortium member time to increase email list -Access to deliver web based training and webinar software -Outreach and advertising about consortium services		- Collect web resources and make available through maintaining the CFSC website - Email newsletters to alert contacts of new resources - Use social media (facebook/twitter) outreach about fire science - Conduct webinars on fire science topics of interest - Create blogs and website links post-events to share information with a broader audience - Update databases (bibliography and GIS)		-Increased awareness of fire science information available -Increased ability to access fire science information for land management - Increased understanding of fire science information -Increased diversity of fire science knowledge	- Increase use of fire science in land management - Improved fire and land management decision making ability		
2) Written information: An abundance of science information is available but barriers for managers accessing this information from journal articles are prevalent.		- Staff time and expertise on resource issues - Staff time and expertise for technical writing -Website and alerts to deliver written products		-Develop and distribute syntheses and annotated bibliographies for key resource issues - Develop research briefs for each region per year		users	Improved fire and land management decision making	-Improved environmental conditions in California wildlands	
3) In person outreach: Inperson interaction helps learners integrate new information into pre-existing cognitive frameworks. Inadequate opportunities currently exist to allow learners to have in-person interaction with researchers and each other. 4) Collaboration: The culture		-Time and funding to host events - Knowledge of key participants, locations, and science users - Participation by managers in group and educational activities - Time and funding to attend events and make consortium presentations - Time and funding to		- Host in-person educational events including workshops and field trips to present science to end - users - Participate in educational efforts of others to inform about consortium and products		- Improved communication between scientists and managers - Improved collaboration on research needs between scientists and managers - Improved understanding and use of fire science	- Improved consortium program delivery - Improved understanding and use of fire science information - Improved ability for researchers disseminate research results through the consortium		
and attitudes of science and management institutions can be a barrier to effective communication and		convene groups - Knowledge of key participants and science users		working and advisory groups - Participate in on-going conferences to inform about consortium and products		information -Improved relevance of fire science information to land management	-Form networks that can be utilized for future needs of both the consortium and		

SITUATION	INPUTS)	OUTPUTS	OUTCOMES			
SITUATION	INPUIS	\vdash	OUTPUTS		Knowledge	Actions	Conditions
collaboration.	 - Participation by managers in group and educational activities - Time and funding to attend events and make consortium presentations -Contract with State (CAL FIRE) for Consortium staff time and resources	•	-Active participant in other fire organizations to provide access to fire science (Prescribed fire councils, CAL FIRE, etc.)		problems	partner organizations	
5) WUI: Wildland Urban Interface fires in California are costly to manage and cause damage to California Communities. WUI science dissemination can help fire agencies, urban planners and communities reduce these damages.	- 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 group and educational activities		- Develop and distribute syntheses and bibliographies for WUI issues - Develop WUI research briefs for the whole state - Develop webinars and short courses for specific user groups - Coordinate special sessions at relevant conferences - Develop field tours to show communities how to reduce fire losses - Develop workshops /webinars to educate on WUI science		- Increased access to and understanding of WUI fire science - Improved communication between scientists WUI managers - Improved understanding of WUI fire issues by communities and residents	- Improved WUI planning and policies - Improved WUI fire management - Improved adoption of wildfire survival strategies and policies by communities and agencies	-Reduced damage and cost caused by WUI firesAppropriate use of fire as a management tool to create a landscape where fire and humans can coexsist



ASSUMPTIONS: Coordination of fire science information delivery and development of user friendly written and web-based information and tools will increase use of science in land management decision making. Inperson interaction will improve understanding of fire science information. Presenters will be seen as credible and attendees will be able to find topics that are useful to them. Improved communication and collaboration between fire scientists and managers will result in production of more relevant fire science information. Improved dissemination of WUI science information will lead to adoption of better WUI policies and procedures by California residents, communities and agencies.

