

JFS Final Report

Development of a California Fire Science Delivery Consortium (Project ID: 09-4-1-3)

By

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Abstract

I have submitted several final reports to the Joint Fire Sciences Program over the years but this one is different. This project was funded to write the full proposals for the California Fire Sciences Consortium. We used the funds from this grant to create the team for the consortium and wrote the proposal that was funded by the JFS. In that regard we accomplished all that we had proposed for this project.

This report will be relatively brief because the project objective was to write a full proposal for consideration of the JFS Board.

Background and purpose

California encompasses a vast range of ecosystems. Environmental gradients such as climate and topography, along with differences in fuel and vegetation management, generate many distinct *fire ecoregions*. Complicating the inherent diversity of California's landscape is a fractured ownership pattern where multiple federal, state, and private entities share management responsibilities. These regions vary in the portfolio of assets at risk during catastrophic wildfire events, both in terms of the built-environment and ecosystem services. This regional complexity creates a pressing need for ecoregion-specific innovations in wildland fire management coordinated at a broad scale.

Study description and location

To address this problem the University of California, Berkeley, Center for Fire Research and Outreach and Center for Forestry organized a state-wide consortium made up of a central hub and several strong regional nodes to focus on fire science delivery in a way that builds upon the strengths of each of the partners and regional needs, but emphasizes an efficient, unified effort at the state level. The partners included in the California Fire Science Consortium include the USGS, USFS Region 5, USFS Pacific Southwest Research Station, Cal Poly State University San Luis Obispo, Humboldt State University, BLM, US National Park Service, UC Division of Agriculture and Natural Resources, and UC Berkeley.

Location information. Different ecoregions throughout the state face different political and regulatory issues related to fire and vegetation. To address this challenge, we proposed a "hub and spoke" approach: a main hub based at UC Berkeley that would coordinate the efficient use of resources and web-based delivery systems, and promote program cohesiveness among several strong regional nodes. Each node has independence both programmatically and financially to focus efforts and address local needs, in addition to the core work that each node has agreed to do. The regions included are: Northern California, Sierra Nevada, Mojave, and Southern California and the Central Coast. We also added one state-wide module on the urban-wildland interface.

Management implications

When we polled managers that use fire science information in California during proposal development we learned that site-specific research was needed. Additionally big challenges were identified regarding planning for landscape scale fuel reduction treatments. Managers also said it was important that the best scientific information be considered to address the environmental impacts of actions in the NEPA/CEQA processes. The NEPA process and related judicial decisions often lead to expensive planning, delays, and cancelled projects that don't accomplish original goals of reducing fire risk. The Consortium is addressing these issues along with a much broader scope of work that is in our full proposal.

Relationship to other recent findings and ongoing work on this topic

We have talked with adjacent consortiums in the Great Basin and Southwest US to more fully understand their programs and to learn from each other. Several of the California Fire Science Consortium members attended the JFS Board meeting in Reno, Nevada, and presented initial results from the consortiums work. Stephens has been in communication with a group in Hawaii that is developing a consortium proposal for that state.

Future work needed

Project is ongoing at this point. We are making great strides in delivering fire science information to the states managers.

Deliverables

Full proposal to the Joint Fire Sciences Program titled 'The California Fire Science Consortium'. Proposal was reviewed by the Board and feedback given to the consortium. A revised proposal was submitted to the JFS and was funded. We are now implementing our plan for the state.