

Exhibit E – Soundness of Approach

State of California

ExhibitESoundnessofApproach.pdf

## **EXHIBIT E: SOUNDNESS OF APPROACH**

The Community and Watershed Resilience Program (Program) is modeled around several broad objectives, including reducing the risk of large, severe wildfires; safeguarding water storage and yields, an increasingly urgent priority in drought-stricken western states; diversifying and supporting local economies; and increasing the storage of carbon to mitigate climate change. Our objective is to apply this Program model in the Rim Fire (Fire) recovery, through the development of innovative partnerships that link together forest stewardship with productive uses for forest products, including timber, wood products, and bioenergy, alongside investments in community protection, economic development, and education. Due to the tight connection and interdependence between the local community and the forest, community and forest ecosystem resilience go hand in hand. Through our regional engagement, the goal is to develop a replicable and durable program model that can be applied throughout the State's rural, forest communities and shared with other Western states (see -Appendix E, page 99).

As outlined in Exhibits B, C, and D, the Fire is one event in a long history of wildfire in the Sierra Nevada. Wildfire risk has increased as a result of historic fire suppression, development patterns, drought, and other factors. Evidence suggests that climate change will result in more frequent and severe wildfires under a range of plausible future climate situations (Westerling and others 2014). Boosting economic and ecological resilience in the Fire area and surrounding communities requires reversing this management trend and developing opportunities to increase the strength and resilience of the local communities and economies.

### **Consultation**

The Fire recovery effort is an entry point to examine dimensions of resilience that are of concern statewide: wildfire, drought, water quality, water supply, and rural economic

development. Therefore, in developing this Phase 1 proposal, we have consulted with a broad group of stakeholders in Tuolumne County, the surrounding region, and the rest of the State. We will continue to engage a broad group of stakeholders in executing the work.

***Outreach, Stakeholders, and Collaboration:*** As described in Exhibit C and outlined in Appendix I, we have had broad-ranging consultation in developing our approach. These conversations have included stakeholders from many parts of the community and broader region, including local government, education, environmental organizations, fire prevention and safety groups, economic development organizations, community organizations, the agriculture, forestry, and wood products industries, local and downstream water utilities, and concerned citizens. We have also engaged with consultants, private business, and researchers.

***Engagement and Collaboration Moving Ahead:*** California and Tuolumne County will continue an interactive and collaborative dialog with the community moving ahead. A steering committee will advise the State on results-based outcomes, outreach, engagement, systems strategies, resilience planning, and implementation of the grant activities.

Leadership partners include the County of Tuolumne, U.S. Department of Agriculture Forest Service (USFS), Sierra Business Council, Local Government Commission, Yosemite-Stanislaus Solutions Partnership, the Amador Tuolumne County Action Agency, Local FireSafe Councils, and PolicyLink. Through this process, we will work iteratively to identify and co-create, with the community, discrete work streams for more focused engagement. Four focus areas under initial consideration are: Outreach and Engagement; Social Equity, Workforce Development, and Economic Opportunity; Natural Systems and Resources; and Built Environment and Infrastructure.

The project will use professional facilitation coupled with a data-sharing platform to facilitate

broad engagement, transparency, and accessibility to the process. Data Basin will be used throughout Phase 2 proposal development, project design, selection, and implementation.

Developed by the Conservation Biology Institute, Data Basin is an innovative web-based spatial visualization and analysis platform for conservation planning and decision making. Data Basin was designed to improve data accessibility and integration supported by a platform that is extremely easy to use and one that supports user collaboration at many levels. California recently used Data Basin for the Desert Renewable Energy Conservation Plan, referenced in Exhibit C, a complex, multi-objective stakeholder process, and has prioritized building this capacity into all place-based planning processes.

***Cumulative Risk and Vulnerable Populations:*** We have identified and reached out to a number of vulnerable populations within our target area. As a rural community with an economy that is closely connected to the forest and surrounding landscape, the communities and local economies in Tuolumne County are highly vulnerable to wildfire and other natural disasters. Community members who are employed in tourism and recreation-related jobs and the timber and wood products industry are highly vulnerable. We have engaged with representatives of the timber, wood products, and recreation and tourism industries, ranchers, and non-industrial private forest landowners to identify ways to build more resilience in these businesses. Two Native American tribes reside in Tuolumne County and we have engaged with each in the first phase of this project. We plan to continue with this engagement as this project moves forward.

Specific segments of the population are also particularly vulnerable to the occurrence of wildfire. These include the elderly, the young, and the infirm, who are especially vulnerable to poor air quality and wood smoke exposure. In the case of school-age children, the Fire also resulted in school cancellations, which, for some children, limited access to meals and other

services. We have engaged with the County Office of Schools to work with this population. We have and will continue to consult with PolicyLink, a national equity advisory and advocacy organization, to help build more extensive networks and collaboration with underserved populations and to develop equity opportunities in Phase 2 of this work.

***Results of Collaboration and Engagement:*** The residents and businesses in Tuolumne County and other forest communities have an intimate understanding of the interdependence among the forest, the watershed, the local economy, and the broader state. Our conversations with stakeholders and partners have been a tremendous asset to the development of this proposal. In particular, these engagements have provided the following:

- A better understanding of the range of economic and infrastructure damage of the Fire;
- Infrastructure deficits, including inadequate water, communications, and transportation systems that place communities at risk;
- Ideas for new projects, partnerships, and collaborations that will sustainably support the local economy, forest and watershed health, and ecosystem resilience; and
- An understanding of collaborative efforts and work already under way in Tuolumne County and the surrounding region, which creates a strong foundation for the work being developed through this proposal.

### **Concept for Resilience**

The Fire demonstrates the vulnerability of the State's watersheds, resource-based rural economies, and the fragile relationship among the State's people, economy, and its natural resources. This region is also representative of large portions of the western states, so this program will have wide applicability throughout the West.

***Project Ideas for Addressing Unmet Needs:*** This proposal focuses on a multi-pronged program for ecological and economic revitalization in which the concepts of ecological and economic resilience are central. We draw on critical elements of *Safeguarding California*, the State's Climate Adaptation Strategy. The Program also addresses two key ideas in the 2012 Forest Planning Rule (USDA Forest Service 2012), namely pursuing "opportunities for landscape scale restoration," and emphasizing "wildland fire and opportunities to restore fire-adapted ecosystems." Working forests are increasingly recognized as a beneficial approach to achieving economic prosperity in rural, resource-dependent communities, increasing resilience in the face of future fires and providing forest carbon storage to help mitigate climate change. We are exploring the following elements as part of our approach:

- Reforestation in the burn area: USFS is clearing burned timber and reforesting parts of the burn area. Due to budget and staff limitations, the USFS was unable to access and remove a significant portion of the timber that could have been used for wood products. We aim to leverage private businesses to facilitate more prompt and complete reforestation and salvage of burned trees.
- Strategic thinning for health and fuel reduction: Additional investments are needed to transition restoration of the burn area alone into activities that will boost resilience in the broader forested area and reduce the risk of future wildfire to the recovery area.
- Strategic firebreaks: Provide protection to communities, businesses, and increase future fire resistance of forests that are vital for the local timber and wood products industry.
- Development of partnerships to manage and utilize biomass: Manage forest biomass to reduce fire risk, develop strategic firebreaks, and enhance watershed health. Develop

economic models for using this biomass for bioenergy development within the wood products industry.

- **Job training:** Work with the forest industry and the California Conservation Corps to develop job training programs in order to develop a deep pool of skilled workers to support forest management activities, including marking trees, thinning, timber harvest, permitting, and biomass utilization. Such a work force will be needed to achieve successful reforestation, tree salvage and erosion control efforts after future wildfires and to manage forests to proactively prevent destructive wildfire.
- **Investment in infrastructure to protect communities from wildfire:** Ensure that water, communications, and transportation systems are resilient in the face of wildfire and are adequate to support evacuation, access, and fire-fighting activities during a fire.
- **Regional coordination and partnerships:** Coordinate with other Sierra Nevada communities (and beyond) to share practices and models for managing forest biomass.
- **Education:** Work with schools and other agencies to inform the public about steps needed to reduce wildfire risk (e.g., defensible space), the natural role of wildfire, and the role of the watershed in protecting the State's water supply and quality.

***Resilience Work Under Way:*** As discussed in Exhibit D, significant resilience work is under way in Tuolumne County. It is being led by local, State, and federal groups. The actions undertaken with this grant will augment existing activities and focus on building partnerships to leverage existing investments and overcome barriers to building resilience.

***Feasibility and Long-Term Resilience:*** The Program is designed to demonstrate a sustainable approach for maintaining forest and watershed health and community resilience. The goal is to move from a reactive model to one that is proactive and takes an integrated approach to

resilience. The Program requires both an initial up-front investment to jump start forest health efforts and to address the many decades of fuel build-up. After that initial investment, the goal is to implement a free-standing Program for forest health that is economically viable and durable. Natural systems are dynamic; therefore, our Program will require long-term monitoring and adaptive management. The funds provided through the National Disaster Resilience Competition will help develop the capacity, partnerships, and a trained local workforce to undertake this maintenance.

***Co-Benefits and Integrated Thinking:*** The Community and Watershed Resilience Program is designed around the relationship between forests and communities. The Program is intended to achieve multiple benefits that emanate from the local community and spread down through the watershed to the entire State. The Program is designed around a central goal of reducing risks from wildfires, but to do so in a manner that supports diverse ecosystem benefits, rural economic development, and long-term resilience and sustainability.