

SUMMARY REPORT

Wildfire Risk Reduction Decision Support Framework User Needs Assessment



Introduction:

Sonoma Water, in partnership with Conservation Biology Institute (CBI), is developing a Wildlife Resilience Planner. The Wildlife Resilience Planner is an online spatially explicit landscape-scale wildfire risk reduction and vegetation management planning and prioritization tool (more information about the initiative [here](#)). This tool supports and is integrated with the parcel scale tool developed by University of California Cooperative Extension in cooperation with Pepperwood as part of a countywide Decision Support Framework to prioritize actions and investments in climate resiliency. In order to develop the most responsive and effective tool possible, Sonoma Water contracted Ag Innovations to conduct a User Needs Assessment. The goal of the User Needs Assessment was to better understand the interests, needs, challenges, and aspirations of a broad, community-wide range of potential users in and around Sonoma County and to help inform its development and to establish and cultivate a community of users for informed and effective decision making.

Target interviewees were primarily potential users whose work includes and/or intersects with landscape-scale wildfire-related interests, including prevention and risk mitigation, preparedness, response, and recovery; a secondary focus was stakeholder groups that could impact or be impacted by wildfire, including water and energy utilities, roads and transportation, tourism and hospitality, risk managers and insurance agencies, and healthcare. Ag Innovations sent out interview requests to 63 individuals, and in total conducted 21 interviews with 39 individuals representing over 30 organizations. The key results and implications of this Assessment are summarized below.

User Needs Assessment Summary Results

The most common and salient needs identified by interviewees included:

1. Sonoma is highly parcelized, with many small, 5-10 acre parcels. It is difficult to coordinate across these multiple adjacent parcels - especially because landowners may have differing interests, means, and ideas about land treatment. This is a major obstacle to implementing land management practices at scale. Coordination across multiple parcels is necessary to leverage effective treatments at sufficient scale, and to drive down costs.
2. There are significant challenges in implementing landscape treatments, as well as in monitoring actual outcomes and progress, due to complexity, regulatory compliance, and high treatment cost per acre. However, it is important to remember that the cost of inaction may be much greater, especially in the most vulnerable and high-risk areas.
3. The current structure of competing for limited, one-time grant funding against other local organizations and landowners implementing treatments is inefficient and non-strategic, frustrating to those trying to implement treatments. Other funding models, like Marin's, appear to enable long-term planning and better coordination among stakeholders.
4. There is a need to educate the public about wildfire risk reduction, and to help professionals and landowners learn about and understand effective practices, costs, trade offs, and resources in different landscapes/contexts.
5. It was recommended to explore and plan for 'managed retreat' from certain high-risk places, because allowance for further expansion into WUI areas without consideration of the increased risks and costs to the County and stakeholders is perceived as dangerous and expensive.
6. Fire professionals and landowners need a user-friendly, centralized, and up-to-date resource hub. Currently, information about wildfires, wildfire planning, and wildfire mitigation is spread across a

- variety of agencies and external resources, all with different areas of expertise and accessibility, making resources and data difficult to find or use.
7. There is a desire for more coordinated and higher-quality messaging across agencies and partner organizations to build alignment and shared awareness. As the concern around wildfires has increased, so has the spread of misinformation, incomplete, or dated materials, as well as conflicting recommendations.
 8. There is not enough data or authoritative guidance to make certain complicated land management decisions, or to effectively analyze the cost-benefits of treatment options. Thus, more landscape-specific research and information on the effectiveness and ecological impacts is needed, especially in a rapidly changing climate.
 9. Interviewees suggested it would be helpful to track planned and completed treatments in order to identify where management actions are being focused, how they align with the areas of highest risk and vulnerability, and how much progress is being made to reduce risks and foster ecological health.
 10. In general, interviewees could be categorized into two different approaches to wildfire planning.
 - a. **“Inside-Out” approach:** a primary emphasis on protecting humans and human assets; see wildfire embers are the primary ignition source for homes and thus first priority is on reducing risk on the property and immediate surrounding landscape.
 - b. **“Outside-In” approach:** a focus on promoting ecological health and community planning to live with “good” fire; reduce wildfire risks and improve ecological values/services by reducing fuel loads, invasive plants, and better stewardship.
 - c. Some stakeholders that prioritize the “Inside-Out” approach are concerned that “Outside-In” can overlook the importance of the home and human safety as a priority and will waste limited funding. Others are equally concerned that although ecological awareness is relatively high in the community, some organizational and individual decisions that are “Inside-Out” do not adequately account for ecological values and services that we all depend upon or inadvertently damage ecosystems and their functioning, and thus may cause more damage to already compromised systems.
 11. Having data and well-designed decision support tools that incorporate the range of values of *both the “Inside-Out” and “Outside-In” approaches in one online resource* was important for an increasingly coordinated and integrated approach that not only stewards the broad range values needed for wildfire resilience but can reduce tension and unnecessary tradeoffs between people-centered and ecologically-centered decisions.
 12. Decision Support Tools and Informed Decision Making Frameworks that are science based are valid and important to communities and agencies serving public needs. These tools are designed to describe and characterize risk and promote shared understanding in terms of priority actions to reduce risk, however the tools do not replace nor preclude information regarding on-the-ground conditions and all fuels reduction and land management work should be conducted in consultation with professionals such as: fire prevention professionals, registered professional foresters, conservation agencies and local government and utilities.

User Needs Assessment Implications:

The information gathered by this needs assessment is being used to guide the development of the decision-support tools of the Sonoma County Wildfire Decision Support Framework. The issues, concerns, and recommendations presented to us by the Sonoma County community are being taken into consideration in a number of ways, including the choice of the data being used in the tools and the way they are made accessible, the messaging and guidance presented within the tools, the coordination between the DSF effort and the wildfire risk reduction initiatives in the county, and the outreach and training being done to ensure institution of the tools within the community. Please see the full report for more details.