



California's Year in Fire Expands Evaluation of Wildfire Impacts

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A wide variety of wildfire impacts are either untracked or unreported, limiting our ability to make informed decisions in wildfire mitigation and recovery efforts. Such a narrow view of the problem and potential solutions both minimizes the opportunity to produce a range of social and ecological benefits and could result in unintended consequences. A broader set of metrics also benefits evaluation and decision-making related to the critical need to restore functional fire to landscapes and build a greater understanding of positive aspects of wildfire. The California's Year in Fire project advances a framework for a more complete picture of evolving impacts and consequences and provides more robust data points to inform meaningful solutions.

California's Year in Fire

We all know that wildfire – and wildfire risk – is getting worse in California, but what does “worse” mean? **Equating wildfire outcomes with acres burned has contributed to a historical reliance on fire suppression**, rather than developing and employing strategies to influence social and ecological impacts more broadly. Though our collective approach to wildfire management has progressed, we are still making decisions about how to prepare for, respond to, and recover from wildfire without considering the full range of effects. As a result, we risk investing resources in ways that do not facilitate the outcomes we seek.

Wildfires are impacting almost everyone in California, and these impacts are evolving. The nature and extent of wildfire impacts have implications for where and how we live, manage, and invest. And yet, **despite an abundant data landscape, wildfire impacts – well beyond acres burned – are elusive.**

The UC Berkeley Center for Law, Energy, and Environment, in conjunction with the Climate and Wildfire Institute, created the [California's Year in Fire](#) project to help define the broad scope of wildfire impacts, provide data points for decision makers, and improve policy.

Better Data and Metrics

As our wildfire costs and investments grow, we need reliable and consistent baseline information regarding wildfire outcomes and trends. Characterizing baseline conditions should capture both the positive and negative effects of wildfire. Identifying where wildfire is facilitating increased ecological function can help enable the significant social and ecological shifts required to coexist with the wildfire and restore functional fire to our landscapes. **Figures 1 and 2**, which respectively show economic losses from wildfire and personnel counts responding to wildfire incidents, provide examples of additional metrics use to measure the impacts of fire beyond acres burned.

The first iteration of the California's Year in Fire project **examines wildfire impacts across five dimensions relating to landscapes, ecology, society, response and recovery, and risk mitigation.** Based on extensive research and consultation with subject experts and data producers, we have curated quantitative data across these dimensions, which will help us measure wildfire impacts more comprehensively, and track them over time.

How is wildfire impacting ecosystems? What social costs are occurring beyond suppression? How are we using firefighting personnel? The California's Year in Fire project is an important first step toward answering our central questions. Through outreach, engagement, and further consultation, we look to improve our ability to reflect the complex nature of wildfire impacts and increase our analytical capacity, allowing us to include impacts of great societal importance, including public health and community resilience. We also hope to report and contextualize information on a regional or ecosystem basis to increase relevance and applicability across California's varied landscapes and fire regimes.

While big data and analytics are essential to our greater understanding, **we must also acknowledge that many intangible wildfire impacts may not be well-suited to a quantitative framework.** The loss of a community, for example, is more than the number of structures damaged or destroyed, and encompasses experiences with trauma and grief, as well as consequences for community cohesion. We hope to continue engaging with stakeholders to increase our ability to acknowledge and reflect these dynamics.

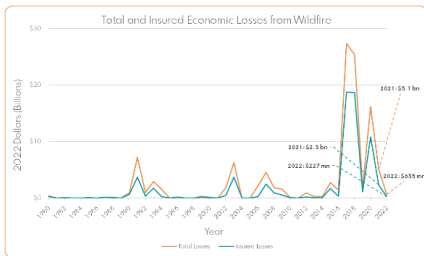


Figure 1: Total and Insured Economic Losses From Wildfire

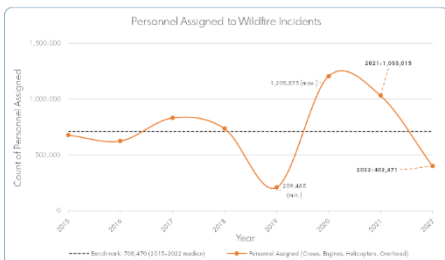


Figure 2: Personnel Assigned to Wildfire Incidents