

Agencies prioritize wildfire risk reduction where risks are salient – not necessarily where largest

Governments rely on public input to allocate scarce wildfire risk efforts, but community demands can lead to an inefficient distribution of fuel treatment projects – often prioritizing lower-risk areas that recently experienced a wildfire.

Based on **Matthew Wibbenmeyer, Sarah Anderson and Andrew Plantinga. 2019. “Salience and the Government Provision of Public Goods.” *Economic Inquiry***; and **Sarah Anderson et al. 2018. “The Dangers of Disaster-Driven Responses to Climate Change.” *Nature Climate Change***.

The Policy Problem

With climate change making wildfires more severe, federal agencies estimate that nearly 100 million acres of land are at high risk for wildfire. But in fiscal year 2018, for example, the government only treated approximately 3 million acres to reduce risk. Given these capacity constraints, it is particularly important that land managers target fuel treatment *efficiently*: investing scarce resources in the places with the highest wildfire risk. A concern is that forest managers instead prioritize fuel treatments for places that have just had a fire – where the short-term fire risk is now lower. When communities with recent fire experiences demand additional fuel treatments, this also generates incentives for fire suppression - a maladaptive response that can lead to fuel build-up and, eventually, more severe fires.

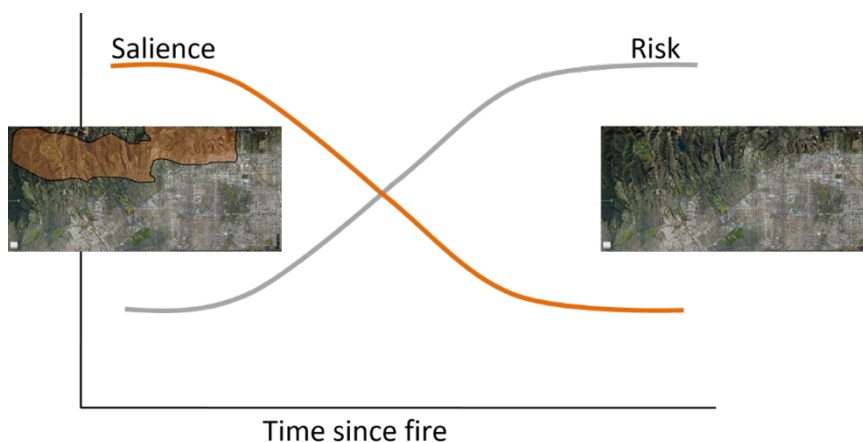
Key findings and proposed solutions

- When communities are paying attention to wildfire, they are more likely to lobby government agencies for fuel treatment projects.
- This biases the distribution of wildfire fuel management projects. Fuel treatments go disproportionately to places that have recently had a wildfire – not the places with the highest short-term wildfire risks.

- Agencies should consider should consider insulating the distribution process from community demands and emphasizing objective risk measures.
- Agencies should channel community attention to longer-term projects, like land use planning, home retrofitting, and evacuation planning.

What We Found

Wildfire-reducing fuel treatments go disproportionately to places that have recently experienced a wildfire. A community that has had a recent, close wildfire is 1.6% more likely to receive a fuels treatment project. This is a large increase relative the 3.5% average annual rate of fuels management projects in in our dataset. This inefficient allocation of resources to areas with lower objective risk is likely the result of high wildfire salience in these communities. When communities are paying attention to wildfire, they are more likely to lobby the agencies for projects. In turn, governments are responsive to public input in their efforts to distribute scarce



resources for wildfire risk reduction. Similarly inefficient allocation of resources probably occurs in other areas where salient disasters spark public attention – like flood management, security to prevent terrorist attacks, and management of zoonotic diseases.

Figure 1. In communities with recent wildfires, the salience of wildfires is high – but the short-term risks of additional wildfires is much lower since fuels have not built up again. Over time, risk salience decreases, while the objective risk of fire goes up.

What We Did

We collected data on all fuels management projects on US federal lands between 2003 and 2011. We combined this panel data with information on the spatial distribution of wildfires, local vegetation conditions and other features of communities in the wildlife-urban interface. We focus on analyzing the effects of recent fire experience on the distribution of fuels management projects in this wildland-urban interface zone.