All too many Californians have lost their homes, and even their lives, as fires have raced through exurbs, suburbs, and even portions of towns and cities over the past several years. A key issue that policymakers are wrestling with is the extent to which new development has increased the risk to people and property from fire in California. Pressure for development – especially housing – in a state with skyrocketing housing costs has pushed new projects into what is called the wildland-urban interface (WUI), the areas that have high fire hazards and are more likely to burn.

But solutions are not simple for two key reasons. First, given the state's dire housing crisis, simply prohibiting all development in high fire hazard areas may not be feasible or desirable, given how much of the state is in those areas. Second, because most development is approved at the local level in California, any response either requires state intervention into local land-use regulation (always politically controversial) or alternatively getting local governments to address the problem themselves, no small task in a state with hundreds of cities and counties.

Addressing this critical issue requires an understanding of what is happening now – something that is also challenging given that local governments can vary widely in how they approve housing development. To get some insights on what is going on, I (together with my collaborator Moira O'Neill) collected data on approvals for residential development in 2014-17 in three counties—Placer, Los Angeles, and San Diego— and two cities—San Diego and Los Angeles—that have large amounts of land in high fire hazard areas. Our results, which are now out in Ecology Law Quarterly, are striking. They show that one county (San Diego) approved most of its housing in high fire hazard areas. They raise real questions about how well current state policy is addressing the issue of development in the WUI. In this series of blog posts, we summarize our research and provide the broader legal and policy context, as well as possible ways forward.

In this first post, we summarize the ways in which development in the WUI can increase the risk of fire and the harms from fire. In our next blog post, we summarize the current legal framework by which California currently addresses (or might address) development in the WUI, and summarize our research. In our third blog post, we describe how we collected our data and our results. In our final blog post, we discuss the implications of our research and identify possible ways forward.

Risks of development in the WUI

Development in the WUI creates three major risks for fire in California. First, increasing the people and property in the WUI, which is high fire hazard, increases the risk that people will lose property and lives in the next fire. Second, people are a major cause of fires – many fires are ignited by humans. More people in the WUI means more fires will be started, increasing the chances a fire will harm people and property.

The third risk requires a little more explanation. Many ecosystems in California are fire dependent – they will burn, and indeed in many cases the more frequently they burn, ironically the lower the risk of large-scale, high-intensity fires. Regular fire reduces the accumulation of biomass that can cause larger, more intense fires that are more difficult to control and can cause significant damage to ecosystems, people, and property. In many ways, responding to the fire crisis in California requires reintroducing fire to the landscape for many of our ecosystems, often through the use of prescribed burns initiated and/or managed by people.

But reintroducing fire to the landscape is much harder if there are many people and buildings on the landscape – people and property that are put in danger if a prescribed burn gets out of control (as can happen). Indeed, in many places development may preclude prescribed fire completely. Thus, more development in the WUI can interfere with our efforts to restore needed fire.

Overall then, WUI development can significantly increase the risks of fire overall, and the risk that more people and property will be harmed by fire. In the next blog post, we'll provide an overview of the current legal framework in California to address this challenge.