

Rebuilding for a Resilient Recovery: Alternative Scenarios, Impacts and Tools

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Approximately one-fourth of Californians live in high-risk fire areas, with three million housing units at risk. Climate change has accelerated, causing the state's fires to grow bigger and last longer – and colliding with California's ongoing construction of single-family homes in the exurban fringe and greenhouse gas reduction goals. Yet, the State's [2018 Strategic Fire Plan](#) focuses almost exclusively on prevention via education, land use planning, and land management; just one of its eight goals targets recovery, but without mention of best practices for rebuilding. Despite Governor Newsom's [April 2019 call](#) to “deprioritize new development” in areas of extreme fire risk, the legislative focus thus far has been on retrofitting homes to become more fire-resistant. A bill that prohibits development in high fire-risk areas unless it met certain standards ([Senate Bill 182](#)) likely faces opposition because it may allow anti-growth cities to avoid meeting their housing goals.



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The failure of California to embrace more resilient recovery processes is due in no small part to the lack of rigorous analysis about the long-term environmental, social, and fiscal costs of simply rebuilding in place. In this studio, we examine how to rebuild for fire recovery in a resilient fashion – reducing greenhouse gas emissions, preserving agricultural land, stabilizing communities, and producing positive fiscal impact. We will study three communities hard hit by recent fires, but each with a different demographic profile and built form: the Thomas Fire in Ventura County, the Tubbs Fire in Santa Rosa, and the Camp Fire in Butte County (Paradise). For each case, we will examine a set of alternative scenarios, including business-as-usual rebuilding, on-site higher density rebuilding, and off-site urban infill rebuilding.

This studio class will examine impacts on the environment, particularly in terms of vehicle miles traveled and loss of natural and working lands; impacts on communities, particularly displacement of low-income households (and related health and other costs); and impacts on city and state budgets (particularly infrastructure and other costs of sprawl). We will conduct stakeholder and key informant interviews in order to explore the institutional and regulatory structures that would provide the most appropriate carrots and sticks for a more resilient recovery.



This class will be co-taught by Karen Chapple and [Rob Olshansky](#), an emeritus professor from the University of Illinois, Urbana-Champaign, who is one of the world's leading experts in disaster recovery. The Nature Conservancy will act in an advisory capacity to the project. This studio is sponsored by a grant from [Next 10](#).