MAPPING THE WILDLAND-URBAN INTERFACE AND HISTORICAL FIRE PERIMETERS TO INFORM DESIGN AND PLANNING EFFORTS IN GROWING MID-SIZED CALIFORNIA COMMUNITIES

SCHLICKMAN, EMILY
University of California, Davis, eschlickman@ucdavis.edu

1 **ABSTRACT**

A century of wildfire suppression, growing development at the edge of wildland, and a rapidly changing climate is increasing the risk of catastrophic wildfire in the American West. In the field of landscape architecture, designing and advocating for community and ecological resilience in response to these events has become paramount. The study outlined in this paper supports the idea that the wildland-urban interface (WUI), which is particularly vulnerable to the effects of wildfire, is where multi-scalar design and planning ideas can make a profound impact and where landscape architects can employ their expertise and become stewards of change. The study explores how descriptive geospatial mapping techniques might help communities grow and develop with wildfire in mind by positioning landscape architects as advocates for land use planning strategies that have the potential to bolster resilience. In particular, the study involves the mapping of 55 growing mid-sized communities across the state of California. A broad visual analysis of these maps revealed communities with WUI areas and a history of past wildfire events. This information was then used to formulate a new urban design studio to explore future development scenarios for one of these communities. Over the course of five weeks, students explored a new paradigm of growth for the community by focusing on two centrally-located infill sites. Findings from the study point toward a development framework for growing mid-sized California cities that are vulnerable to wildfire. The framework employs mapping to identify potential risks and to speculate about potential infill areas that are less vulnerable to wildfire and areas that promote the densification of traditionally sprawling communities.

1.1 Keywords:
Mapping, wildland-urban interface, wildfire, resilience, climate change adaptation