

Advancing the characterization and management of community wildfire risk

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\$250,000

Despite the science advancements, assessments, and a myriad of state, federal, and local fire protection activities and programs (Jakes and Sturtevant 2013), numerous gaps exist in the current wildfire risk assessment and planning systems that potentially degrade progress towards the goals of the federal wildland cohesive strategy (USDA-USDI 2013). One way to organize the community risk problem while recognizing scale and risk transmission issues is through the use of fireshed mapping and community archetypes. These assessment techniques provide a way for communities and land managers, community members, and individual home owners to understand the fire dynamics where they work and live, thus providing information to make informed decisions about the investments required to improve community's resiliency. Moreover, defining the scale of community exposure set the stage for the application of scenario planning tools to evaluate investment options, costs, and associated tradeoffs. In this way, community firesheds are mapped, catalogued, and organized into Fireshed Planning Areas (FPAs) that are maintained in a Community Fireshed Registry (CFR; or knowledge base), thus providing a strategic framework to explore and prioritize investment options at national scales. Once firesheds have been appropriately described, use clustering/segmentation techniques to identify unique biophysical and/or social archetypes. This would identify adaptation / management pathways for each fireshed biophysical archetype and fireshed community capacity archetype. This Community Fireshed Registry would to be based on best available science, peer reviewed, and maintained to specific standards over time.