



## Climate Change is Increasing Wildfire Risk

Climate change is an ongoing reality that is accelerating the incidents of wildfire, resulting in unprecedented increases in annual damages to property. Decision-makers can no longer accept observed historic events as accurate predictors of future risks, and instead must look to science and technology to help guide their decisions. Dewberry's engineers, planners, and geospatial analysts work closely with communities to assess their risks, capabilities, and needs, and then apply innovative solutions that incorporate modeling, geospatial technology, and remote sensing to develop adaptation strategies and help prioritize limited resources.

## GIS-Based Risk Model

Our GIS-based wildfire risk model incorporates dozens of layers of geospatial information about fuel, weather, topography, and fire history to evaluate wildfire risk at 30-meter resolution. Having relevant risk information at the individual address level allows communities to develop better short- and long-term plans for addressing and mitigating wildfire risk.

## Infrastructure Evaluation

Wildfires put additional stress on already aged infrastructure resources, such as water and stormwater systems, energy networks, and roadways. We help our clients identify their most vulnerable critical infrastructure assets and evaluate their capabilities to handle these additional stresses. We then work with our clients to identify planning and engineering solutions to ensure that these assets will be able to function effectively to support fire fighting, evacuation, and post-fire surface water runoff.

## Evacuation Planning

The unpredictable nature of wildfire necessitates having a good evacuation plan to get citizens to safety, and firefighters to the areas where they are needed. We are experienced developing customized plans that account for special needs groups and pet evacuation. By understanding our clients' specific concerns, as well as available resources, we are able to develop a coordinated evacuation plan that is best suited to a community's unique needs.

## Hazard Mitigation, Land Use Planning and Building Codes

We have been working for decades on developing and implementing both engineered and non-engineered mitigation solutions to natural and man made hazards. Actions can be taken at the individual building level to improve resistance to wildfire, and both the new building codes and construction materials can help to address these risks. We believe that taking a community planning approach to wildfire risk mitigation is the most effective long-term solution, and our work focuses on developing strategies that leverage a community's geographic features as well as their existing resources to mitigate their risk of damage from wildfire.

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