

## **Summary of Boulder County Land Use WUI Building Codes Effectiveness in the Fourmile Canyon Fire**

The "Fourmile Canyon Fire Findings" or the USFS assessment of the Fourmile Canyon Fire examined home destruction caused by fire. Specifically, that study looked at the conditions that affected fire behavior and the fire behaviors that led to home destruction. Boulder County also examined home destruction from the Fourmile Canyon Fire as it related to its Land Use and Building Codes.

### **Boulder County Land Use and Building Codes Background**

In Boulder County, the Land Use Department has included wildfire mitigation measures in the planning review and building permit processes since the Black Tiger Fire in 1989. When building a new home, residents are required to go through a SPR (Site Plan Review) process and implement an approved Wildfire Mitigation Plan (WMP). This process and plan include the best site location on the property, effective defensible space, ignition-resistant construction, adequate emergency access, and sufficient water supply. Landowners who go through the SPR process with a WMP are also required to maintain their defensible space over time. Boulder County programs also encourage, but do not require, residents of existing homes to create and maintain a safe home ignition zone.

While Boulder County has the statutory authority to enforce these codes, and a mechanism by which to enforce them, we currently do not have adequate staff capacity for inspection and enforcement of defensible space/WUI Building Code requirements. We operate on a complaint-based system, so if a resident issues a complaint about non-compliance with code requirements we may investigate and may pursue a violation.

To review the Boulder County wildfire mitigation requirements, visit:

<http://www.bouldercounty.org/doc/forest/w02wildfiremitigationplan.pdf>

### **Fourmile Canyon Fire Findings Related to Boulder County Land Use Planning and Building Codes**

There were 474 homes within, or adjacent to, the final perimeter of the fire: 168 of these homes were destroyed (35%); 306 homes survived (65%).

- Most of the homes that were in or directly adjacent to the Fourmile Canyon Fire had not gone through SPR under the WUI building codes regulations. (46 out of 474 homes; 10%)
- Fourmile Canyon Fire homes that did not go through SPR process for WUI building code regulations (268 out of 428 homes survived; 63%)
- Fourmile Fire homes that did go through SPR for WUI building code regulations (38 out of 46 homes survived; 83%)
- Of the homes that did go through SPR for WUI building code regulations, they were approved in the following years:
  - o 1993-1994: 9 of 12 homes survived (75%)
  - o 1995-1999: 20 of 25 homes survived (80%)
  - o 2000-2010: 9 of 9 homes survived (100%)

Boulder County has established an informal goal to increase the survivability of homes from the 65% experienced in the Fourmile Canyon fire to 75% through WUI building codes, education and outreach around WUI issues, direct support and assistance to homeowners in the WUI and other measures.