



FEMA

Multiple Mitigation Measures Save Home from Wildfire

Jamul, CA – In October 2007, fire surrounded the home of Bob and Suzy Bullock, who live approximately 25 miles east of San Diego near Jamul. They evacuated, and when they came back they found their home intact – protected by all the mitigation measures they took.

On a 10-acre site in the wildland area above Deerhorn Valley, the Bullocks' home sits surrounded by scorched hillsides and gulleys. The Santa Ana winds drove the Harris Fire, one of the biggest fires of the Southern California wildfires in 2007, through the area. The fire destroyed 19 homes within sight of the Bullock property.

A wide swath of defensible space planted with fire-resistant vegetation that is watered regularly with a special irrigation system helped save their home. So did its construction – a tile roof with boxed-in air vents that repel flying embers, stucco walls, concrete aprons around three sides of the structure, and the asphalt driveway at the back of the house. The Bullocks also have a fire hydrant (required by the county as a condition of the building permit) fed by water from a 10,000-gallon water tank.

The Bullocks' advance preparations included coating their house with a fire-repellent gel. The gel is applied as a mist with a garden hose. The "fire-blocking gel" should be rehydrated with a misting every eight hours. Firefighters from Lake Tahoe re-misted the gel while the Bullocks were gone.

The concrete aprons extend 10 to 21 feet from the outer walls of the house. The 16-foot-wide asphalt driveway behind the house serves as an apron there. The Bullocks also have an irrigation system installed for watering plants in the defensible space.

The next thing the Bullocks will do to enhance protection of their property is remove a pine tree that was growing next to the water tank behind and upslope from their house. That decision was made when the Bullocks found out that vegetation by a water tank could ignite, destroying the water tank, as had happened on other properties in other fire areas.

The overall cost of mitigating their house with aprons, defensible space, including the irrigation system, well, fire hydrant, fire pump, and fire hose totals \$85,000. The cost of constructing their house in 2003 was \$600,000. The Bullocks' insurance company estimated late in 2007 that it would cost approximately \$775,000 to replace their home if it had been a total loss. That makes the cost benefit ratio 9 to 1. The house is insured for \$800,000, Bullock said.

The Bullocks encourage everyone to consider what they may do to protect their homes and consider that the extra costs are well worth it.



San Diego County,
California



Quick Facts

Sector:

Private

Cost:

\$85,000.00 (Estimated)

Primary Activity/Project:

Building Codes

Primary Funding:

Property Owner, Residential