



Vegetation Made the Difference

Full Mitigation Best Practice Story

San Diego County, California

San Diego, CA – Herb Peters is convinced that ice plant placed on three sides of his Rancho Bernardo home early in 2007 was a major reason his 1,500-square-foot house did not burn when the Witch Fire roared through his neighborhood during the morning hours of October 21, 2007.



The ice plant and more than 50 feet of wax-leaf ligustrum hedge that lines the north side of his elevated corner lot, facing in the direction from which the Witch Fire came, “had a great deal to do with saving our house,” Peters said.

Many homes in the area where Herb and Jill Peters’ home is located burned to the ground. Homes directly across the street were destroyed. Several homes burned to the ground east of the Peters home. The Witch Fire burned several dozen homes in the area west of Interstate 15.

In April, Peters removed an older type of ice plant that had been growing on the property for well over 20 years and replanted the slopes with 180 flats of the new ice plant. The ice plant is watered three times a week and is “very fire-resistant,” Peters said.

Removing flammable native vegetation and replacing it with low-growing, fire-resistive plants is one of the easiest and most effective ways to create a defensible space, according to the Fire Safe Council. Fire-resistive plants grow close to the ground, grow without accumulating dead branches, needles or leaves, and are easily maintained and pruned, the council said. Some of the more common species of fire-resistive plants include ice plant, periwinkle, rosemary, and African daisy, the council said.

The fire hit the area between 3:30 and 4 a.m. Herb and Jill, got the call to evacuate while they were in Omaha, Nebraska, visiting with family. Peters’ son was taking care of their home. A neighbor across the street called and said burning palm tree fronds “were flying.” Flames and embers blew under tiles of neighboring houses, and the homes “blew up,” the neighbor told Peters.

Houses with asphalt shingles in his neighborhood “are still standing,” Peters said. “Winds were blowing through here at 80 to 100 miles per hour.” He added that “some beautiful multi-million dollar homes” in Rancho Bernardo were destroyed during the conflagration. Houses burned on every side of his home. Peters added that wooden fencing on both sides of West Bernardo Road, a bit more than a block away from his home, acted as a “wick,” or fuel, that fed the fire.

At one point, the Peters were told their home was gone. When they returned to Rancho Bernardo, they “really expected it to be gone,” Peters said. “We were euphoric when we saw it still standing.”

“Everything went wrong” when the Cedar Fire roared through San Diego County in 2003, Peters said. “This time, we were organized, and everybody did much better.”

The Witch Fire (also known as the Witch Creek Fire) was the most destructive of 24 fires that burned in seven counties in the area declared by the president as a disaster area.

The Witch Fire destroyed 1,125 homes. Another 77 homes were damaged, 499 outbuildings were destroyed, and 26 outbuildings were damaged by the conflagration that blew over Interstate 15 to burn into Mr. and Mrs. Peters’ neighborhood, according to Cal Fire, the state fire agency.

Two people died because of the fire, 39 firefighters were injured while fighting it, and 21 civilians were also injured, Cal Fire reported. The Witch fire burned 197,990 acres – more than double the acreage burned by the second biggest blaze, the Harris Fire in southern San Diego County.

Cinders bounced off the asphalt shingle roof of his home without causing damage to the roof, only burning a piece of outdoor carpeting on the patio, Peters said. Although Peters considers the asphalt shingle roof on his home as “quite fire-resistant,” he

will replace it, as soon as he receives his insurance settlement, with new asphalt shingles with a higher fire-resistive rating. He also will install rolls of new R-30 rated insulation in the attic.

Peters said it cost less than \$6,000 to landscape his property with fire-resistant vegetation. That is far less than what it would cost for Herb and Jill Peters to rebuild their home. Based on construction costs in 2007 (which can be \$250 per square foot in some San Diego County areas, and up to \$307 per square foot), Peters estimates it would cost \$250,000 to \$275,000 to replace his home.

Weighing what he has done and will do, Peters envisions there may be more wildfires and that he should be ready.

Activity/Project Location

Geographical Area: **Single County in a State**

FEMA Region: **Region IX**

State: **California**

County: **San Diego County**

City/Community: **San Diego**

Key Activity/Project Information

Sector: **Private**

Hazard Type: **Fire; Wildfire**

Activity/Project Type: **Building Codes; Vegetation Management**

Activity/Project Start Date: **10/2003**

Activity/Project End Date: **Ongoing**

Funding Source: **Homeowner**

Activity/Project Economic Analysis

Cost: **\$6,000.00 (Estimated)**

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **No**

Value Tested By Disaster? **Yes**

Tested By Federal Disaster #: **1731 , 10/24/2007**

Repetitive Loss Property? **No**

Reference URLs

Reference URL 1: <http://www.fema.gov/plan/prevent/howto/how2001.shtm>

Reference URL 2: <http://www.usfa.dhs.gov/>

Main Points

- Ice plant helped save Herb Peters' home during the 2007 Witch fire in California.
- The ice plant and more than 50 feet of wax-leaf ligustrum hedge that lines the north side of his elevated corner lot.
- Many homes in the area where Herb and Jill Peters' home is located burned to the ground.
- Removing flammable native vegetation and replacing it with low-growing, fire-resistive plants is one of the easiest and most effective ways to create a defensible space, according to the Fire Safe Council.
- Peters also has an asphalt shingle roof which contributed to saving his home from the fire. He plans on replacing the roof with an even more fire resistant model.
- Peters said it cost less than \$6,000 to landscape his property with fire-resistant vegetation. That is far less than what it would cost for Herb and Jill Peters to rebuild their home.



Special type of ice plant cover three areas around home



A view of the burned area



Trees (beyond Herb Peters) were blackened by the blaze, and later trimmed, but apparently posed no threat to his home.



Peters' home shown just across the street from one of the neighboring homes that were destroyed by the fast-moving Witch Fire