

SANTA BARBARA NEWS-PRESS



RUBBER HITS THE ROAD : Old tires shore up area damaged in Jesusita Fire

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When construction is complete, 350 tons of shredded tire will be holding up a section of Palomino Road damaged during the Jesusita Fire, in what the state is hoping will be a permanent fix for the long-troubled roadway.

Firefighters reportedly made a stand on Palomino as they battled the devastating Jesusita Fire in May of last year, parking heavy equipment along the roadway. The added stress combined with years of landslide troubles badly damaged the roadway, restricting traffic to just one direction ever since.

A traditional fix in such a situation has been to pile even more concrete onto the roadway, but this adds still more weight to the underlying soil, which holds water once it has become saturated. However, the state Department of Resources Recycling and Recovery saw the site as the perfect opportunity to show how lightweight "tire derived aggregate" could benefit roadway construction.

CalRecycle kicked in \$150,000 to the project, leaving the county with just the paving bill, which will be about \$50,000.

"The soil on this hillside weighed about 150 pounds a cubic foot, and then when it got wet it might even get heavier," CalRecycle materials recycling engineer Stacey Patenaude told the News-Press Thursday, as a bulldozer ran back and forth over the tire shreds that were being compacted into place nearby.

She added: "The tires weigh about 50 pounds per cubic foot in place and they don't get saturated. It will always be 50 pounds per cubic foot, and it's strong. It doesn't lose its strength when it gets wet."

Crews began digging the heavy, wet soil out of the roadway last week, and workers on Thursday continued laying down a 3-foot layer of the aggregate along the 400-foot-long project site. The aggregate is wrapped in what Ms. Patenaude described as a heavy, felt-like material that keeps dirt out of the tires, preserving their light weight.

CalRecycle refers to the wrapped tire shreds as a "burrito," and soil is added on top. A road base described as being crushed rock will go on top of that, and vehicles will be able to drive on the base once this portion of the project is completed by late next week.

The county will have to wait at least a week before paving over the base.

In addition to the aggregate's lightweight properties and strength, Ms. Patenaude said another plus is that it's environmentally beneficial, as the tires would be shredded up regardless and thrown into a

landfill.

An alternative to using shredded tires for the project would be to dig out a large section of soil, which would consume a lot of diesel fuel and be costly.

"When you look at a lightweight material, (tire derived aggregate) is probably the most cost-effective on the market," Ms. Patenaude said. "And then it's 100 percent recycled. It's the only 100-percent recycled, lightweight aggregate on the market."

First District Supervisor Salud Carbajal took a look at the ongoing construction Thursday, and he recalled that the road was undermined during storms in 1995 and 1997, leading to significant work to maintain the roadway. The hillside itself is also having troubles because it's sliding, according to Mr. Carbajal.

However, looking at the roadway filled with shredded tires, the supervisor described it as an innovative fix he hopes will work out for the nearby residents.

"Who would have known?"

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