
GEOPHONE WILL BE CALLED UPON TO FIND OLD MINING TUNNELS

By R. SCOTT RAPPOLD THE GAZETTE

Before Colorado Springs had suburban sprawl, it had coal mines, dug in a crescent from Palmer Park to Rockrimmon and then abandoned.

A state agency plans to use a new technology to survey the underground labyrinth beneath one area and fill any chamber in danger of collapse.

In June, officials from the Colorado Division of Mining, Reclamation and Safety plan to survey 175 properties using geophysics, by sending signals underground and recording them with a geophone, to detect gaps that signify mining tunnels, said agency engineer Al Amundson.

The technique has been used for oil and mineral exploration in Colorado, but it will be the first time the agency has used it to study underground mines.

Over the years, the mining has led to subsidence, collapses that can damage houses and property.

The agency conducted projects in 2004 and 2005 to fill some old mines, but they had to rely on drilling to tell where the chambers were.

"What we are trying to do is find out if there are any more voids, to find out if there could be a big subsidence in the future," Amundson said. "By getting this kind of snapshot of what's in the ground, we're trying to see if the possibility is one in 100 or one in a million."

The residents, who will be notified by mail in the coming weeks, are on Country Club Circle, Fairway Drive and Holiday Lane. Country Club Circle had the last collapse, when five houses were threatened in 2005.

The area to be tested was mined from 1900 to 1943, and houses were built above because it was thought all the underground collapses had occurred.

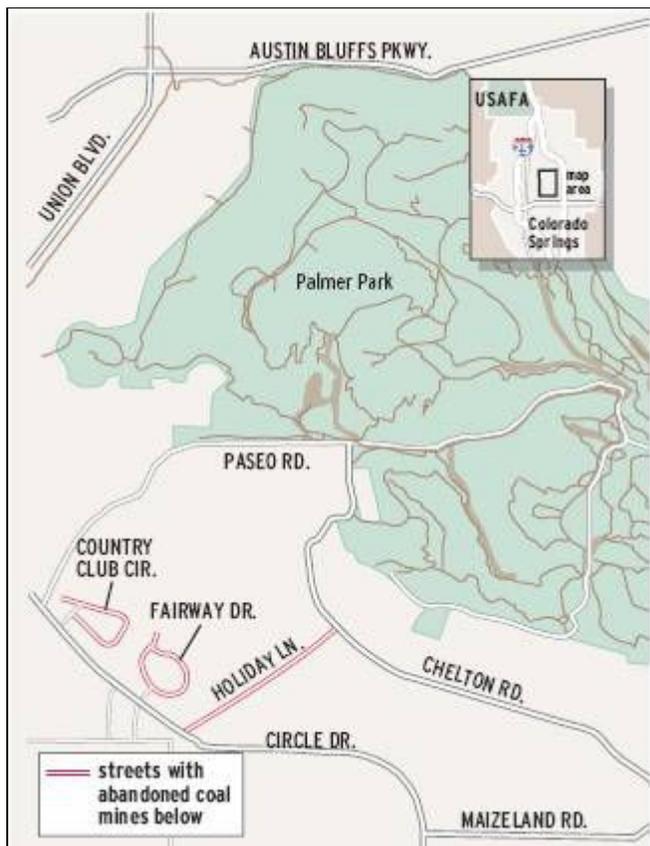
If the geophone detects large underground chambers, officials will drill holes to confirm the chambers exist and fill them with grout — a cement and sand mix, Amundson said.

Colorado Springs was chosen as a place to test the new technology because the area has had more collapsing and earth-moving than other areas.

"I want to be able to finally check off that area of Colorado Springs as not being a subsidence risk," Amundson said.

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