

## **Mine rescue has vital lessons**

*Teachers, officials seize on Chile news*

**Andrew Edwards and Wendy Leung, Los Angeles Newspaper Group, 10-14-10**

News footage showing Wednesday's rescue of Chilean miners provided an opportunity for some teachers in the region to develop lesson plans that incorporated the event into lessons on economics and the importance of smart decision making.

The rescue also gave land-management officials in California a chance to talk about the dangers presented by the thousands of abandoned mine shafts scattered around the state. A large number of those abandoned mines are in the Mojave Desert.

Educators at schools in Rancho Cucamonga and Bloomington found different ways to blend the Chilean saga into their lessons.

Rancho Cucamonga High School economics teacher Sherry Berwick went to work Wednesday with a detailed lesson plan in mind but abandoned her original ideas to introduce CNN's news coverage to her students.

"Not every student goes home to a home that may be discussing current events. Not every kid has exposure to world events," Berwick said. "I had a lesson plan that I really needed to get to. That's OK. I'll get to it tomorrow."

Students in Berwick's five economics classes watched live video of the rescues, and some stayed inside the classroom during lunch to continue watching the men emerge from their underground prison. Pupils discussed such questions as who is picking up the tab for the rescue efforts, whether the miners will eventually seek legal action and if any of them will continue mining.

Bloomington Middle School teachers Marisa Lopez-Sevilla and Paul Lucero seized the Chilean story as a means to teach students the difference between proactive and reactive decision making.

"People need to think before they act," Lopez-Sevilla said.

The successful rescue provided a means to explain that the trapped miners and their rescuers both had to plan ahead to get out of the mine.

To students, the difference between thinking ahead and just reacting to events was understood as the difference between such choices as getting one's homework done in advance or thoughtlessly lashing out at a sibling or friend.

The lesson, which coincided with teachings from "Seven Habits for Highly Effective Teens," is set to continue today with additional discussions on the values of good planning, Lopez-Sevilla said.

Mining was and is an important part of San Bernardino County's economy, but the local risks of getting stuck inside a mine shaft are greater for amateur adventurers than anyone who earns a paycheck.

In April 2006, for example, a man fell to his death while exploring an abandoned mine near Calico Ghost Town. The same abandoned mine shaft claimed another victim a week later when another man - a Riverside County sheriff's detective - was paralyzed.

The kind of surface mining that can be seen in the Santa Ana River wash between Redlands and Highland is an example of the mining that is typical to modern California, Bureau of Land Management geologist Steve Kupferman said.

But there are thousands of abandoned mine shafts scattered across the state that federal and state officials are seeking to find and in some cases, block them from human explorers.

Sometimes the mines are sealed off with foam, Kupferman said. Other times, metal cages are used that allow bats to fly in and out to protect the winged mammals' habitat while keeping people out.

The California Department of Conservation has its own Abandoned Mines Land Unit that works with BLM and other landowners. The unit estimates that of some 46,000 abandoned California mines, there are about 12,200 in San Bernardino County, although the unit has only inventoried 1,570 of those.

The unit has teams this week in Mojave National Preserve and Death Valley National Park on the hunt for mines, unit manager Stephen L. Jenkins said.

"You can see how big this problem is. Even with us sending all these people out, it's still an enormous task," he said.

The American Recovery and Reinvestment Act, aka "the stimulus," allocated \$1.5 million to reduce mine dangers on BLM land and another \$2 million to address the problem on National Parks land. Combined, the money is intended to reduce dangers at nearly 600 old mine sites in San Bernardino, Riverside, Inyo, Kern and Imperial counties.

Desert adventurers who find an abandoned mine shaft are advised to stay out and notify the Abandoned Mines Land Unit by calling 877-653-6463.