## Drought's end doesn't eradicate tree-killing insect

## By Kathryn Reed

One incredibly wet winter will not rid the West of the beetle infestation that has devastated forests, especially in California where more than 102 million trees have died since 2010.

"Bark beetles are still there. They will hatch and fly in early summer. Then we'll expect to see additional mortality, but at what rate is anyone's guess," Chris Anthony, CalFire division chief, told *Lake Tahoe News*.

What to do with all that fuel remains an unknown. Leaving it in the forests creates a fire hazard. Removing it is a financial conundrum. Even the wood that can be harvested doesn't necessarily then have a home. Trees that come off federal or state land cannot be sold oversees unless they have been milled to a certain dimension prior to exporting. That in itself can be cost prohibitive.

According to the regional U.S. Forest Service office, lots of people in California have looked into the export issue and potential legislation, but the agency could not provide any new information. This is a federal issue. No one from Rep. Tom McClintock's office responded to an inquiry. He is the Republican congressman representing Lake Tahoe and a large swath of the Sierra in the House.

The U.S. is the world leader in the production of timber for industrial products, accounting for approximately 25 percent of world production, according to the U.S. Forest Service. China is a big consumer of wood from the U.S.

While the law was set up to protect the domestic market, it is

now a hindrance. There are no limits from private property when it comes to being able to export wood.

This dead wood doesn't have an unlimited shelf life in terms of having monetary value. Once it starts rotting, no one wants it. If it has been stained blue by the beetles, it's value is also diminished, sometimes to the point of being worthless.

"When you look at the massive amount of wood there is still not enough markets to utilize all of the dead material," Anthony said.

Biomass, while effective, is also not financially feasible. It's cheaper to generate energy other ways or to just use natural gas. That is one reason the plant between Tahoe City and Truckee never got built

"They've done some experimenting to cut down trees and burn them on site. It's not efficient and it's dangerous," South Lake Tahoe Fire Chief Jeff Meston told *Lake Tahoe News*.

The state has had a tree mortality task force since October 2015, which Anthony was on from November 2015-July 2016. It was set up as the beetles became prolific during the drought. It is comprised of state and federal agencies, local governments, utilities, and various stakeholders. The Lake Tahoe Basin has a task force regarding beetles, too.

Three types of bark beetles are indigenous to the Sierra Nevada: mountain pine beetles, Jeffrey pine beetles, and fir engraver beetles. The mountain pine beetle is the most aggressive.

A healthy tree is able to use pitch to stop beetles from burrowing under the bark. Drought weakens trees and they become defenseless. Eventually the beetle wins and the tree dies.

"It's hard to predict what level of mortality we will continue

to see," Anthony said. "Overall, I expect to see the mortality rates decline over what they were the last five years, but there is this tremendous population of bark beetle. It takes trees time to get the vigor and strength to fend off bark beets. One good winter is not enough."