

# Efficient woodstoves improve Tahoe air quality

By Kathryn Reed

Black smoke billowing from chimneys is exactly what air quality regulators don't want to see.

Woodstoves have become so efficient that little or no smoke should be seen. The problem is there are thousands of open face fireplaces and inefficient woodstoves in the basin. This contributes to poor air quality, and the soot reaching the lake degrades the clarity of Lake Tahoe.

"Older, outdated woodstoves generate significant emissions that harm air quality and the environment. Newer, more efficient woodstoves certified by EPA burn one-third less wood and can result in particulate matter emission reductions that are equivalent to removing five diesel buses from the roads," Tom Lotshaw with the Tahoe Regional Planning Agency told *Lake Tahoe News*.

The California Air Resources Board's initial draft plan that was released Dec. 2 calls for reducing greenhouse gas emissions by 40 percent below 1990 levels by 2030. This mandate is the most ambitious of any state.

"This plan lays out a road map for California – and the rest of the world – to achieve climate goals that were inconceivable only a decade ago," Gov. Jerry Brown, who established this 2030 target by Executive Order in April 2015 and signed SB32 in September to codify it, said in a statement. "There are steep hills ahead, but we'll scale them by continuing to take a series of bold actions, including extending California's Cap-and-Trade Program."

El Dorado County is doing what it can to work on air quality

issues. The problem is that much of the pollution is not generated in the county, but instead blows in from the west.



Efficient woodstoves improve air quality. Photo/LTN

“Parts of our county are in non-attainment for ozone standards and particulate matter standards,” Adam Baughman, air quality engineer with the El Dorado County Air Quality Management District, told *Lake Tahoe News*. “We have deadlines in which to attain standard. We have to show reasonable forward progress. We will meet the ozone standard by about 2022.”

By providing rebates to people to take out their inefficient wood burning device and replacing it with a better model or even gas, the county is doing what it can to achieve the state air quality standards. Not all areas of the county can go to gas; only the basin and El Dorado Hills have natural gas.

“We try to do things like this with the incentives that help get us there without laying the hammer down,” Baughman said.

The program started in 2007, but has been revamped through the years. Funding has come from the feds and state. The rebate throughout the county is a few hundred dollars, in the basin it is more because TRPA has provided \$88,750 to the cause.

In the basin in El Dorado County 122 people have received rebates. Of these, 58 went to gas only units and 41 went back to wood. The rest did complete removal, with a couple going to pellet or electric.

Baughman said these conversions mean 6 tons of particulate matter that is 2.5 to 10 micrometers in diameter are no longer being emitted. Greenhouse gas emissions have been reduced by 300 tons. Countywide, those numbers are 20 tons of particulate matter and 777 tons of greenhouse gas emissions.

According to the website AirNow, "Particles less than or equal to 10 micrometers in diameter are so small that they can get into the lungs, potentially causing serious health problems. Ten micrometers are less than the width of a single human hair."

For more information about the rebate program in El Dorado County, go **online**.