

# Dead trees don't mean catastrophe for California

Char Miller, Sacramento Bee, 6-27-16

Miller is a professor of environmental analysis at Pomona College.

Nature knows what it's doing. You'd never know that, though, from the panicked reaction to news that 66 million trees in California have died since 2005, including 26 million said to have perished just in the last few months.

This data, which the U.S Forest Service and California Department of Forestry and Fire Protection just released, comes with fearsome maps that paint areas of highest loss in fire-retardant orange. The choice of color sends a worrisome signal. So does Secretary of Agriculture Tom Vilsack's hyped reaction: "Tree dies-offs of this magnitude are unprecedented," he asserted in a news release, and they "increase the risk of catastrophic wildfires that puts property and lives at risk."

Vilsack's prescription is clear: To stop the anticipated (and fiery) End of Times, federal and state public land managers must intervene quickly. More timber must be slicked off before it goes up in smoke. More prescribed burning must occur before mega-fires ignite.

These aggressive interventions, however, also miss the point. Tree mortality does not necessarily equal an escalation in fire risk, catastrophic or otherwise. That's evident in the record of the last 10 years of fires in the Sierra.

There have been large conflagrations such as the 2013 Rim Fire, but its size and intensity is consistent with the region's fire history. Cal Fire spokesman Daniel Berlant conceded as much when he acknowledged that the current die-off "doesn't necessarily mean more fires."

To presume otherwise carries another debatable assumption that dead trees contain no ecological value. Nothing could be farther from the truth. Just ask a woodpecker and the tree-boring bugs on which it happily feasts, or the pollinators, rodents and owls for whom such habitats are home ground.

Large fires are also an essential force in maintaining western U.S. forests' vitality. So argues ecologist Chad Hanson, whose field research undercuts what he dubs the "myth of catastrophic wildfire." He identifies two significant outcomes: high-intensity fires are critical to the healthy regeneration of Sierra forests; and major fires are ecological catalysts that support some of the highest levels of wildlife biodiversity of any forest type.

That's good news to be sure.

But what if Vilsack's worse-case scenario comes to pass? What if a massive wildfire explodes? What if it is so all-consuming that the original forest cover is incinerated, allowing other tree species or chaparral to supplant the pine, fir or sequoia we expect to encounter when visiting Yosemite National Park, or hiking in the Eldorado National Forest?

Such a radical transition on such a massive scale would in fact violate what we think a forest should look like. But nature does not particularly care about our cultural constructions – and that's a good thing. Our expectations need to match the new realities shaping these forests.

Those 66 million dead trees point the way to a more rational, less fear-driven approach to ecosystem management in our climate-changed era.