

‘Unprecedented’: More than 100 million trees dead in California

Michael Bodley, SF Gate, 11-19-16

California’s lingering drought has pushed the number of dead trees across the state past 100 million, an ecological event experts are calling dangerous and unprecedented in underlining the heightened risk of wildfires fueled by bone-dry forests.

In its latest aerial survey released Friday, the U.S. Forest Service said 62 million trees have died this year in California, bringing the six-year total to more than 102 million.

Scientists blame five-plus years of drought on the increasing tree deaths — tree “fatalities” increased by 100 percent in 2016 — but the rate of their demise has been much faster than expected, increasing the risk of ecologically damaging erosion and wildfires even bigger than the largest blazes the state’s seen this year.

“It’s not beyond the pale to suggest that this is a pretty unprecedented event in at least recent history,” said Adrian Das, an ecologist with the U.S. Geological Survey.

There are about 21 million acres of trees spread across California’s 18 national forests, and the latest figures show 7.7 million of them — more than one-third — are dead.

The U.S. Forest Service has earmarked \$43 million in California to help restore eroded sections of roads and trails throughout the state’s wooded areas, but officials say too much money is being spent on fighting wildfires that are becoming more and more common, as opposed to restoring the scarred forests.

It’s been a record-setting year for those wildfires, which have burned through 56 percent of the U.S. Forest Service’s budget, leading U.S. Secretary of Agriculture Tom Vilsack to petition Congress to classify wildfires as disasters, which would free up additional federal funding to fight them.

The majority of the 102 million dead trees are in the southern and central Sierra Nevada region, the survey found, but the Forest Service also warned of tree deaths on the rise in northern regions, especially in Siskiyou, Modoc, Plumas and Lassen counties.

Rising temperatures throughout the state aren’t helping matters, and neither are the persevering infestations of bark beetles fond of gnawing through pine trees stressed by drought, leaving in their wake thousands of acres of brown, dead wood.

From his base in Sequoia National Park, Das said pines are dying faster than firs, but all the acres of trees he studies have been drying out and falling over faster than they should.

Tree mortality, and what drives it, “is still a poorly understood process,” Das said, adding that one of few immediate upsides to the stands of dying trees is that scientists can better study what specifically is causing their demise.

The old-growth forests he studies — resplendent with massive sequoia trees and sugar pines that often live for centuries — are changing more rapidly than he has ever seen, a matter of months in what usually unfolds over years or decades.

“You want to understand what’s going on in these systems, and you should be concerned when big changes are happening and you don’t really have a handle on what the mechanisms are and how they’ll play out,” Das said.