

# ARBORISTS: DROUGHT PUTS TREES IN TROUBLE SOME...



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By [Robert Krier \(/staff/robert-krier/\)](#) | midnight Dec. 23, 2015 | Updated , 8:05 a.m.

San Diego County's success at conserving water during the state's historic drought could have a downside: Trees, a cherished natural resource in urban communities, are threatened.

That's the view of some arborists who said thousands of local trees are distressed or dying due to lack of watering. And even if El Niño delivers the hoped-for abundance of rain this winter, residents' and businesses' pronounced shift toward permanently cutting back on watering could imperil the urban forest in the long term.

"We need to get the message out that people need to water their trees," said Mike Palat, chairman of the San Diego Regional Urban Forests Council. "The benefits of those trees far outweigh the nominal expense of watering them."

Among other things, trees cleanse the air, sequester carbon dioxide, create shade, reduce soil erosion, raise property values and provide habitat for wildlife.

Arborists believe many people have taken the conservation message too far, turning off their sprinklers completely and letting the grass die or replacing it with fake turf or decorative rock. They said while these alternatives might seem appropriate for semi-arid Southern California, trees are often the inadvertent side casualties.

"This is an environmental policy issue, not a gardening issue," said Robin Rivet, an urban forester, arborist and member of the San Diego Community Forest Advisory Board.

## Increasing mortality

Sergio Arias, who has the bulky title of transportation and stormwater/street division horticulturalist for San Diego, said his crews have recently seen increasing mortality among the city's roughly 400,000 streetside trees.

"I think a lot of the trees that were just holding on, waiting for El Niño, are starting to quit on me," Arias said.

Palat said the winter holds tantalizing potential of short-term moisture relief, but that El Niño doesn't guarantee ample precipitation. And if the succession of storms does arrive, they may not do so until February or March.

Once the winter and springtime rains have passed, urban trees could face a sharp decline if well-intentioned residents maintain a "save-water-at-all-cost" mindset that they've developed during the drought. Rising water bills could give residents further incentive to minimize irrigation.

Local arborists have seen increases in pest infestations and diseases because trees are stressed by lack of water, Palat said.

"In wet years, trees have better defense mechanisms," he said. "In a drought, it's like cutting off your foot and then trying to fight a battle."

Unfortunately, he said, removing dead trees is becoming a bigger part of local arborists' business.

"Lots of concerned people are reaching out to arborists," Palat said. "However, there is a common trend of the call coming when the tree has gone past the point of recovery."

There's no official count of the number of dead or dying trees in the county, said Palat, who does contract work for most cities in the region through West Coast Arborists. Many local cities, including San Diego, don't have an up-to-date inventory of their tree populations, and there is no census of the millions of trees on private properties in the county.

Delia Juncal, landscape coordination inspector for Oceanside, said about 2,000 of the approximately 40,000 trees on that's city property - 5 percent - are stressed or dying. A recent study in Los Angeles showed that 4 percent of that city's 350,000 parkland trees - or 14,000 - had died in the past year.

There are many variables to consider, but if similar percentages of trees in the rest of San Diego County are affected, the region is in danger of losing at least tens of thousands of urban trees.

## Taking out turf

Kevin Grangetto, whose family owns Grangetto Farm and Garden Supply stores in Escondido, Encinitas, Fallbrook and Valley Center, said he believes water managers' decision to offer turf-removal rebates to a dramatically greater number of Southern Californians this year "jumped the gun a little."

"The turf serves as a biofiltration," Grangetto said. "Now we have salts concentrating in there. That weakens the trees, and the diseases and pests are not far behind."

In many cases, lawns were replaced with artificial turf or rocks, which don't provide the same benefits to the soil. Grangetto said a better option is to replace water-guzzling grasses with native grasses or other low-water vegetation.

He also worries that when the rains do come, the ground may have trouble absorbing it. Gravel, which has become a popular lawn alternative, pulls in more heat than concrete, Rivet said. That added heat can bake the soil beneath it, making it impervious to water.

"Five years down the road, if you want to take out that gravel, it's difficult to undo the damage that gravel has done," Rivet said. Artificial turf also adds heat around a home, she said, and it has "no environmental justification. It's an outdoor rug."

Carlos Michelon, a principal water resources specialist for the San Diego County Water Authority, said the agency is concerned about reports of stressed and dying trees. He said the agency's turf replacement program, which was suspended in January when grant funding ran out, likely had a positive effect on the region's tree cover - if property owners followed the recommendations that included retrofitted irrigation systems.

"In conjunction with the rebate program, the water authority offered numerous classes on water-smart landscaping," Michelon said.

"The classes emphasize the important role played by trees for shade and climate, and the need to maintain tree cover in our communities."

#### Improper watering

San Diego County had unprecedented rains in May and July, but those storms did little for most trees because the moisture didn't soak down deep enough, said Ted Stafford, an arborist who has been tending to trees in San Diego County for 40 years.

A fairly wet fall has helped, but January through March, the typical rainy season when the days are cooler and shorter and the sun angle is lower, is the "magical time" for local trees, Stafford said. That's when the moisture can get down deep into the root zone. During the past four years, San Diego has had far below its usual winter rainfall, and the trees have suffered because of it.

Stafford said maybe 5 percent or 10 percent of people water their trees properly. He sees the drought as a teachable moment.

"I really believe strongly that the drought is an opportunity for trees," he said. "You've got to get the water down 18 to 24 inches at the drip line (outer edge of the tree's branches). If you want to make a tree happy, it's all about managing the root zone. A tree wants a deep watering, but it only needs it once a month to be happy. I'm trying to get people hip to that."

Because trees need water infrequently, they end up using far less water than many other landscape plants, said Palat at the San Diego Regional Urban Forests Council. He referenced a graphic from a Los Angeles group called Tree People that showed a person could water 251 trees with what it takes to maintain one lawn.

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Drought

Drought County could potentially lose tens of thousands of urban trees

How to help trees through the drought

Be observant. Look for subtle changes such as leaf drop or browning needles.

Water deeply but infrequently, using a soaker hose or drip system. The water should reach a depth of 18 inches or more. Water at the tree's perimeter, not at its base.

Create a soil berm around the perimeter of the tree.

Put a 2- to 4-inch layer of organic mulch away from the trunk to the outer edge of the canopy.

Signs of tree stress

Browning or dead twigs and branches.

Yellowing foliage and early leaf drop.

Abnormal cracks in the trunk.

Bark sloughing off the trunk excessively.

Lines of ants going up the tree. Ants often harvest tree pests' byproducts.

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