

COUNTY OF TULARE

COUNTY ADMINISTRATIVE OFFICE



MICHAEL C. SPATA
County Administrative Officer

Tulare County faces many challenges when responding to tree mortality – some are different from other counties’ challenges.

Our County has a very high percentage of federal lands, mostly split between two national parks and very large U.S. Forest Service lands. Our County does not have nearly early as much private land as other mountainous counties, and not a lot of state land. When you go to the coastal areas you’ve got state land and many more state parks. We don’t have a lot of that. What we have is a lot of federal lands. We really need the state to try to partner with the County to motivate the Forest Service in particular and other federal landowners to do their jobs with active forest management. Going back to those indirect impacts on the County and the State, when we have large fires on national forest lands, that wildfire often spreads to private property inholdings, state lands and county areas.

The Tule River Tribe Indian Reservation - the second largest reservation in the state - is surrounded by Sequoia National Forest. Both the Tule Tribe and Tulare County are very concerned about wildfires occurring on federal lands that could jump over onto tribal property and destroy their forest lands. These federal lands are where most of the tree mortality is. The majority of the eight million dead and dying tree mortality trees in Tulare County are in the Sequoia National Forest. Some of that drifts down into Kern County, but there are more than six million dead trees in the Sequoia National Forest alone. So when we think about where the heart of the problem is as far as the numbers of dead trees, it is on the federal lands, its not on the private lands, its not on the state lands, its on federal lands.

The U S Forest Service has to step up and play a much bigger role with tree mortality in particular and forest management in general here.

An overview of the impacts of the tree mortality crisis on Tulare County

Dead or dying trees located on private, state or federal lands are in danger of falling into our roads or whatever other type of public or private structures are located in close proximity to hazard trees. We have to deal with those trees without having them fall on our equipment and/or our roads, thereby blocking public access and public safety. Roads in mountainous areas serve as escape routes during wildfire.

ECONOMIC IMPACTS:

Tourism and recreational spending: Visitor spending is a huge generator of economic value in California as a whole, and in Tulare County in particular. Dead trees are not pretty to look at; Tree Mortality is affecting visitor spending – hurting businesses and costing jobs.

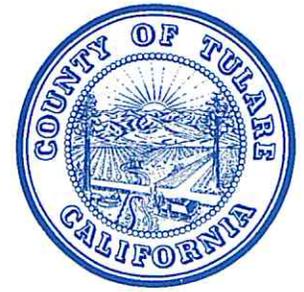
Magnitude of statewide visitor spending:

- Total direct travel spending in California was \$125.9 billion in 2016, a 2.8 percent increase from 2015
- Travel spending in California directly supported 1,090,000 jobs, with earnings of \$44.3 billion
- Travel spending in 2016 generated \$4.9 billion in local taxes and \$5.4 billion in state taxes
 - (Source: Dean Runyan Associates; economic analysis prepared for Visit California)

Magnitude of Tulare County visitor or tourism spending; related tree mortality impacts

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- Total visitor spending within Tulare County in 2015: \$377 million
 - (Source: *Dean Runyan Associates*)
- Sequoia & Kings Canyon National Parks visitors in 2016: 1.8 million (Source: NPS)
- Percentage of Giant Sequoias located within the Sierra Nevada mountains located in Tulare County - 75%
- Tulare County is the size of Connecticut; half its land mass are public lands.
- Bed taxes for visitor stays in unincorporated Tulare County in 2016 exceeded \$1.6 million

Other economic impacts of Tree Mortality:

Wildfire in these areas adversely affects property taxes as land values decline. As more and more insurance companies refuse to provide fire insurance in mountain areas affected by tree mortality, the cancellation of homeowners' fire insurance has already begun to affect mountain property owners.

If you don't have fire insurance, your mortgage lender can call a home loan due. If you cannot buy fire insurance, it becomes very hard if not impossible to sell or buy certain properties. This in turn affects property assessments and tax revenues.

Air Quality impacts:

The capacity of sierra forests to capture carbon dioxide from the atmosphere and sequester it is rapidly declining. The rapid growth in size and severity of wildfires is already offsetting GHG reductions occurring in other sectors. This has been scientifically quantified in a comprehensive report released on April 5, 2017 by the Governor's Tree Mortality Task Force

Wildfire creates tremendous adverse health impacts:

The Cedar Fire (2016) consumed about 20,000 acres in the southern part of the County this last year, and claimed several homes.

The Rough Fire (2015) occurred mainly in Fresno County also caused major damages in the northern part of Tulare County.

The Rim Fire (2013) is estimated by the United State Forest Service to have emitted 12.06 million metric tons CO₂e - more than 3 times the year-on-year GHG reductions achieved in all other sectors within California that year.

These fires severely impacted air quality throughout the Central Valley region, and endangered private property located on inholdings within public lands. Due to the extreme heat and unusually fast expansion of the Cedar Fire, noted by many experts to have been exasperated by tree mortality-related fuel loads, many fire-scarred areas suffered soil sterilization to unusual depths which may cause lasting damage to these affected areas.

Water Quality and water supply Impacts:

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Water quality and water supply sustainability has been affected statewide by tree mortality. More than half the state of California – from the Bay Area to Southern California - depends upon water from the Sierra Nevada.

The fact these trees are dead and the landscape is burnt - this can also affect future water supplies and revegetation because there is no shading on the ground. The lack of shade canopy in turn means that snowmelt is accelerated resulting in less water being available later in the year. High ash levels can affect the PH in local runoff and cause further water quality concerns.

Soil erosion and other environmental impacts:

Depending on the intensity of fires, we may have problems of water quality related to extreme runoff from areas that have been denuded and especially where extreme heat has sterilized soils. A lot of silt and ash material washes down into streams, clogging waterways and then building up excess silt in reservoirs downstream. This reduces existing water storage capacity – a resource that is already in short supply statewide.

Soil sterilization through very intense wildfire associated with high tree mortality fuel loads creates its own set of problems in terms of sloughing - several inches of the surface just slough off, the water goes underneath it and the soil on top floats on down the hill. It also has an impact on regeneration of forests and that's another indirect issue.

Reforestation concerns

What happens to our forests after they have been consumed by catastrophic wildfire? What happens as far as reforestation? When soil is sterilized by extreme heat or when vast amounts of timber loss occur, the landscape changes. Brush fields take over - which then create their own impacts on things such as water. Brush fields often consume more water than forests, and once brush fields are established they tend to prevent new stands of large trees from reemerging. If we have a bunch of brush fields they pick up the water that would normally come to the Valley floor and this water supply becomes locked up in the brush fields. And brush is not as efficient as trees are at GHG sequestration.

Then there is the matter of California's legacy. For generations tourists both worldwide and domestic have made pilgrimages to our Sierra Nevada forests – drawn by large, epic stands of tall trees that can be found nowhere else in such abundance. Our forests have become part of our state identity. Will future generations feel compelled to travel here to view large expanses of Manzanita and scrub brush?

Recommendations for state actions to help Tulare County.

Advocate for Proactive Forest Management: Encourage more active forest management by the feds. Avoiding tree mortality damages and its spread can be accomplished through active forest management to reduce fuel loads exacerbated by large numbers of dead and dying trees. All of this leads down the road toward the need for active forest management.

The challenge is in explaining the crisis of tree mortality impacts to the greater public that does not spend time or has not been directly exposed to the forest decimation in affected areas.

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Continued proactive Education and Tree Mortality Awareness: One challenge lies in educating people statewide and nationally about the environmental and economic impacts, as well as the health and water quality and quantity impacts of tree mortality.

Locally, one of the primary issues for Tulare County government is protecting our road right of ways against large numbers of falling trees in order to safeguard evacuation corridors for people escaping wildfire. Some trees tend to fall across roads in the best of times through natural attrition, but until the recent bloom of tree mortality our county was not faced with the very real threat posed by tens of thousands of dead and dying trees located immediately adjacent to public roads.

This issue of trees threatening public infrastructure is of statewide and national concern because of the large amount of utility assets located in mountainous areas that is used to maintain and supply the power grid and telephonic grid – infrastructure that connects most regions of this state to each other.

Encourage capacity building: Tulare County doesn't have the built in capacity to effectively deal with large scale tree mortality, so the costs go up because you've got to create capacity - and requires either staffing up by diverting existing local resources or abandoning Tulare County's core mission to provide other public services countywide.

Improve access to state grant funding: One way to initiate more tree removal projects is to ensure that available funding – in one specific case continued funding for tree mortality removal projects through CalFire State Responsibility Area grants – continues to be well funded going forward and is made more accessible.

For example, prioritize funding to the 10 most affected counties subject to the statewide disaster declaration and perhaps block grant appropriate allocations to the CalFire Unit Commanders in those counties. CalFire officials have generally been very helpful in guiding local grant applicants toward developing successful projects, but why not go a step further and set up a base allocation by area of need and give a short window for local applicants in that area to jointly develop fundable projects working directly with CalFire experts to achieve maximum return? If a county cannot then develop a fundable project within a short time, then unobligated funds could be made available to enhance projects in other eligible counties.

It makes sense for fire experts to directly guide project development for SRA grants, and in cases where local counties are the intended primary applicants, partnering with local stakeholders such as fire safe councils, etc., why should government administrators have to guess what projects fire experts most want to see implemented? Why not require workshops where eligible applicants are required to participate to project development to guide locals toward the highest scoring projects that offer the most public value?

Why tree mortality is a statewide issue

As outlined above, even though 10 California counties are primarily affected, the impacts of tree mortality are statewide and severe.

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The state should be concerned for several reasons: The state should be concerned about air quality. Air quality affects the entire Central Valley air basin; particulate matter released by wildfire into the air doesn't stay up in the National Forest – it spreads back throughout the Valley as it churns up against the Sierra Nevada.

The state should be concerned about water, and water production, and water quality. As you move up slope into the foothills and then up into the mountains, that's where most of the precipitation takes place and that's where most of the groundwater is generated, and it finds its way down to the Valley floor.

Again, the State should have great concerns about our federal lands being properly managed - One, to produce water, and secondarily, to improve overall water quality by dealing with tree mortality issues.

Visitor spending is a huge generator of economic value in California as a whole, and in Tulare County in particular. Dead trees are not pretty to look at; Tree Mortality is affecting visitor spending.

People will still spend money but you've got businesses that rely upon the recreating on the National Forest and in Sequoia & Kings Canyon National Parks.

An economic analysis of visitor spending prepared for the state tourism office (VisitCalifornia), shows more than \$70 million was generated in camping revenue in private, state and federal camping areas within Tulare County in 2015. You've also got church camps and Boy Scout camps, and different kinds of camps. They exist in many ways because of the forest. If the forest is removed or decimated, then those camps are going to find it difficult to survive. Businesses are going to have a difficult time persisting because of the lack of forest areas.

The Forest Service has a responsibility to protect, preserve, and perpetuate Giant Sequoias. That was the purpose of the Giant Sequoia Monument. Tulare County estimates approximately 75% of the naturally recurring Giant Sequoias in the world live in Tulare County. And that is unique from every place else. That is something that needs to be protected.

We need to make sure the USFS is doing their job. We need to point to things that occurred in the northern part of the county (Rough Fire) where one can make the argument the Forest Service officials haven't been doing their job because they didn't do anything in advance of the problem; as a consequence they lost a lot of Giant Sequoia trees because there was no way of stopping the fire from getting into those groves. That problem persists. If your job is to protect the Giant Sequoia Groves, what are you doing about getting rid of dead trees? What about trees that are going to fall on your Giant Sequoias seedlings, or they're going to create a fire hazard right up to a Giant Sequoia grove and then create the ladder fuel to destroy your grove. What are you doing about that? We don't think they're doing anything.

Again, the State needs to take a broader scope and say "Even though these are federal lands, they're part of California. They're part of our landscape. They're part of our heritage. They're part of our economy. They're part of our environment whether its water or air or wildlife."

The State needs to understand that they have a vested interest in the Forest Service doing a good job managing the forest and they have not been doing a good job for some time. And the question is, how are they going to? What is the plan going forward?

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We've been watching a plan of inaction on the part of the Forest Service. What is the action plan that would give us some assurance that we are going to have a forest in the future? And you can also use global warming. If we're going to have warmer and dryer climates, and less snow, tree mortality and forest health issues become even more critical.

- *Submitted by Eric Coyne, Deputy Tulare County Administrator and Manager of the Tulare County Tree Mortality Taskforce*