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California

Volume of dead trees could make removal difficult

By **TIM HEARDEN**
Capital Press

ANDERSON, Calif. — The sheer number of dead and dying trees in Central California forests could make their harvest and removal difficult, an official of one of the nation's largest timber companies says.

Drought and pests are among the causes for a record 66 million dead trees in Southern Sierra Nevada forests, the U.S. Forest Service concluded after conducting aerial surveys.

Sierra Pacific Industries could postpone some of its harvests of green timber from federal and private lands to accommodate removing and using some of the dead trees, said Mark Pawlicki, the company's director of corporate affairs and sustainability.

"However, the amount of dead and dying timber on federal lands greatly exceeds our ability to process the timber into lumber," Pawlicki said in an email.

"That's primarily due to the fact that the greatest mortality is in the area east of Fresno, and there is only one sawmill in that region," he said. "We take volume from the area mostly north of Yosemite (National Park) into our Sonora and Chinese Camp sawmills."

Forestry officials announced on June 22 that they had identified an additional 26 million dead trees since last October in a six-county region on the San Joaquin Valley's eastern edge in addition to the 40 million that had died since 2010.

Four consecutive years of severe drought, a dramatic rise in bark beetle infestations and higher temperatures were the leading factors in the tree die-offs, according to the Forest Service.

Pawlicki said Sierra Pacific is also seeing some mortality on its private forestlands as the beetle infestation moves northward in the Sierra. The infestation is already north of Highway 50, which links Sacramento to Lake Tahoe, but it is spotty and mostly in the middle to lower elevations, he said.

"We have loggers who are solely dedicated to salvage logging to make sure we harvest the dead trees as soon as possible," he said.

The Forest Service has set aside \$32 million for "safety-focused" forest restoration along roads, trails and recreation sites, officials said. To date, the Forest Service has felled over 77,000 hazard trees, treated over 13,000 acres along 228 miles of roads around communities and recreation areas, and created 1,100 acres of fuel breaks, according to an agency news release. Work on 15,000 additional acres is ongoing.

The die-offs set an ominous tone for fire season, U.S. Agriculture Secretary Tom Vilsack said in prepared remarks.

"While the fire risk is currently the most extreme in California because of the tree mortality, forests across the country are at risk of wildfire and urgently need restoration, requiring a massive effort to remove this tinder and improve their health," Vilsack said.

The secretary called anew for Congress to reform how the Forest Service pays for firefighting — a goal that's been elusive for several years despite bipartisan support.

For the fourth straight year, the House of Representatives has passed a bill known as the Resilient Forests Act, which would allow the Federal Emergency Management Agency to give disaster funding to the Forest Service and Bureau of Land Management when they have exhausted their firefighting budgets.

New citrus-funded lab to tackle huanglongbing

By **TIM HEARDEN**
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The citrus industry and University of California-Riverside are teaming to build a top-notch laboratory that will enable researchers to tackle the deadly tree disease huanglongbing.

The grower-funded California Citrus Research Foundation has raised \$8 million to construct a biosecurity-level 3 building near the university, which has more than 100 years' experience in citrus research.

The facility will enable Georgios Vidalakis, director of UC-Riverside's Citrus Clonal Protection Program, and others to do work with plant pathogens that previously couldn't be done in Southern California.

The nearest high-level pathogen lab is at UC-Davis, and materials often must be sent as far away as Texas or Florida to be tested, Vidalakis said.

"We are involved in research of the disease but in collaboration with researchers who are 3,000 or 4,000 miles away," Vidalakis said.



Courtesy of UC-Riverside

An artist's rendition shows a planned new laboratory near the University of California-Riverside that will specialize in research into defeating the deadly citrus tree disease huanglongbing. The project will be built with the help of \$8 million in donations from the citrus industry.

"It makes it very difficult .. It doesn't make sense for a land-grant institution like UC-Riverside, especially with our expertise in citrus, not to have a facility like that."

The level-3 lab will enable scientists to house the live bacterium and develop resistance and tolerance in plants, he said. Researchers can study interactions between the pathogen, vector and plant — "the three

corners of the triangle that cause the disease," he said.

Scientists are making "a big effort" at genome editing of citrus trees in an attempt to make them not as attractive to Asian citrus psyllids — the carrier of huanglongbing — or "deal with the disease a little better," Vidalakis said.

"It's not a question of why we need it," he said of the lab. "The question is why we don't

have it already. It cannot be more important. We need it immediately."

Huanglongbing — which has devastated the citrus industries in Florida, Georgia, Louisiana, South Carolina and Texas — has been found in 21 citrus trees in California.

Huanglongbing isn't harmful to humans or animals but causes discoloration of fruit and leaves and eventually kills

the tree. Nearly one-third of California's land mass is now under quarantine for the psyllid, requiring shipped fruit to be free of leaves and debris. The state's Citrus Pest and Disease Prevention Program has been talking to growers about adopting a regional quarantine structure under which fruit moving between regions would have to undergo a wet wash.

The new lab will accept projects from researchers around the world, said Alyssa Houtby, public affairs director for the more than 2,000-member California Citrus Mutual.

"The priority is finding solutions to huanglongbing," Houtby said. "It's very significant. Until now, there was not a facility in California that was solely dedicated to HLB research."

Construction is set to begin in October, and researchers are already preparing to seek permits for planned experiments.

Vidalakis said he expects the new laboratory facility to be functioning by next summer.

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"But that doesn't mean that this historical approach is accurate or what's best when it comes to maximizing yield and profit potential, which is particularly important in today's challenging economic environment. In fact, more wheat agronomists and university experts are recommending that, in order to achieve more accurate seeding results, growers should base wheat seeding rates on seeds per acre and not only pounds per acre, due to wide variances in the number of seeds that can be in a pound."

To enable growers to better calibrate their air seeders or drills for improved yield potential and efficiency, WestBred® wheat recently introduced the ConnectIN™ Wheat Insight System, which gives wheat seed suppliers the ability to provide growers Optimal Seeding Rate recommendations for the variety they

are purchasing. Optimal Seeding Rate recommendations are based on key factors like seed count per pound, geography, planting date, production practices and the targeted seeds per acre identified for the farm.

"Many wheat growers want to know how many seeds to plant per acre, how many seeds are in a pound of the variety they've purchased and how it all relates to their planting environment," said Fietsam. "The ConnectIN System, by providing Optimal Seeding Rate recommendations, gives growers valuable information in a quick, convenient format that they can easily use for planting."

Fietsam noted that since variations in seed size and density can have a dramatic impact on how many seeds are in a pound, planting based on only pounds per acre can prevent growers from optimizing results.

Although some wheat varieties are capable of compensating somewhat and producing similar grain yields across a fairly wide range of seeding rates, using seeding rates that are too low can lead to reliance on excessive tillering, delayed maturity, increased weed competition and failure to make use of the full yield potential.

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For more information about the advantages of Optimal Seeding Rates and the ConnectIN Wheat Insight System from WestBred wheat, see your WestBred representative, call (800) 705-2309 or visit ConnectINSystem.com.

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