

'When, not if it happens': Factors favor possible Austin mega-wildfire event

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All it will take for Central Texas to become the next area engulfed by catastrophic wildfires like those seen in Australia is a dry spring and summer, an errant flame and sustained winds.



Travis County <u>fire</u> officials say the likelihood of such a mega-fire event is just a matter of time.

A recent report released by CoreLogic, an online property data service, ranked Austin fifth among metropolitan areas in the nation most at risk for wildfires. The only others in the country at a greater risk are in California, according to the study.

As the world watches and mourns over the wildfire devastation plaguing Australia, residents need only look out their window to see a similar landscape that Australians admired before the fires began.

Daniel Shaw, an Australian who has worked for the National Weather Service as a storm spotter, said his home country also built on the backs of preservation areas like Austin's wildlands to the west.

And, similar to residential growth near grassy areas east of Interstate 35, population growth in Australia has also pushed neighborhoods closer and closer to wild grasslands.

Shaw said if Austin's wildlands catch fire and embers blow into those grasslands, firefighters would struggle to extinguish the flames before another would start up nearby.

"If you've got fuel to burn and winds to drive it, then you're going to have a fast-running fire whether it's grasslands or bush," Shaw said.

Bob Nicks, president of the Austin firefighters union, said Austin's lack of sustained winds are now the only thing protecting Austin from a similar fate.

However, he said Austin's luck will eventually run dry.



"A 20 mph wind is devastating if it's sustained and blowing in one direction," Nicks said. "It's just a matter of when it happens, not if it happens."

Nicks said Central Texas frequently experiences two of the needed components for wildfires, dry conditions and triple-digit temperatures, from June through September during the summer wildfire season. However, sustained winds, the third factor that fuels the fires and pushes them forward in a singular direction, are less frequent.

If a fire was sparked in West Austin during hot, dry conditions when sustained winds were present, there would be no stopping it from destroying everything in its path, according to Nicks.

"When a fire reaches a certain size you cannot stop the progression forward," he said. "There is not enough water or personnel to put a dent on the head of that fire. You cannot stop it."

In 2011, as Central Texas vegetation withered during a historic drought, the most destructive wildfire in state history burned a total of 34,000 acres. The Bastrop Complex Fire destroyed 1,660 homes, killed two people and injured 12 others.

In Travis County, the 2011 wildfire season sparked 76 blazes and burned 9,835 acres, according to data collected by the Texas A&M Forest Service.

The 2011 season was the most devastating in the century for Texas, with a state-wide total of 30,896 fires and 9.94 million acres burned, the data said.

Even before the Bastrop fire, the forest service in 2008 tallied 175 fires that burned an average of 658 acres in Travis County alone. The next



year, 50 fires burned an average of 95 acres in the county.

However, after 2011 the total number of fires and acres burned decreased significantly. The highest number of fires from 2011 through 2017 was in 2013 with 74 fires and 109 acres burned.

Randy Denzer, a vice president for the Austin Firefighters Association in Texas and the International Association of Firefighters Wildland Firefighting Task Force committee member, said the 2018 and 2019 fire seasons were also mild because of significant rainfall.

The combined total of acres burned for 2018 and 2019 was 107.

However, Denzer said, the increased moisture and lack of fires have allowed for vegetation to overgrow. Because of this, Central Texas is now at an extreme risk for wildfires, he said.

"The grasses are what carries the fires, and we have an overabundance now," Denzer said. "If we have a dry spring, we will be right back to where we were in 2011 by August of this year."

Although Central Texas received above-average rainfall in the first part of 2019, severe or extreme drought covered nearly the entire five-county Austin metro area in the fall, according to data from the U.S. Drought Monitor. Severe drought or extreme drought, which can include major crop or pasture losses and widespread water shortages or restrictions, are just below the U.S. Drought Monitor's worst condition, exceptional drought.

Extreme drought affected about 9.4% of Texas by October, including most of Hays and Travis counties.

Austin recorded 57 days last year when temperatures reached or



surpassed 100 degrees, according to data collected at the city's main weather station at Camp Mabry. The highest temperature recorded was 105 degrees.

Denzer said climate change, which is causing drought conditions to persist throughout the state and temperatures to rise into the 100s more frequently, is putting Central Austin at a greater risk for fires.

"Climate change does have something to do with it," Denzer said.
"Higher temperatures provide drier fuels, which creates better conditions for fires. Just a couple of degrees makes a difference.

"There is a bigger role, though, that is made by humans," he continued. "Everyone wants to live in an area with a pretty view. But now we can't have a fire burn in that area, so we have to stop it."

More than 53,000 residential properties in Austin are in the high to extreme risk zone for wildfires, according to the CoreLogic data. Cost of reconstruction in those areas would be approximately \$16.35 billion, the data says.

Justice Jones, a wildfire mitigation officer for the Austin Fire Department, said where the fire occurs in Austin greatly affects the risks and intensity of the fire.

Jones said grass fires are seen daily during peak fire season in areas east of MoPac Boulevard (Loop 1) and Interstate 35. Those fires are often less intense because of less vegetation in the east, fire experts agree.

However, the west side of Travis County where residential areas intermingle with wooded areas are at risk of devastating, uncontrollable wildfires during hot, dry months because of dense vegetation.



"Right now Austin as a whole is at risk of wildfires," Denzer said. "West Austin though is at risk of 50-foot wildfires that are unstoppable. Any fires along unmanaged wildland areas, no matter how small they are, will be devastating."

Austin's push toward conservation has tied 30% of its land into preservation of natural areas. As Austin began to experience rapid population growth, however, construction of residential homes expanded closer to these preservation areas, which put that land at a greater risk of wildfires.

Carrie Stewart, Austin fire's wildfire division chief, said once a wildfire does start, its embers can blow over a mile and can easily ignite other wooded areas or homes.

"Those wildland fires can happen anywhere we have those large, open green spaces," Stewart said. "That's going to be all over the city of Austin where we have those risk areas."

The Texas A&M Forest Service created a risk assessment portal to show what parts of Travis County are at a greater risk with current weather conditions.

As of Tuesday, nearly every green space in or around Austin was listed as a high to very high risk of wildfires.

In California, an estimated 350,000 home and business owners were unable to find insurance agencies that would cover their properties following the states most deadly wildfire season in 2018, according to media reports.

Jerry Hagins, spokesperson for the Texas Department of Insurance, said insurance agencies base their coverage costs on long-term historical data,



so the more wildfires that happen in a particular area the greater the risk of insurance prices skyrocketing or the insured being dropped altogether.

Hagins said because Austin has yet to experience consistent mega fire events over the past 10 to 20 years, he does not predict Travis County to suffer from the same insurance woes like California in the near future.

"I think California is pretty different from Texas in the frequency of wildfires and the severity of them," Hagins said. "But, we still do have that risk. We don't see rate changes after a single event because they are factored in for the long-term average."

However, Denzer disagreed.

"I think in the near future people will have issues finding affordable insurance if we don't do something about this," he said. "The CoreLogic data is for insurance investors. Insurance companies are going to start taking a look at this data and they are going to start looking into these risks."

However, there is something Austin officials can do to help prevent wildfires and decrease the risk of rising insurance costs, according to officials.

This year, Austin city council may vote on a \$1.5 million plan that would require all new homes and businesses constructed near wildland areas to follow a wildland urban interface code, or WUI code.

The new code would mandate that all new structures in these areas be built with ignition-resistant materials to protect them from burning embers, which often sets buildings ablaze in a wildfire when they fall on wooden roofs, blow in through vents or lodge under boards.



Examples of ignition-resistant materials include double-paned glass windows and noncombustible screens over attic vents. Remodeled properties and new construction would have to comply.

Nicks said while any code is better than no code at all, the city council is only considering a portion of the full WUI code.

"The one they have up for council soon will have the least impact on risks today," Nicks said. "A properly written code would give the authority to mitigate fuels on certain property, which is a very big part of risk reduction. We're disappointed it doesn't include old construction."

Nicks said later this month he and his team will welcome <u>wildfire</u> experts from California to re-visit the area and assess the risks and offer advice on how local officials can address a growing concern for wildfires in West Austin.

Denzer said he hopes the experts' opinions will push for the city council to consider adopting the full WUI code, which would hold landowners responsible for decreasing risks of wildfires on their own properties.

"I'm happy it's moving forward, but it does not do enough," Denzer said.
"Adopting the full code is an investment, but it would reduce the risks of wildfires and of property insurance rates going up."

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