

Late Backup

CITY OF AUSTIN PUBLIC SAFETY COMMISSION

June 4, 2012

Resolution Regarding Wildland Fire Risk in Austin

The Austin/Travis County/Central Texas area is in a period of significant and long-term drought, which in the last 12-18 months has caused several wildland fires to spread very quickly over hundreds of acres, resulting in the loss of many lives and many homes, and severe and unrecoverable damage to the ecology. Because of recent spring rains, the vegetation that would supply the fuel for fires in our area has increased, and with intense, multi-week temperatures expected again this summer this vegetation will again quickly become very dry, serving as an immense source of "fuel" that will increase the risk of "fire storms" with greater destructive power than tornados and hurricanes and that could take lives and destroy thousands of homes in Austin. Because the Austin Fire Department (AFD), like all fire services, has finite resources, and as seen in the Bastrop fires once many homes over wide areas are inflamed, there will be no firefighting resources available to prevent such fires from igniting other structures, resulting in firestorms that would carry the fires deep inside the City, consuming thousands of structures, including those far from areas of burning vegetation. Studies of the Bastrop fires showed that high winds carry even small burning embers for many miles, igniting vegetation and structures far from the embers' original source. (And in California's fires, structures have been ignited not by flames but by the intense heat generated by these fires. In Austin, this puts at risk structures situated above canyons of vegetation.)

To better understand the risk in our area:

- 1) "Fly" over west Austin and Travis County with Google Earth to see the massive amounts of vegetation of which most elected and appointed officials, as well as most residents of this huge area, are not aware.
- 2) Visit the Texas Forest Service's Wildland Risk Assessment Portal for Austin:
<http://www.texaswildfirerisk.com/> Click on "Public Viewer". Click on "Get Started"
Click on "Zoom to" Click on Travis County. You can Scroll/Zoom down to your street.
- 3) Watch this firestorm video from the Texas Forest Service:
<http://www.youtube.com/watch?v=14Jc088R6PU> It does give more than convincing support to what the National Weather Service has identified as Southern Plains Outbreak Pattern that cause firestorms that will spread fast and far. Their key common denominators: "fuel" and weather. These firestorms move the length of two football fields per minute.

- 4) An Austin firefighter wrote this e-mail on the morning of Saturday, September 3, 2003. The next day the Bastrop fire started. "After reviewing this morning's fire weather, I want to make sure you know what's coming. Today and tomorrow should be Fire Wx days with lower moisture return than normal tonight. Expect fires to start earlier in the day Sunday (Rather than the normal 1500-1800 timeframe). Today's winds are going to be 10-15, but Tomorrow and Monday are going to have "winds between 20 and 25 mph. Winds could gust as high as 30 mph. The real problem Sunday and Monday nights is that the winds are NOT going to lay down at dark as they usually would, and will instead continue until Tuesday. This is because we are on the backside of tropical storm Lee, and the winds will be racing to the systems low pressure system. We will see a slight reduction in wind speeds tonight, but once they increase tomorrow, they should be with us until Tuesday. Some gusts could be high enough for power lines sparking and starting fires. The winds have been our missing ingredient from the "This could happen tomorrow" scenario we have averted since the drought started. Starting this afternoon they will be here. I foresee a bad fire weekend ahead."
- 5) <http://www.nytimes.com/2011/08/14/opinion/sunday/as-texas-dries-out-life-falters-and-fades.html> The August 13, 2011 New York Times wrote. "In Texas the worst drought, known as the "Drought of Record", parched the state from the late 1940s to the late 1950s. In fact, Texas has long been stalked by megadroughts, events that can last 30, even 40 years. The story is told within the trunks of the bald cypress that line the creek and riverbeds of central Texas. Using the science of dendrochronology, researchers from Texas and Arkansas sampled nearly 300 trunk-core samples, creating a record of tree rings stretching back before Columbus landed in the Americas. One tree, still living, was but a sapling in 1426. The record shows that in the 1700s and early 1800s, before American settlement and even extensive Spanish and Mexican settlement, several dry stretches were longer than the Drought of Record. The driest 10 years were 1716 through 1725, and the worst 20 years were 1697 through 1716. There have been numerous 30- and 40-year droughts. The worst gripped Texas and Mexico for nearly a half-century, from 1450 to 1489. But the future, sadly, is likely to be worse than the past. "Texas is going to get hotter and drier," said Malcolm Cleaveland, a professor at the University of Arkansas who led the researchers. Indeed, rainfall modeling shows that rising temperatures and more arid conditions over the last few decades are likely to increase in the 21st century. According to a paper published in Science in 2007, "Droughts will become the new climatology of the American Southwest within a time frame of years to decades." Rain will become more rare and it will evaporate more quickly, making the megadroughts of old look like periodic dry spells. And it will be in part thanks to increased carbon emissions, a fact that Texas will have a hard time confronting."
- 6) Sunday's New York Times wrote of the Whitewater-Baldy Complex fire in southwestern New Mexico: "Since early May...it has burned more than 350 square miles. More than

1,200 firefighters have been deployed to fight the blaze, the largest in New Mexico's history."

Based on the testimony to this commission by several respected experts on this subject, including officials of the U. S. Fish and Wildlife Service (charged with the management of the Balcones Canyonlands National Wildlife Refuge) and the Texas Forest Service, this commission makes the following recommendations to the Austin City Council:

- 1) The most important recommendation of this commission: Increasing AFD's firefighting resources, because ultimately it's all about available manpower. The Loop 360 corridor has only two fire stations, and AFD must have a third as soon as possible, with both an engine company and a ladder company, and ideally located south of the Colorado River. This will require the new station to be included in the November 2012 bond election. Massive areas of vegetation on either side of the highway require rapid response by firefighters in order to suppress any fire before it becomes uncontrollable, and to begin to provide lines of defense against wildland fires that are being blown toward Austin. (It is already seen that the two existing stations provide throughout the rest of the year significantly insufficient fire protection for the several thousand structures in this very large geographic area of western Austin and that are in these stations' first alarm territories, increasing their average response times for fire and medical emergencies.) Because the construction of a new fire station could not be completed until 12-18 months after its authorization by voters, the additional firefighters and their apparatus could be housed in temporary buildings. In addition, all fire apparatus throughout the City must be staffed with four firefighters. Currently AFD has three ladder companies with only three firefighters each., and AFD's three rescue units should be increased from two firefighters to four firefighters each, to allow them to serve an additional role as manpower squads.
- 2) All City of Austin departments, such as the Austin Water Utility and the Austin Parks and Recreation Department, when using "prescribed burns" for vegetative fuel mitigation, must have these efforts under the direct risk assessment and operational control of AFD. (Recently in the Denver area several deaths and a large area of damage occurred as a result of such protocols not being in place.)
- 3) AFD must be given sufficient funding to allow: a) The purchase of protective clothing and equipment for its personnel; b) The training of its personnel in the methodology of wildland firefighting; c) The ability to bring in off duty personnel when the National Weather Service declares a "Red Flag Warning" so that additional firefighters are immediately available to attack emerging fires.
- 4) AFD must establish a wildland fire mitigation division charged with planning and implementing programs for wildland fire prevention and vegetative fuel mitigation; and wildland fire suppression with the necessary technology.

- 5) AFD must be given the authority to develop and implement a Community Wildfire Protection Plan (CWPP). The plan will clarify and refine the City's wildland fire risk and priorities, and will address in detail critical elements such as wildland fire response, risk assessment by area, hazard mitigation, community preparedness and structure protection. (Most structures can have increased fire "resistance", but cannot be made "fireproof".)
- 6) The International Wildland Interface Code (IWUIC) must be immediately adopted with modifications recommended by AFD. It contains provisions addressing fire spread, accessibility, defensible space, water supply, etc., for all buildings located in or near wildland areas.
- 7) In addition to its current relationship with the Travis County StarFlight helicopter program that can respond with water drops, AFD must have a similar relationship with the Texas National Guard's helicopter program so that it can be activated quickly for additional water drop ability.
- 8) The City must work with Travis County to consolidate the County's Emergency Service Districts with AFD for one unified, county-wide fire service.

Seven key resource areas will be guided by the CWPP and AFD's wildfire mitigation: 1) Public Education; 2) Communications with the public, officials, and other agencies to assure the success of any plans (which include evacuation planning in coordination with the Austin Police Department); 3) Fuel mitigation with prescribed controlled burns of vegetation, and the construction of "fire breaks"; 4) Training; 5) Regional response plans and coordination.