

**San Antonio Tree Preservation Ordinance (Sec. 35-523)**  
**- Proposed Improvements -**

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The Greater Edwards Aquifer Alliance (GEAA), representing 48 local member organizations, joins with the Citizens Tree Coalition and many other concerned residents and community groups, to strongly urge the San Antonio City Council to very significantly strengthen the revised tree preservation ordinance. Trees are essential components of our quality of life, due to their esthetic, cultural, historic, and ecosystem contributions. In terms of ecosystem services alone, tree canopies remove air pollutants, increase and cleanse recharge to aquifers, reduce flooding and erosion, lower daytime temperatures, and maintain wildlife diversity.

San Antonio's revised tree ordinance provides little in the way of actual tree protection. The tree ordinance remains much weaker than ordinances adopted by other local communities. When easement exemptions are considered, the destruction of up to 85 percent of our tree canopy will continue during development in our city and its ETJ. San Antonio should overhaul its tree ordinance, in the manner of the markedly more progressive ordinances adopted by other central Texas communities. Many local models exist, including Austin's ordinance as recently revised to enhance the protection of heritage trees with a diameter greater than 24 inches.

### **1. Climate change**

The reality of climate change makes the improvement of the revised tree ordinance extremely urgent, in order to maintain San Antonio's cultural and natural heritage, environmental services, and high quality of life. The best climate models (Seager, 2007) predict that the city will become a significantly hotter and drier desert environment in only a few decades. Research indicates that long-lived mature trees resist the impacts of climate change, but new plantings and natural reproduction are highly vulnerable. Furthermore, planted trees will never achieve the size of existing mature trees, partly because the tree species now prevalent in San Antonio will be unable to establish in the adverse future climate. So again, avoid cutting large trees, by specifying more effective enforcement and mitigation requirements in the ordinance itself, in order to preserve increasingly important environmental services that compensate for climate change.

The U.S. Global Change Research Program (2010) states that climate change will soon stress our regional water resources, due to increasingly pervasive drought, caused by declining precipitation, elevated evaporation, and increased water loss from vegetation. This research also finds that climate change will interact with pollution, depleted resources, urbanization, and similar socioeconomic and environmental impacts, so that the cumulative impact will be far

greater than any single crisis alone. An adaptive response is necessary to counter these unavoidable changes to our community. Increased protection of the ecosystem services, which large trees provide, will reduce the impact of climate change, by promoting energy and water conservation, aquifer recharge protection, facilitation of air-quality attainment, carbon sequestration, etc.

## **2. Destruction of existing trees should be strictly avoided**

As currently proposed, the ordinance allows up to 85% of irreplaceable heritage and other significant trees to be destroyed. Due to impending climate change and development pressure, heritage trees that are removed can never be effectively replaced. San Antonio should copy the strong heritage tree preservation standards of other local communities, including Austin.

The reasons for the wholesale destruction of existing trees, as allowed by the currently revised ordinance, include the following. These should be remedied as indicated:

- a. Payments for the removal of trees are far too readily used in the ordinance, and should instead be seldom used and only then if all reasonable alternatives are exhausted and tree destruction is truly unavoidable. The revised ordinance continues to allow developers to purchase their way out of the overwhelming majority of ordinance requirements, so that tree canopy goals will not become reality.
- b. The availability of both tree-survey and tree-canopy alternatives for meeting tree preservation requirements allows the developer or landowner to choose whichever alternative facilitates increased tree removal. Instead, tree preservation should be based on a single method.
- c. Requirements of the ordinance should apply to all city departments, in the same manner that they apply to the citizens of San Antonio. The ordinance should be applied equally, so that existing exemptions for city departments and related utility right-of-ways and other easements are removed. For example, the Austin heritage tree ordinance has no exemptions for city departments and other utilities.
- d. All loopholes should be deleted, if they allow the removal of a heritage tree in exchange for protecting smaller trees or equivalent canopy cover. Heritage and other large trees should not be destroyed in exchange for the maintenance of either existing or planted "twigs".
- e. In addition, the agricultural exemption, which has resulted in the large-scale clearing of tree cover for many years in developing areas, is a deliberate deception when used on land targeted for later development. The revised ordinance attempts to discourage the use of this loophole by requiring a specified amount of canopy cover on a completed project. However, other communities use a more direct "ghost tree" approach, which should be added to the revised tree ordinance, in order to proactively alert potential applicants to avoid premature cutting upfront.

Proposed "ghost tree" requirement: If a healthy protected tree is removed within 3 years before submittal of a development application, then such tree will be treated as if it were present at the time of construction or development application. In this manner, the drip line or root zone of the illegally removed tree continues to be protected. Any replacement trees typically must be in the same general location. Such replacement trees are considered significant trees at the time of the development application, and may be removed and relocated on the site only if the original significant tree would have been allowed to be removed under the tree ordinance. Practical enforcement measures include on-site surveys paired with aerial photographs, in order to determine if large trees or major areas had been removed. Again, the enforcement language typically provides for a "reach back" of 3 years.

### **3. A public process should be included**

The revised San Antonio tree ordinance proposes a strictly administrative process, with appeals only allowed by the applicant, when the variance for tree removal is denied by city staff. Due to the high community value of heritage trees, affected neighbors and neighborhood associations should be treated fairly and also have the right of appeal of variance approval.

Especially when heritage trees are involved, most other communities require that variance requests for tree removal go through a public process. Variance requests for the removal of heritage, historic, and other significant trees should be decided by the Planning Commission. In addition, as is the case in Austin, there should be a monthly public posting of all decisions made by the city arborist in regard to the removal of such highly significant trees. Maintaining a public record in this manner will allow the effectiveness of the ordinance to be assessed over time, which will facilitate adaptive improvements.

### **4. Canopy cover requirements should be increased in Edwards Aquifer contributing and recharge zones to protect the health and welfare of San Antonio's citizens**

The Southern Blackland Tallgrass Prairie (Elliott, 2009) encompasses approximately two thirds of Bexar County. This grassland type naturally has a lower overall canopy cover. On the other hand, the Edwards Plateau Woodland, which occupies a quarter of the county, mostly to the north and northwest, is characterized by much higher canopy cover. This woodland area also encompasses the all-important contributing and recharge zones for the Edwards Aquifer.

American Forests' recently revised Urban Ecosystem Analysis (2009) for the city recommends the maintenance of 55 percent canopy cover for this aquifer area. As noted in that report:

“American Forests’ recommendations of tree canopy goals for San Antonio are based on the area’s existing tree canopy as quantified in this study, as well as local climate, soils, and rainfall patterns, and the City’s mandate to protect its environmental quality and comply with federal regulations for air and water quality.”

This goal of environmental quality will not be achieved by the city's tree ordinance as currently revised. Accordingly, we recommend that a higher canopy-cover percentage of 55 percent should

be mandated on completed projects within the contributing and recharge zones of the Edwards Aquifer, in order to adequately protect the health and welfare of San Antonio's citizens.

As recognized in the state court of appeals' 2009 Potranco vs City of San Antonio case, the San Antonio tree ordinance traditionally has "intended to, and does, regulate tree preservation to promote the health of the municipality and the orderly and healthful development of the community." The Court also noted that the purpose of the ordinance has been "[t]o preserve trees as an important public resource enhancing the quality of life and the general welfare of the city and enhancing its unique character and physical, historical, and aesthetic environment." Not only are these entirely permissible and lawful purposes for a municipal tree ordinance, the Potranco case found that these characteristics make the ordinance a rule "governing plats and subdivisions of land" that may be enforced against property in San Antonio's ETJ.

Maintaining canopy cover over the Edwards Aquifer is a critical requirement for the health and welfare of San Antonio's citizens. Accordingly, non-uniform tree-canopy requirements should be allowable and appropriate under existing law. In addition, the protection of water quality afforded by a higher canopy requirement over the recharge and contributing zones would arguably exempt the ordinance from the Private Real Property Rights Preservation Act, including in the ETJ.\*

#### **5. "Overly mature and dying" trees should not be exempt from ordinance requirements**

Exempting "overly mature and dying" trees from the provisions of the ordinance creates a very large and arbitrary loophole, which promotes the removal of the very same large trees that should be strictly protected. Recently, the Austin city council specifically considered and excluded similar language from the Austin heritage tree ordinance for these reasons. Though heritage trees often contain dead wood, including within their trunks, this is a natural condition and does not in itself relate to tree health. Therefore, the exemption for "overly mature and dying" trees should be deleted. The ordinance would still allow the removal of hazardous or dead trees, though the term "hazardous" should be amended to indicate that only trees posing an "imminent" hazard are exempt from ordinance requirements, as was also done in the recent revisions to the Austin ordinance.

#### **6. Enforcement, mitigation, and compliance monitoring**

In particular, enforcement, mitigation, and compliance monitoring should be strengthened in the ordinance, in order to avoid the removal of heritage and other significant trees in the first place. A variance should be granted to remove a heritage tree only when saving the tree prevents all reasonable property uses, rather than interference with any particular development option. Significantly stronger enforcement needs to be written directly into the ordinance, including continued "ghost tree" protection (see comment 2.e) and project shutdown, when heritage trees are removed without a permit. This would result in fewer removals, and less need to attempt mitigation that will increasingly fail as climate change proceeds.

If removal is permitted, then mitigation should result in the preservation and/or replacement of at least the total square inches (basal area) of the removed heritage tree. Basal area (BA = 3.14 \*

(diameter/2)<sup>2</sup>) should be the basis for replacement, since basal area (i.e., square inches) is the standard measure of the relative importance and environmental function of trees. Mitigation based on replacement by a specified number or cumulative diameter of trees is inherently insufficient. Due to the very insignificant penalties in the revised ordinance for illegal destruction of the tree, particularly during large development projects, requirements of the tree ordinance may often be ignored. Penalties need to be strong enough to prevent illegal removal. Before construction commences on a site, the applicant should also provide a specified amount of fiscal security for each protected tree on any construction site.

Local tree ordinances most often specify a progressive series of enforcement steps in response to violations of protection requirements (Nichols 2007), to be implemented in the following order. A stop work order is the most common first step in enforcement for local tree ordinances across the country.

- a. First, a stop work is issued when a violation is suspected;
- b. The tree permit along with any other approved permits are suspended when an ordinance violation or other transgression is confirmed;
- c. The certificate of occupancy is often withheld until an approved mitigation plan has been implemented and all penalties imposed for the violation have been paid;
- d. And finally, ordinances typically codify penalties in the form of monetary fines or restoration. For each day a heritage tree is unlawfully removed without the existence of an approved mitigation plan for that tree, Class C misdemeanor fines could be based on the maximum allowed under the current City Code of Ordinances, and additional civil penalty provisions could be based on section 54.017(b) and 54.001(b) of the Texas Local Government Code.

Please contact GEAA, if we may provide additional information, or address your comments and suggestions.

### **References:**

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