

CITY OF KERRVILLE, TEXAS
ORDINANCE NO. 2025-01

AN ORDINANCE AMENDING CHAPTER 46 “ENVIRONMENT” OF THE CITY’S CODE OF ORDINANCES BY ADDING A NEW ARTICLE II “TREE PRESERVATION”, WHICH ADOPTS REGULATIONS FOR THE PRESERVATION OF TREES; PROVIDING FOR PENALTIES NOT TO EXCEED \$2000.00; ORDERING PUBLICATION; PROVIDING AN EFFECTIVE DATE; AND PROVIDING OTHER MATTERS RELATED TO THE SUBJECT

WHEREAS, the City of Kerrville (City) is located within the scenic Texas hill country with its abundance of wildlife, scenic views, and natural beauty; and

WHEREAS, City Council of the City (City Council) recognizes the value that trees add to the community as beautiful iconic backdrops to the scenery, shady respites from the Texas heat, and ecological benefits that improve air quality while providing food and shelter for wildlife; and

WHEREAS, City Council seeks to promote the public health, safety, and general welfare of the City and the safe, orderly, and healthful development of the City, by prioritizing the preservation of trees; and

WHEREAS, pursuant to the City’s Comprehensive Plan (*Kerrville 2050*), Kerrville citizens and community members “voiced” their collective opinion that areas trees, particularly those considered significant specimen or heritage trees, should be valued, celebrated, and protected; and

WHEREAS, in addition, *Kerrville 2050* specifically provides that trees dotting the landscape of Kerrville and the surrounding Hill Country are an important community asset; contribute to the beauty of the surrounding landscape, reduce pollution and runoff, and enhance property values; and that trees can be cut down and cleared quickly, but they cannot be easily replaced; and

WHEREAS, with these views in mind, *Kerrville 2050* stated that a tree preservation strategy and a planting plan for City-owned property and public spaces should be considered; and

WHEREAS, *Kerrville 2050* also provided that the City should consider tree preservation in order to encourage limited tree removal as a way to ensure any removal is done thoughtfully and responsibly, thereby protecting property values and the natural beauty of the community; and

WHEREAS, on October 22, 2022, City Council adopted Resolution No. 67-2022, which adopted a *Tree Preservation Policy* for the City; and

WHEREAS, City Council finds that removing all or most of the trees on any property is not beneficial to the hill country environment; and

WHEREAS, City Council finds that regulating the removal of trees helps preserve the hill country landscape and water resources; and

WHEREAS, City Council has determined that reasonable rules and regulations governing tree preservation are necessary to maintain water quality, protect the region's livability, preserve property values, and reinforce Kerrville's significance within the Hill Country; and

WHEREAS, pursuant to Texas Local Government Code Section 51.001, the City has general authority to adopt an ordinance or police regulation that is for the good government, peace, or order of the City and is necessary or proper for carrying out a power granted by law to the City; and

WHEREAS, City Council finds that it is necessary and proper for the good government, peace, or order of the City to adopt an ordinance regulating the removal of specified trees;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF KERRVILLE, KERR COUNTY, TEXAS:

SECTION ONE. The facts, recitations, and findings contained in the preamble of this Ordinance are found to be true and correct and are incorporated by reference herein and expressly made a part hereof, as if copied verbatim.

SECTION TWO. Chapter 46 "Environment" of the Code of Ordinances of the City of Kerrville, Texas, is amended by adding a new Article II "Tree Preservation", as provided for in **Exhibit A**, which is attached and hereby adopted.

SECTION THREE. The City Secretary is authorized and directed to submit this Ordinance to the publisher of the City's Code of Ordinances and the publisher is authorized to amend said Code to reflect the provisions adopted herein, to correct typographical errors, and to index, format, number, and letter paragraphs to the existing Code as appropriate.

SECTION FOUR. The provisions of this Ordinance repeal and replace all previous ordinances concerning the subject matter provided herein.

SECTION FIVE. It is officially found and determined that the meetings at which this Ordinance is passed were open to the public as required and that public notice of the time, place, and purpose of said meetings was given as required by the Open Meetings Act, Chapter 551 of the Texas Government Code.

SECTION SIX. If any section, subsection, sentence, clause, or phrase of this Ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this Ordinance. City Council declares that it would have passed this Ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION SEVEN. The penalty for violation of this Ordinance shall be in accordance with the general penalty provisions contained in Section 1-7 of the Code of Ordinances of the City of Kerrville, Texas and specifically a fine not exceeding TWO THOUSAND AND XX/100 DOLLARS (\$2000.00) per day for each violation hereof.

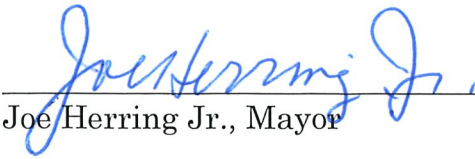
SECTION EIGHT. Pursuant to Texas Local Government Code §52.013(a) and Section 3.07 of the City's Charter, the City Secretary is authorized and directed to publish the descriptive caption of this Ordinance in a newspaper of general circulation and in the manner and for the length of time prescribed by the law as an alternative method of publication.

SECTION NINE. This Ordinance shall become effective immediately upon the expiration of ten days following publication, as provided for by Section 3.07 of the City Charter.

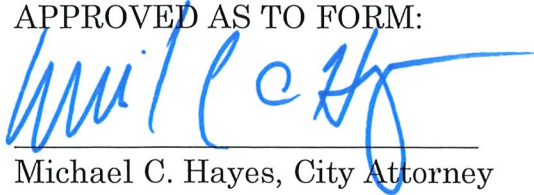
SECTION TEN. City Council directs the City Manager to report back to Council on or before the expiration of 180 days of the Effective Date of this Ordinance as to its implementation and whether any amendments need to be made.

PASSED AND APPROVED ON FIRST READING, this the 14 day of January, A.D., 2025.

PASSED AND APPROVED ON SECOND AND FINAL READING, this the 28 day of January, A.D., 2025.


Joe Herring Jr., Mayor

APPROVED AS TO FORM:


Michael C. Hayes, City Attorney

ATTEST:


Shelley McElhannon, City Secretary

EXHIBIT A

“CHAPTER 46 ENVIRONMENT

ARTICLE II. – TREE PRESERVATION

Sec. 104-1. - Purpose.

This article implements the following provisions of the Kerrville Comprehensive Plan (Kerrville 2050) and includes these goals as its purposes:

- (1) Preserve the neighborhood character of Kerrville;
- (2) Improve the quality of living for Kerrville citizens;
- (3) Preserve and enhance the rural atmosphere of Kerrville;
- (4) Responsibly protect the natural environmental resources of Kerrville;
- (5) Preserve the rugged beauty and natural environment that defines the Hill Country character of Kerrville and makes it a unique and desirable community; and
- (6) Prevent the clear-cutting of land as provided within this article.

Sec. 104-2. Definitions.

Caliper inch means the diameter, or width, of a tree measured at a height 4.5 feet above the natural grade.

City means the City of Kerrville, Texas.

City Council means the City Council of the City of Kerrville, Texas.

City Manager means the City's City Manager or designee.

Development means any development activity occurring on property subject to this article, to include construction activities and/or clearing, grading, excavating, or filling of land, or any other site work that may damage or destroy a protected tree.

Development Services means the City department designated by the City Manager for applying and enforcing these regulations.

Dripline means the area of ground surrounding the trunk of a tree considered essential to protecting the root structure of a tree. The dripline is calculated at 1 foot for every 1 caliper inch.

Heritage tree means any i) large tree species with a width greater than 24 caliper inches; or, ii) small tree species with a width greater than 8 caliper inches, such species as designated in **Table 1**.

Preservation rate means the caliper inches or area of trees to be preserved on a property as calculated for each tree preservation category, such rates found in **Table 2**. Examples are as follows:

Example: Preservation rate for “Large Tree Species” (see **Table 1**) where the caliper inches onsite = 10,000”; Preservation rate = 40% of total protected inches → $10,000 \text{ inches} \times 40\% = 4,000 \text{ caliper inches}$ of this tree type shall be preserved.

Example: Preservation rate for “Small Tree Species” (see **Table 1**) where the caliper inches onsite = 1,000”; Preservation rate = 40% of total protected inches → $1,000 \text{ inches} \times 40\% = 400 \text{ caliper inches}$ of this tree type shall be preserved.

Example: Preservation rate for “Heritage trees” (see **Table 1**) where the caliper inches onsite = 1,000”; Preservation rate = 60% of total protected inches → $1,000 \text{ inches} \times 60\% = 600 \text{ caliper inches}$ of this tree type shall be preserved.

Example: Preservation rate for protected trees located within the 100 year floodplain = 80% of total protected inches.

Protected tree means the following trees that by virtue of species and size are protected by this article and which are listed in **Table 1**, to be periodically reviewed by the City Manager:

(1) Standard tree;

(2) Heritage tree.

Standard tree means any i) large tree species with a width equal to or greater than 8.0 caliper inches but less than 24.0 caliper inches; or, ii) small tree species with a width equal to or greater than 6.0 caliper inches but less than 8.0 caliper inches, such species as designated in **Table 1**.

Tree survey means a plan or drawing to scale that identifies the exact size, location, condition (healthy, dead, or declining), and species of protected trees and the disposition of each protected tree during development. The plan shall indicate whether each protected tree is to be preserved or removed to comply with the preservation rate as described in Table 2. The plan shall indicate the location and types of treatments to be utilized to protect trees during development such as fencing, mulching, root pruning, and other measures.

TABLE 1* TREE PRESERVATION LIST

TABLE 2* PROTECTED TREES AND TREE PRESERVATION RATES

(NOTE: Tables are attached and included within Code of Ordinances.)*

Sec. 104-3. Applicability.

All new development within the City occurring on unplatted property greater than 1.0 acre, is subject to this article.

Sec. 104-4. Exceptions.

The following situations and actions are exempt from the provisions of this article:

- (1) Existing platted lots, whether developed or not, prior to the effective date of this article.
- (2) Regular maintenance of trees to include trimming and pruning, especially as it relates to oak wilt and other diseases or strategies to address pest control.
- (3) During the period of or following a significant weather event, such as a tornado, storm, flood, or other act of God, City Council may waive the requirements of this article for an affected area or areas and for a specified period.
- (4) Utility companies franchised or otherwise authorized to provide utility service may remove protected trees that endanger public health, safety, and welfare by interfering with utility service, provided that any removal is the minimum necessary for the utilities to function properly and no other alternative is available.
- (5) Mowing, clearing, and grubbing of brush located within or under the drip lines of protected trees is allowed, provided such mowing, clearing,

or grubbing is not conducted by use of bulldozers, loaders, or other construction or earth-moving equipment.

(6) Areas contained within public and private rights-of-way or utility or drainage easements, provided that any removal is necessary for the rights-of-way and easements to function properly.

(7) All governmental functions and activities of the City and other governmental entities.

Sec. 104-5. Permit for tree removal.

(a) *Applicability.* An owner of property subject to this article shall submit a tree removal permit application and any associated permit application fees established by the City to Development Services in conformance with the requirements of this section. A permit is required even where an owner or applicant believes no protected trees exist on the subject property. The permit and the tree survey shall thereafter apply to a property.

(b) *Permit information.* Development Services shall maintain applications for a tree removal permit, such application to require the submission of a tree survey.

(c) *Protection of property.* An applicant shall not attempt to circumvent the preservation rate through the filing of multiple applications; and toward this end, the City may require an owner to protect trees located on the property through restrictive covenants, conservation easements, or equivalent methods.

Sec. 104-6. Protected trees: removal, replacement, and mitigation.

(a) *Removal of protected trees.* It is unlawful for any person, directly or indirectly, to cut down, destroy, remove, or perform any other action which effectively destroys through damaging, any protected tree within the City without first obtaining a tree removal permit from Development Services.

(b) *Replacement Trees.* **Table 2** specifies the required preservation rate that property owners shall maintain for the protection of trees. Should an owner seek a lower preservation rate than what this article requires based upon proposed development and construction plans, the tree removal permit shall require the owner to plant a replacement tree(s) as follows:

- (1) Standard tree(s) replacement having a caliper inch equal to that of the tree(s) to be removed (1:1 replacement) at least equal to the preservation rate.
 - (2) Heritage tree having a caliper inch equal to three times that of the tree(s) to be removed (3:1 replacement) at least equal to the preservation rate.
 - (3) Such replacement trees must have a minimum caliper inch of two inches and a minimum height of at least 8.0 feet when planted. In addition, no more than 30 percent of replacement trees may be of the same species.
 - (4) All replacement trees shall be planted and cared for to maintain a healthy growing condition and for which the tree(s) shall live for at least one year.
 - (5) After planting a replacement tree, a property owner shall replace such tree with another tree if the replacement tree dies within one year from the date of its planting and a new one year warranty period shall start for that tree.
 - (6) The City Manager may assess the value of established smaller trees or clumps of trees which individually do not meet the caliper inches applicable to a protected tree, but that taken together, meet the intent of this article so that the addition of replacement trees may not be required.
 - (7) Only those trees indicated in **Table 1**, as periodically and consistently reviewed and approved by the City Manager, shall satisfy the tree replanting requirements contained herein.
- (c) *Mitigation fee in lieu of replacement.* A person may pay a mitigation fee to the City instead of providing replacement trees required by this article as follows:
- (1) This provision is limited to 50 percent of the required protected tree replacement.
 - (2) The per-caliper-inch cash value for replacement trees and planting is set out in the City's fee schedule and applied per caliper inch. City Council will consider the appropriate fee amount during its adoption of the City's Fee Schedule.

- (3) The City shall deposit payments for the tree mitigation fee into its tree replacement fund, which the City will restrict to pay for replacement trees within City parks and other public spaces or the acquisition of land, to include easements, for conservation.

Sec. 104-7 Tree Preservation Incentives.

A person may apply for incentives for tree preservation as follows:

- (1) *Parking Space Reduction.* Upon application and verification by Development Services, an individual shall be entitled to a reduction in the minimum parking requirements to help meet the tree preservation rate. For the purpose of providing an incentive, the City Manager may reduce minimum parking requirements by 1 parking space for every 4 caliper inches of trees that have been protected or mitigated on a site. However, the City Manager may not waive more than 15 percent of required spaces.
- (2) *Sidewalks.* Upon application, the City's Planning and Zoning Commission may determine that preservation of trees warrants the elimination, reduction in width, alternative routing, or modification to the sidewalk and curb requirements in accordance with the tree preservation rates.

Sec. 104-8. Tree protection measures.

The following tree protection measures are required for a property subject to this article for which development is planned:

- (1) the property owner shall establish and maintain a root protection zone and install four-foot high plastic (or equivalent) safety fencing outside the drip line of protected trees for the duration of development. It is unlawful to prune any tree to reduce the root protection zone.
- (2) the property owner shall prohibit the cleaning of equipment or materials and/or the disposal of any waste material, including paint, oil, solvents, asphalt, concrete, mortar, and similar products under the canopy or within the drip line of any protected tree.
- (3) It is unlawful to attach any attachments or wires of any kind, other than those of a protective nature, to any protected tree during development.

(4) Where major grade changes of 6 inches or greater results from placement of fill material, the property owner shall construct a retaining wall or tree well of rock, brick, landscape timbers, or other approved materials around a protected tree no closer than 6 feet from the trunk of the trees. The top of the retaining wall or tree well will be considered the new finished grade.

(5) Unless otherwise approved by the City Manager, no development shall occur within the drip line of any protected tree.

(6) Any trees removed shall be chipped or hauled off-site within 30 days of the time the trees were removed.

Sec. 104-9. Penalty upon failure to comply.

(a) Any person violating or failing to comply with any provision of this article shall be fined a minimum of \$250.00 and a maximum of \$2000.00. Each tree illegally removed or damaged in violation of this article shall constitute a separate offense.

(b) Failure of any person to follow the procedures of this article shall constitute grounds for the City withholding or revoking site plan approval, building permits, occupancy permits, or any other approvals necessary to continue development. Such sanctions may be instituted immediately at the direction of the City Manager. In the case of emergency to prevent the unauthorized removal of a protected tree(s), the City Attorney may petition a court of competent jurisdiction for injunctive relief seeking compliance with this subsection.

(c) In addition to any other remedies or penalties contained herein, the City may enforce the provisions of this article pursuant to the applicable provisions of Chapter 54 of the Texas Local Government Code, which chapter provides for the enforcement of municipal ordinances.

Sec. 104-10. Jurisdiction.

(a) To ensure compatibility with the City's comprehensive plan and this article, the City Manager has the authority to review and act on all tree removal permits for commercial and residential developments within the City. Plans shall be approved, approved with conditions, or denied. The City Manager shall provide comments to the property owner or designated representative as to the disposition of each tree removal permit application.

(b) Any applicant or party aggrieved by a decision of the City Manager may appeal such decision to the City's Planning and Zoning Commission. Such notice of appeal must be filed with the Development Services within ten working days of the decision in question. Such appeal shall stay the issuance of a building permit. Following a decision by the Planning and Zoning Commission, the applicant may appeal this decision to the City Council.

Sec. 104-11. Enforcement.

The City Manager is authorized to enforce this article and may serve notice to any person in violation thereof or institute legal proceedings, as may be required.

Sec. 104-12. Variances.

(a) Variances to the terms of this article may be granted by the City's Planning and Zoning Commission where a literal enforcement of the provisions of this article will result in unnecessary hardship. A variance request must be submitted to Development Services in writing setting out the basis for the request. No variance shall be granted unless:

(1) a variance will not be contrary to public interest;

(2) a variance will be in harmony with the spirit and purposes of this article;

(3) the plight of the owner of the property for which the variance is sought is due to unique circumstances existing on the property, and the unique circumstances were not created by the owner of the property and are not merely financial; and

(4) a variance will not substantially weaken the general purposes of this article.

(b) After review of the variance request, Planning and Zoning Commission may:

(1) approve the variance;

(2) deny the variance; or

(3) grant the variance with such conditions as may be necessary for the furtherance of the purposes of municipal tree preservation in keeping with the spirit and intent of the ordinance.

(c) An applicant may appeal a decision by the Planning and Zoning commission to City Council.

Sec. 104-13. Liability.

Nothing in this article shall be deemed to impose any liability for damages or a duty of care and maintenance upon the City or upon any of its officers or employees. The person in possession of public property or the owner of any private property shall have a duty to keep the trees and landscaping upon the property and under their control in a safe, healthy condition. Any person who feels a tree located on property possessed, owned, or controlled by them is a danger to the safety of themselves, others, or structural improvements on-site or off-site shall have an obligation to secure the area around the tree or support the tree, as appropriate to safeguard both persons and improvements from harm.”

| Large Trees | Scientific/Binomial name | Native/ Adaptive | Usual Height (FT.) | Foliage (1) | Comments | Recommended for Planting |
|---------------------------------|--|---------------------|-----------------------|----------------|--|-----------------------------|
| American Elm | <i>Ulmus americana</i> | Native | 60-90 | D | Grows on well-drained soils along streams and rivers, but also planted widely as a shade tree. High water use. | Wet areas only |
| Anacua | <i>Ehretia anacua</i> | Native | 20-50 | S | Ornamental landscape tree. Easy to grow on alkaline soils with good drainage. Disease resistant. Drought tolerant. | Yes |
| Black Hickory aka Texas Hickory | <i>Carya texana</i> | Native | 60-75 | D | Grows on well-drained hillsides and sandy uplands with post and blackjack oaks. Produces edible nuts. | Yes |
| Bodark (Bois-d'Arc) | <i>Maclura pomifera</i> | Native | 40-60 | D | Spiny, with short often crooked trunk and milky sap. Large fruits on female trees create litter and are not edible. | Yes |
| Box Elder | <i>Acer negundo</i> | Native | 50-75 | D | For moist areas. Fast growing, short-lived, brittle wood. | Wet areas only |
| Carolina Basswood | <i>Tilia americana</i> var. <i>caroliniana</i> | Native | 70-100 | D | Moist soils. Fast grower. Ornamental shade tree. Late spring flowers favored by honeybees. | Wet areas only |
| Cedar Elm | <i>Ulmus crassifolia</i> | Native | 50-75 | D | Hardy, fast-growing shade tree. Tolerates heat, flood, and poor soils. Good substitute for oaks. | Yes |
| Chinese aka Lacebark Elm | <i>Ulmus parvifolia</i> | Adaptive | 40-60 | D | Common landscape tree native to Asia. Tolerates drought and alkaline soils. | No |
| Eastern Cottonwood | <i>Populus deltoides</i> | Native | 100+ | D | Fast growing, short-lived shade tree. Weak wood, brittle limbs, invasive roots, cottony seeds. High water use. | No |
| Eastern Persimmon | <i>Diospyros virginiana</i> | Near-Native | 20-100 | D | Edible fruit. Deep well drained moist soil. Part shade. Usually disease and insect free. Attracts wildlife. | Yes |
| Escarpment Black Cherry | <i>Prunus serotina</i> ssp. <i>Eximia</i> | Native | 25-60+ | D | Spring flowers, golden orange fall color. Requires moist well-drained soil. Fruit is edible. Toxic seeds, leaves, and bark. | Yes |
| Green Ash | <i>Fraxinus pennsylvanica</i> | Native | 50-70 | D | Common bottomland tree across the eastern third of Texas, as far west as the Guadalupe River. Prefers moist soils. Susceptible to invasive Emerald Ash Borer beetle. | Wet areas only |
| Hackberry species | <i>Celtis species</i> | Native | 40-80 | D | Fast growing. Best in moist soils. Good food and shelter tree for wildlife. Birds relish the berries and spread the seeds. | Yes |
| Honey Mesquite | <i>Prosopis glandulosa</i> | Native | 30-40 | D | Needs deep watering to become a tree. Thorny, drought tolerant. Spreads by seeds and can invade grasslands. | Yes |

Notes:

1) Legend: D = Deciduous, E= Evergreen, S = Semi-Evergreen

| Large Trees | Scientific/Binomial name | Native/ Adaptive | Usual Height (FT.) | Foliage (1) | Comments | Recommended for Planting |
|-------------------|---|----------------------|-----------------------|----------------|--|-----------------------------|
| Honeylocust | <i>Gleditsia triacanthos</i> | Native | 30-80 | D | Occurs in a wide variety of soil and moisture conditions. Thornless varieties are popular for landscape plantings. | Yes |
| Mexican Ash | <i>Fraxinus berlandieriana</i> | Near-Native | 30-40 | D | Native to South Texas, grows along streams. Planted as a fast-growing yard tree in Texas. Often sold as Arizona Ash. Susceptible to invasive Emerald Ash Borer beetle. | Yes |
| Pecan | <i>Carya illinoensis</i> | Native | 70-100+ | D | Slow-growing. Needs rich, moist, well-drained deep soil. Nut producing. Native and cultivated varieties. | Yes |
| Red Mulberry | <i>Morus rubra</i> | Native | 50-60 | D | Prefers rich, moist soils of river bottoms, often grows in the shade of larger trees. Good tree for wildlife. | Yes |
| Southern Catalpa | <i>Catalpa bignonioides</i> | Adaptive | 25-50 | D | Often planted as a fast-growing yard tree. Prefers moist soil; tolerates drier sites. Has naturalized along streams. | Yes |
| Southern Magnolia | <i>Magnolia grandiflora</i> | Adaptive | 60-80 | E | Widely cultivated ornamental. Occurs naturally in moist lowlands. Best in slightly acid to slightly alkaline soils. | No |
| Sweetgum | <i>Liquidambar styraciflua</i> | Near-Native | up to 100 | D | Often planted as a landscape tree. Fruits shaped like a spiked ball. Does not do well in alkaline soils. | No |
| Sycamore species | <i>Platanus species</i> | Native | 50-100 | D | Fast growing, weak limbs, messy leaves and seed balls. Shedding bark. Invasive roots in yards. High water use. Important large tree in streamside situations. | No |
| Texas Ash | <i>Fraxinus albicans</i> | Native | 30-45 | D | Strong, long lived, good shade tree, attractive fall color. Susceptible to invasive Emerald Ash Borer beetle. | Yes |
| Walnut spp. | <i>Juglans species</i> | Native | 30-100 | D | Three native species. Usually grow near water source. Nut bearing. Roots inhibit growth of nearby plants. | No |
| Western Soapberry | <i>Sapindus saponaria var. drummondii</i> | Native | 20-50 | D | Occurs throughout Texas. Tolerates various conditions. Often suckers to form thickets. Berries toxic to humans. | Yes |
| Willow species | <i>Salix species</i> | Native / Adaptive | 50-100 | D | Occur along streams and wet areas; high water needs. Invasive roots. Prone to insects and disease. | No |
| OAK TREES | | | | | All oaks are susceptible to oak wilt. | |
| Blackjack Oak | <i>Quercus marilandica</i> | Native | 30-60 | D | Slow growing, long lived. Able to survive on very poor soils. Attractive shade tree. | Yes |

Notes:

1) Legend: D = Deciduous, E= Evergreen, S = Semi-Evergreen

| Large Trees | Scientific/Binomial name | Native/ Adaptive | Usual Height (FT.) | Foliage (1) | Comments | Recommended for Planting |
|-------------------------------|------------------------------|---------------------|-----------------------|----------------|---|-----------------------------|
| Bur Oak | <i>Quercus macrocarpa</i> | Native | 80-100+ | D | Large, slow growing, long lived. Big leaves, huge acorns. Common landscape tree. Sensitive to root disturbance. | Yes |
| Chinkapin Oak aka Chinquapin | <i>Quercus muehlenbergii</i> | Native | 45-70 | D | Attractive fast growing shade tree. Medium water use in well drained soil. Good fall color. | Yes |
| Lacey Oak | <i>Quercus laceyi</i> | Native | 45-60 | D | Attractive, medium-sized, with blue-gray foliage. Tolerates drought and thin rocky limestone soils. | Yes |
| Mexican White Oak | <i>Quercus polymorpha</i> | Near-Native | 40-80 | S | Native to west Texas. Fast growing. More resistant to oak wilt and other diseases. Common landscape tree. | Yes |
| Plateau Live Oak | <i>Quercus fusiformis</i> | Native | 20-55 | S | Susceptible to oak wilt and live oak decline when stressed by drought. Protect from injury above and below ground to prevent infection. | Yes |
| Post Oak | <i>Quercus stellata</i> | Native | 40-50+ | D | Slow-growing and long-lived. Roots extremely sensitive to disturbance. Not often used in landscape situations. | Yes |
| Shumard Red Oak | <i>Quercus shumardii</i> | Native | 50-90 | D | Outstanding red/crimson fall color, drought tolerant. Similar to Texas Red Oak but prefers deeper soils. | Yes |
| Southern Live Oak | <i>Quercus virginiana</i> | Near-Native | 40-50 | S | Native to coastal areas. Beautiful branch structure. Best in neutral or slightly acidic soils. Medium water use. | No |
| Texas Red Oak | <i>Quercus buckleyi</i> | Native | 35-70 | D | Fast growing. Beautiful fall color, multiple trunks. Tolerates limestone soils. Susceptible to oak wilt. | Yes |
| Miscellaneous Oaks | <i>Quercus species</i> | Varies | Varies | | Additional Near-Native and Adaptive landscape trees occur in the area. | Yes |
| Conifer Trees | | | | | | |
| Arizona Cypress | <i>Cupressus arizonica</i> | Near-Native | 30-90 | E | Native to canyons in Big Bend National Park. Planted widely in desert landscapes and other well-drained sites. | Yes |
| Ashe Juniper (Mountain Cedar) | <i>Juniperus ashei</i> | Native | 30-40 | E | Picturesque. Improves degraded soils. Provides food and shelter for wildlife. Tolerates drought and deer. | Yes |
| Bald Cypress | <i>Taxodium distichum</i> | Native | 50-100 | D | For moist areas; fall color. "Knees" develop from roots in poorly drained situations. | Wet areas only |
| Deodar Cedar | <i>Cedrus deodara</i> | Adaptive | 40-60 | E | Graceful looking tree with a pendulous growth habit. Very sensitive to cold temperatures. | No |

Notes:

1) Legend: D = Deciduous, E= Evergreen, S = Semi-Evergreen

| Large Trees | Scientific/Binomial name | Native/ Adaptive | Usual Height (FT.) | Foliage (1) | Comments | Recommended for Planting |
|------------------------|---|---------------------|-----------------------|----------------|---|-----------------------------|
| Montezuma Cypress | <i>Taxodium mucronatum</i> | Near-Native | 100+ | S | Faster growing than Bald Cypress. Could suffer winter damage. Small "knees" may project from submerged roots. | No |
| Pinyon Pine species | <i>Pinus edulis</i> / <i>P. remota</i> / <i>P. cembroides</i> | Near-Native | 30-40 | E | Slow-growing, forms a dense compact crown. Grows naturally on dry rocky slopes and hillsides in SW Texas. | Yes |
| Miscellaneous Conifers | <i>Pinaceae family</i> | Varies | Varies | E | Generally grow poorly in limestone-based soils. | No |

Notes:
1) Legend: D = Deciduous, E= Evergreen, S = Semi-Evergreen

| Small Trees | Scientific/binomial name | Native/ Adaptive | Deer Resistant | Usual Height (FT.) | Foliage | Comments | Recommended for Planting |
|--|----------------------------------|---------------------|-------------------|-----------------------|---------|--|-----------------------------|
| American Smoketree | <i>Cotinus obovatus</i> | Native | No | 8-15 | D | Outstanding ornamental. Likes north or east facing rocky slope or protected side of Ashe Juniper. Slow growing. Well-drained soil/low water use. | Yes |
| American Witch-hazel | <i>Hamamelis virginiana</i> | Native | No | 12-15 | D | Large shrub/small tree. Occurs on moist soils along streams and forest edges. Yellow fringed flowers persist long after leaves drop. Full sun to part shade. | Wet areas only |
| Anacacho Orchid | <i>Bauhinia lunarioides</i> | Native | Yes | 8-12 | D | Grows in rocky limestone canyons. Needs well-drained soil. White or pink flowers. Plant it facing south in a protected area. | Yes |
| Arroyo Sweetwood | <i>Myrosporum sousanum</i> | Near- Native | No | 15-25 | S | Vanilla-scented white flowers/flat bean type fruit. Nearly thornless. Fern like leaves. Xeric. Drought and cold tolerant, full sun. | Yes |
| Bigtooth Maple | <i>Acer grandidentatum</i> | Native | No | 15-20 | D | Grows best when protected from west sun. Fall colors. Needs extra water until established. | Yes |
| Brazilian Bluewood | <i>Condalia hookeri</i> | Native | Yes | 6-15 | E-S | Thorny. Grows in dry limestone soil or along waterways. Small green flowers turn to seed that attracts birds. | Yes |
| Buckeye species | <i>Aesculus species</i> | Native | Yes | 10-15 | D | 4 species/varieties of true buckeyes occur in the area. Deep red to yellow tube shaped flower. Best in shade near streams. Seed capsules highly poisonous. | Yes |
| Buttonbush | <i>Cephalanthus occidentalis</i> | Native | No | 5-12 | D | Grows in moist to wet soil. Fragrant white spherical flowers early to mid-summer. Full sun. Not drought tolerant. Very low maintenance. | Wet areas only |
| Carolina Buckthorn | <i>Frangula caroliniana</i> | Native | No | 15-30 | D | Prefers alkaline well drained moist soils. Part shade. Greenish white flowers, pink to red to black berries. No thorns. Medium low water use. | Yes |
| Carolina Laurelcherry aka Cherry-Laurel | <i>Prunus caroliniana</i> | Native | Yes | 15-40 | E | Usually found on rich, moist, well-drained bottom lands. Showy white flowers attract birds; leaves poisonous. | Yes |
| Crape Myrtle | <i>Lagerstroemia species</i> | Adaptive | No | 10-40 | D | Smooth bark, summer flowers, various sizes and colors, tolerates hot dry conditions. | Yes |

Notes:

1) Legend: D = Deciduous, E = Evergreen, S = Semi-Evergreen

| Small Trees | Scientific/binomial name | Native/ Adaptive | Deer Resistant | Usual Height (FT.) | Foliage | Comments | Recommended for Planting |
|-------------------------------|--|----------------------|-------------------|-----------------------|---------|---|-----------------------------|
| Desert Willow | <i>Chilopsis linearis</i> | Native | Yes | 20-25 | D | Pink or burgundy orchid-like flowers in summer. Full sun / drought tolerant. Spreads via seeds. | Yes |
| Evergreen Sumac | <i>Rhus virens</i> | Native | Yes | 10-20 | E | Creamy white flowers in late summer attract bees and butterflies. Red berries in fall attract birds. Fast-growing, disease free, drought tolerant. | Yes |
| Eve's Necklace | <i>Styphnolobium affine</i> <i>/Sophora affinis</i> | Native | Yes | 15-35 | D | Wisteria-like rosy-pink flowers, seed pods like black string of beads. Grows in full sun to shade. Low water use, well-drained site, heat tolerant. | Yes |
| Goldenball Leadtree | <i>Leucaena retusa</i> | Near-Native | No | 15-25 | D | Bright golden-yellow globe-shaped flowers from spring to fall followed by seed pods. Heat and drought tolerant. | Yes |
| Guajillo aka Thornless Acacia | <i>Senegalia berlandieri</i> | Near-Native | Yes | 8-15 | S | Showy ornamental, fragrant flowers. Great honey plant. Drought hardy. Low water use. | Yes |
| Hawthorn spp. | <i>Crataegus spp.</i> | Native / Adaptive | No | 15-35 | D | 30+ species, usually small trees or shrubs with small white flowers, thorny branches, small red seeds. Different species are adapted to different sites. | Yes |
| Huisache / Sweet Acacia | <i>Acacia farnesiana</i> | Near-Native | Yes | 20-30 | D | Often a multi-trunked clump. Thorny. Feathery leaves, fragrant flowers, small seed pods. Aggressive. Tolerates heat, drought, poor soil. Cold sensitive. | Yes |
| Loquat | <i>Eriobotrya japonica</i> | Adaptive | Yes | 15-20 | E | Dark green foliage, edible fruit, seeds poisonous. Drought tolerant. Dies in sub 27 F temperatures. | No |
| Mexican Buckeye | <i>Ungnadia speciosa</i> | Native | Yes | 15-25 | D | Outstanding specimen tree. Bright pink flowers in spring. Seed pods hold mildly poisonous, glossy, dark-brown seeds. Multi trunk can be trained into a small tree. Drought tolerant. Low water use. | Yes |
| Mexican Plum | <i>Prunus mexicana</i> | Native | No | 20-25 | D | Fragrant white blooms in spring, edible fruit. Needs supplemental water in drought. Full sun, part shade. Non-suckering showy accent tree. | Yes |

Notes:

1) Legend: D = Deciduous, E = Evergreen, S = Semi-Evergreen

| Small Trees | Scientific/binomial name | Native/ Adaptive | Deer Resistant | Usual Height (FT.) | Foliage | Comments | Recommended for Planting |
|-------------------------|----------------------------------|---------------------|-------------------|-----------------------|---------|---|-----------------------------|
| Mexican Silktassel | <i>Garrya ovata</i> | Native | No | 10-20 | E | Rocky well drained soils. Fast growing. Disease free. Drought, heat, and cold tolerant. | Yes |
| Possumhaw | <i>Ilex decidua</i> | Native | Yes | 7-15 | D | Alkaline, well drained soil. Red berries grow in clusters, a favorite of birds in fall and winter. Full sun or partial shade, drought and heat tolerant. | Yes |
| Prairie Flameleaf Sumac | <i>Rhus lanceolata</i> | Native | Yes | 10-15 | D | Red fall color. Tight spike of white flowers at ends of branches in spring. Alkaline soil. Spreads by suckers to form a small colony. Full sun, drought tolerant. | Yes |
| Retama aka Paloverde | <i>Parkinsonia aculeata</i> | Near- Native | Yes | 15-20 | D | Green bark, showy yellow flowers, seed pods attract birds. Fast growing, neutral to alkaline well drained soil. Drought tolerant. Multi trunked. | Yes |
| Roughleaf Dogwood | <i>Cornus drummondii</i> | Native | No | 10-20 | D | Showy clusters of small white flowers. White fruits eaten by birds. Adaptable, best in moist soil, tolerates dry. Part shade. Spreads by suckers. Good for erosion control. | Yes |
| Rusty Blackhaw | <i>Viburnum rufidulum</i> | Native | No | 10-20 | D | White flowers, blue/black fruit. Understory tree. Fall color. Requires well drained soil. Drought tolerant. | Yes |
| Shantung Maple | <i>Acer truncatum</i> | Adaptive | No | 20-25 | D | A Texas Superstar™ heat and drought tolerant. Grows in average well-drained soils in full sun to partial shade. Yellow to red fall color. | Yes |
| Texas Crabapple | <i>Malus ioensis var. texana</i> | Native | No | 12-30 | D | Ornamental, thorny. Thicket forming via underground rhizomes. Heat and cold tolerant. Low water needs. | Yes |
| Texas Kidneywood | <i>Eysenhardtia texana</i> | Native | Yes | 8-12 | D | Attractive wispy form. Easy to grow. Blooms after summer rain. Well drained soil. Low water use. | Yes |
| Texas Madrone | <i>Arbutus xalapensis</i> | Native | No | 20-30 | E | Multitrunked, understory, slow growth. Prefers north facing slope, grows best near Ashe Juniper. Drought tolerant. Exfoliating reddish bark, deep taproot. | Yes |

Notes:

1) Legend: D = Deciduous, E = Evergreen, S = Semi-Evergreen

| Small Trees | Scientific/binomial name | Native/ Adaptive | Deer Resistant | Usual Height (FT.) | Foliage | Comments | Recommended for Planting |
|--------------------------------------|--|---------------------|-------------------|-----------------------|---------|---|-----------------------------|
| Texas Mountain Laurel | <i>Sophora secundiflora</i> | Native | Yes | 15-25 | E | Purple flowers similar to wisteria. Slow grower. Heat, drought, cold tolerant. Seeds poisonous. | Yes |
| Texas Persimmon | <i>Diospyros texana</i> | Native | Yes | 10-20 | D | Smooth peeling bark, small black edible fruit. Can be an aggressive spreader. Tolerates heat/drought. | Yes |
| Texas Pistache | <i>Pistacia mexicana</i> | Near- Native | Yes | 10-30 | E | Alkaline soil, full sun. Tolerates heat, drought. Needs good drainage. Red berries in fall attract birds. | Yes |
| Texas Redbud | <i>Cercis canadensis ssp. texensis</i> | Native | Yes | 15-20 | D | Pink to magenta flowers in spring. Grows on thin, calcareous well-drained soils. Sun to partial sun. Heat tolerant, medium drought tolerance. | Yes |
| Texas Prickly Ash aka Toothache Tree | <i>Zanthoxylum hirsutum</i> | Native | Yes | 10-15 | D | Birds love summer fruit. Prickly branches, leaves smell like citrus. Low water use, well drained soil. | Yes |
| Vasey Oak | <i>Quercus vaseyana</i> | Native | No | 25-40 | S | Good specimen tree for small areas. Heat/drought tolerant. Alkaline soil. Forms thickets. | Yes |
| Wafer Ash / Hop Tree | <i>Ptelea trifoliata</i> | Native | Yes | 10-25 | D | Outstanding tree resistant to pests and diseases. Prefers moist deep soil but tolerates dry. | Yes |
| Wax Myrtle | <i>Morella cerifera</i> | Adaptive | Yes | 12-20 | E | Dense leaves. Frequently used as a hedge. Purple seeds on female. Attracts birds. Slightly acidic moist soil. Tolerates drought. | Yes |
| Weeping Yaupon | <i>Ilex vomitoria 'Pendula'</i> | Hybrid of Native | Yes | 15-30 | E | Grows best in acidic moist soil, tolerates dry. Red berries in fall attract birds. Full sun to partial shade. | Yes |
| White Shin Oak | <i>Quercus sinuata var. breviloba</i> | Native | No | 12-40 | D | Grows single trunk in hard limestone soil; thicket forming in light soil or if roots disturbed. Pale gray, shaggy bark on older trees. Heat / drought tolerant. | Yes |
| Yaupon | <i>Ilex vomitoria</i> | Native | Yes | 15-20 | E | Grows well in poor soil. Bushy but can be pruned into small tree. Red berries in fall attract birds. Drought and heat tolerant. | Yes |
| Misc. Acacias | <i>Acacia species</i> | Varies | Yes | Varies | D | Thorny. Drought tolerant. Cold sensitive. | Yes |

Notes:

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| Small Trees | Scientific/binomial name | Native/ Adaptive | Deer Resistant | Usual Height (FT.) | Foliage | Comments | Recommended for Planting |
|----------------------|--------------------------|----------------------|-------------------|-----------------------|---------|--|-----------------------------|
| Misc. Conifers | <i>Pinaceae family</i> | Varies | Yes | 15-50 | E | 8 native conifer species in Texas. Typically narrow habit, aromatic scale-like leaves, small cones. Most grow poorly in limestone-based soils. | Local natives only |
| Misc. Maples / Other | Various | Native / Adaptive | No | Varies | D | Additional Near-Native and Adaptive landscape trees occur in the area. | No |
| Misc. Oaks | <i>Quercus species</i> | Varies | No | Varies | | Additional Near-Native and Adaptive landscape trees occur in the area. | No |
| Palm species | <i>Arecaceae family</i> | Native / Adaptive | Yes | Varies | E | Texas Sabal, south Texas native, planted in Kerrville. Non-natives planted. Sensitive to extended freeze. | No |

Notes:
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| Common Invasives | Scientific/binomial name | Usual Height (FT.) | Foliage | Comments - These are all listed on the TexasInvasives.org website. | Recommended for Planting |
|----------------------------------|-------------------------------------|--------------------|---------|---|--------------------------|
| Callery Pear | <i>Pyrus calleryana</i> | 20-50 | D | The parent rootstock of the "Bradford" / "Aristocrat" and other cultivars. Cultivars can cross-pollinate with other cultivars, produce viable seeds, and escape to invade disturbed areas. Native to Asia, cultivars widely planted in Texas, especially in small spaces and on commercial development sites due to price, availability, tolerance of a wide range of soils, conditions, drought. | No |
| Chinaberry | <i>Melia azedarach</i> | 40 | D | A common shade tree of old homesteads and unmaintained areas. Has naturalized throughout central Texas, especially along river bottoms and streams. One of the top ten invasive exotic species in Texas. | No |
| Chinese Parasol tree | <i>Firmiana simplex</i> | 35-50 | D | Prolific seed production, quick growth and aggressive competition. Prefers moist areas. Often found growing along roadsides and other disturbed areas. | No |
| Chinese Pistache | <i>Pistacia chinensis</i> | 25-35 | D | Has been invading natural areas in Central Texas, including ranchland and forested/riparian areas. It will replace native plants, thereby altering the habitat for native animals and plants. Widely planted as an urban street tree. | No |
| Chinese Privet and other privets | <i>Ligustrum sinense and others</i> | 8-20 | E | Aggressive and troublesome invasives, often forming dense thickets, particularly in bottom-land forests and along fencerows. Colonize by root sprouts and spread widely by abundant bird- and animal-dispersed seeds. | No |
| Chinese Tallow | <i>Triadica sebifera</i> | 20-50 | D | Alters light availability for other plant species. Toxins in fallen leaves create unfavorable soil conditions for native plant species. Outcompetes native plants, reducing habitat for wildlife and forage areas for livestock. | No |
| Golden Rain Tree | <i>Koelreuteria paniculata</i> | 30-40 | D | Introduced from China as an ornamental tree. It is a fast grower and has great seed viability. | No |
| Mimosa aka Silk Tree | <i>Albizia julibrissin</i> | 20-40 | D | Because it can grow in a variety of soils, produce large seed crops, and resprout when damaged, it is a strong competitor to native trees and shrubs. Occurs on dry-to-wet sites and spreads along stream banks. Prefers open conditions but also persists in shade. | No |

Notes:

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| Common Invasives | Scientific/binomial name | Usual Height (FT.) | Foliage | Comments - These are all listed on the TexasInvasives.org website. | Recommended for Planting |
|-----------------------|--------------------------------|--------------------|---------|--|--------------------------|
| Paper Mulberry | <i>Broussonetia papyrifera</i> | 30-60 | D | May be confused with exotic white mulberry and native red mulberry, basswood, and white poplar. Shallow root system makes it susceptible to blow over in high winds. Spreads by seeds and new plants from it's roots. | No |
| Princess Tree | <i>Paulonia tomentosa</i> | 30-60 | D | Common around old homes, on roadsides, riparian areas, and forest margins in infested areas. Spreads by wind- and water- dispersed seeds. Invades after fire, harvesting, and other disturbances. Forms colonies from root sprouts. | No |
| Siberian Elm | <i>Ulmus pumila</i> | 50-70 | D | Looks similar to other elms. Thickets of fast growing seedlings quickly overtake native vegetation. Wind carries seed. Prairies and stream banks are vulnerable. Fast growing, short-lived, and disease prone. | No |
| Tree-of-Heaven | <i>Ailanthus altissima</i> | 60-80 | D | A prolific seed producer, grows rapidly, can overrun native vegetation and form an impenetrable thicket. Produces toxins that prevent the establishment of other plant species. Root system is aggressive enough to cause damage to sewers and foundations. The invasive Spotted Lanternfly is an insect that uses this tree in its native range; having wild populations of the tree is concerning. The tree can create a 'host plant superhighway' allowing Spotted Lanternfly to spread throughout the country. | No |
| Vitex aka Chaste Tree | <i>Vitex agnus-castus</i> | 10-20 | D | Texas Superstar plant sold as a landscape tree in nurseries. Native to Europe and Asia. Has been found in limestone outcrops and dry creek beds throughout Central Texas. Outcompetes native vegetation. | No |
| White Mulberry | <i>Morus alba</i> | 30-50 | D | The "fruitless" mulberry planted in many Texas landscapes. Native to Asia. Displaces native species, possibly hybridizing with and transmitting a root disease to the native red mulberry. | No |

Notes:

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TABLE 2.0
TREE PRESERVATION CATEGORIES AND PRESERVATION RATES

| | "Large Tree Species" | "Small Tree Species" | Preservation Requirement |
|-------------------------------------|---|--|--|
| Standard Category | Large Tree Species that are: 8" to 24" caliper | Small Tree Species that are: 6" to 8" caliper | 40% of the total protected inches or area, if alternative tree stand option used |
| Heritage Category | Large Tree Species that are: Greater than 24" caliper | Any Small Tree Species that are: Greater than 8" caliper | 60% of the total protected inches or area, if alternative tree stand option used |
| 100 Year Floodplain Category | All Protected and Heritage Category Trees | All Protected and Heritage Category Trees | 80% of the total protected inches or area, if alternative tree delineation stand option used |