

Oak Wilt Presentation

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City Council Meeting

November 18, 2025

Background

- Oak Wilt is a destructive and incurable vascular fungal disease
- All species of Oaks are susceptible with some species being somewhat tolerant
 - Red Oaks, Shumard, Spanish and Live Oaks are highly susceptible to the pathogen
- Trees with Oak Wilt generally do not survive

Background

- How the fungus kills the tree
 - Infection: fungus enters tree through fresh wounds caused by pruning or storms. Sap feeding beetles carry spores from infected trees to healthy ones, especially in spring and early summer
 - Blockage: fungus grows within the tree's vascular system
 - Host Reaction: tree fights the invasion that plugs its own vessels choking off water supply
 - Disease leads to rapid wilting and death

Background

- How it Spreads
 - Above Ground through Beetles: Diseased Red Oaks produce fungal mats in the spring attracting small *Ceretocysstis fagacearum* beetles. Fungus spores attach to the beetle. Beetles are then attracted to fresh cuts on all oak trees spreading the spores
 - Below Ground through Root Connections: Live Oaks grow in dense groups with interconnected roots

Background

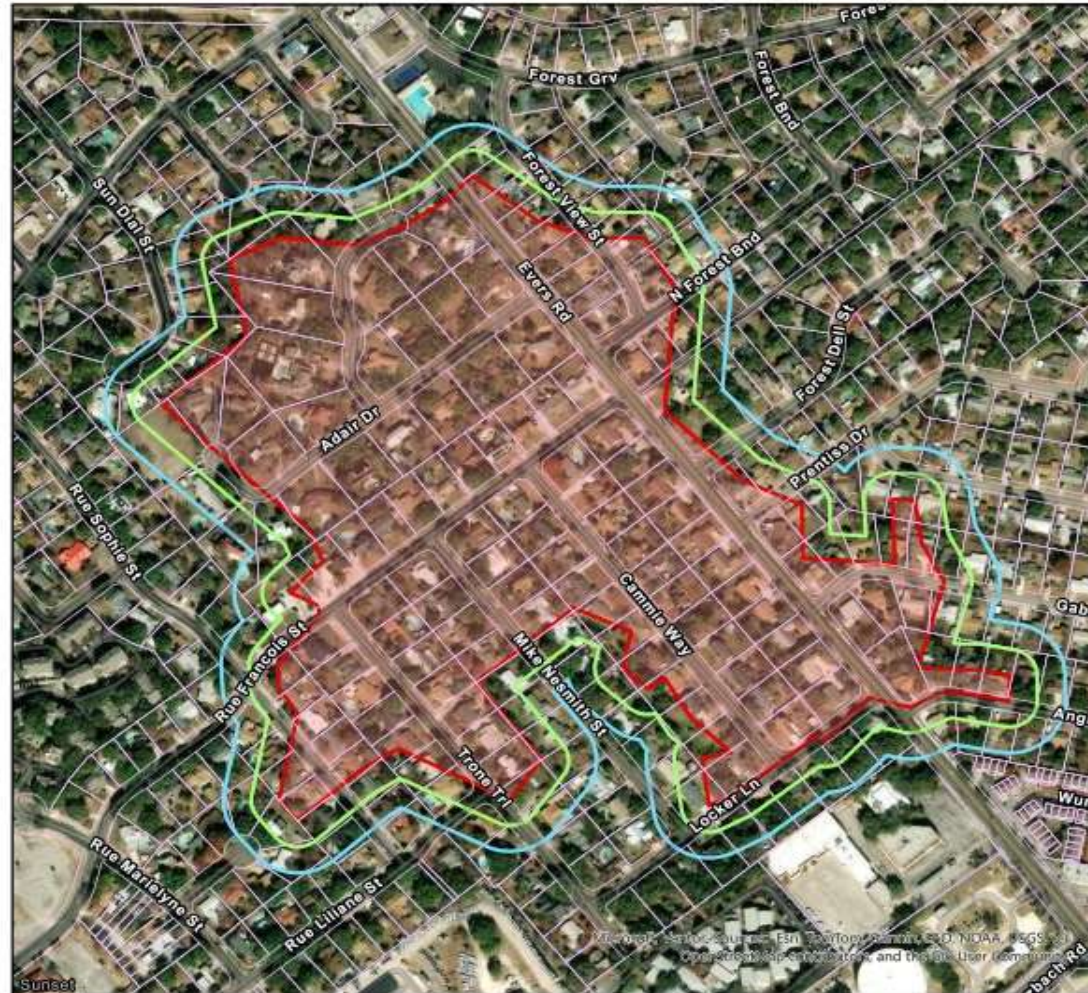
- Prevention
 - Avoid pruning oak trees from February to June 30, as this is the time beetles are most active and the fungal mats produce spores
 - Disinfect cutting tools each time you prune a different tree, using an all-purpose household disinfectant
 - Paint oak tree wounds immediately, regardless of the season with latex or tree wound paint
 - Trench to cut the root systems between groups of trees to halt the underground spread
 - Treat healthy oak trees with injectable fungicide every 18 months



- Diseased Area
- Immediate Treatment Zone (area b/w red & green line)
- Following Treatment Zone (area b/w green & blue line)

0 230 460
Feet

County: Bexar
Quad: Castle Hills
Date: 10/28/2025
Forester: Elizabeth Nyawo



- Diseased Area
- Immediate Treatment Zone (area b/w red & green line)
- Following Treatment Zone (area b/w green & blue line)

0 250 500
Feet

County: Bexar
Quad: San Antonio West
Date: 10/28/2025
Forester: Elizabeth Nyawo

Background

- Efforts to Combat Oak Wilt
 - Forest View Trench: Trenched 1,030 ft. along Forest View
 - Oak Wilt Training: Hosted three Oak Wilt trainings on Oak Wilt & how to use the City's manual pump kit
 - Treated live oak trees at the Forest Oaks Pool w/fungicide
 - Developed the Oak Wilt Answers Brochure
 - Manual pump kit using the Macro System is available at Public Works for residents to borrow (fungicide not included)
 - 2x year brush pickup is held in February and September—months when Oak Wilt is less active

Recommendation

- Efforts to Combat Oak Wilt
 - Staff will work with Texas A&M Forest Service to schedule an Oak Wilt training in spring 2026
 - Continue to distribute the City's Oak Wilt brochure at tree adoption during Arbor Day and Earthwise Living Day events
 - Continue to loan out the manual pump kit and share training on how to use