

Regional Summary of Potential Impacts of Emerald Ash Borer



Central Texas - Greater Austin

Over two million people live in the Austin-Round Rock Metropolitan Statistical Area. This 4,279 square mile area comprises five counties and over fifty-five cities and towns, six of which exceed 50,000 in population.

- Ash trees make up 4.2% of the urban forest in the Greater Austin area (derived from city inventories and Urban Forest Inventory & Analysis)—an estimated **3.5 million trees** that provide \$64 million annually in ecosystem services. Estimated removal costs for community ash trees in the region could exceed \$894 million (\$250/tree) if communities and residents only practice reactive management.
- Debris processing costs of all community ash trees alone could total \$21 million.
- The cost to replace all existing community ash trees is estimated at \$1.0 billion (\$300/tree).
- Treatment in lieu of removal and replacement is a viable option. If all community ash trees are treated, the cost to treat ash trees will be an estimated \$178 million annually. Treatment costs per tree average \$100 every 2 years and must be continued in perpetuity. This would exceed \$3.5 billion in 20 years.

Likely Management Scenario

- It is probable that up to 25% of dead or dying ash trees will be either located in natural riparian areas or small enough diameter to not warrant removal.
- If 25% of trees are ignored due to size or location and 25% of trees are proactively treated once EAB is nearby (at a cost of \$44 million annually), total removal costs would be closer to \$447 million.
- Not all trees removed will be replaced. Assuming a modest 50% replacement rate of non-treated trees, replanting costs would be approximately \$268 million.
- This likely scenario results in a **\$2.3 billion** cost to the region.

Table 2: Potential statewide costs of Emerald Ash Borer infestation in Texas communities (in millions of dollars)

Applied Management	Maximum	Likely Scenario	
	20-Year Cost If applied to all ash	Percent of total ash trees	20-Year Cost If applied to percent
Treatment	\$3,576	25%	\$894
Removals	\$894	50%	\$447
Debris Processing	\$21	50%	\$10
Replacement	\$1,072	25%	\$268
Lost Ecosystem Services	\$1,287	75% trees lost, 25% replaced	\$724
Total*	\$3,576 or \$2,631	Total	\$2,344

*Treatment only, or remove & replace with ecosystem services beginning again 10 years after replacement

The percentage of ash in communities varies widely; some cities have as much as twenty percent of the community trees as ash species. Typically, thirty percent of community land area is owned by the municipality although the range can be as low as ten percent in smaller communities to as high as sixty percent in the City of Austin. Of the \$2.3 billion likely cost to this area, at least \$703 million of that will be borne by municipalities.

EAB damage to trees tends to be slow initially with escalating mortality several years after initial infestation. This means that damage and mitigation needs may occur seemingly all at once. Proactive planning by communities, including identifying debris staging areas and outreach to residents, will help keep costs from escalating beyond what is likely.

Data Sources

Forest Ecosystem Values application, www.texasforestinfo.com
Urban Forest Inventory & Analysis, www.mycitystrees.com