

VERMONT URBAN AND COMMUNITY FORESTRY PROGRAM

EAB Municipal Management Case Study

Sprague, Connecticut

APPROACH

Focusing on Removals in a Rural Community

SUMMARY

Sprague, Connecticut is a lightly populated rural town. Its forested roadways are cared for by a tree warden and a road crew of three men. Historically, when individual trees are hazardous and are too large for the road crew to take down, the town contracts with a tree removal company. Like many rural communities, Sprague operates on a tight budget without a lot of leeway for unanticipated expenses. When emerald ash borer (EAB) was discovered in Connecticut in 2012, Sprague's tree warden, David Gustafson, knew it only would be a matter of time before the town would be facing large expenditures for tree removals. He also knew that removal costs of trees with dying canopies would be much higher than removal costs of healthy trees.

In 2016, Gustafson conducted an inventory of all ash trees over 6 inches DBH on town-maintained roads and properties. At that time, basing his calculations on the DBH of the trees, he estimated that removing the 546 inventoried ash, would total \$312,700. If he included in his calculations the costs of stump grinding and replanting about half of the removed trees with replacements, the total estimate came to \$365,100.

However, Gustafson explains that in reality, the tree removal company does not charge by the

size of the tree. Rather, the company charges by the amount of time worked. The cost varies some depending on the equipment and labor used. For a 75-foot bucket truck and three workers, (two in the bucket and one on the ground), the company charges \$175 per hour. If they use a crane, the 100 foot crane and operator is an additional \$125 per hour, and if traffic control is required, it is \$200 per hour. Gustafson anticipates it will cost the town between \$1,600 and \$2,000 a day to take down the ash trees.

The tree warden is required to post notice of every tree slated for removal for a ten-day public comment period and ask property owners if they want the wood from the felled trees. The tree removal company will come once there is at least one-day's work to be done. Subsequently, there may be a month's time between when Gustafson initially posts trees for removal and when the tree removal company arrives. Once the ash removals begin in earnest, Gustafson's plan is to paint all the trees destined for removal on one piece of property with orange paint and post one of the trees for the public comment period. Then he will contact the tree removal company and try to schedule them for a few weeks' worth of work at a time.

FAST FACTS

Population: 2,950

Miles of Town Maintained Roads: 26

Number of Ash Inventoried on Town Roads prior to Removals: 546

Normal Management of Public Trees: Tree warden and three-person road crew address roadside trees; contract out removals requiring bucket truck or crane.

Active Tree Board or Conservation Commission: Conservation Commission.

Local Tree Ordinance: Not yet, in development.

Ash Inventory Conducted: 2016

EAB First Detected: The first EAB was found in Sprague in 2016. Neighboring towns to the east and west are both heavily infested.

Ash Management Status in 2020: Inventory conducted with estimated costs for management in 2016. About 20 ash under utility lines have been removed by utility company.

Key Players: Tree Warden, Road Foreman, First Selectman (also on Conservation Commission), utility company and tree removal service.

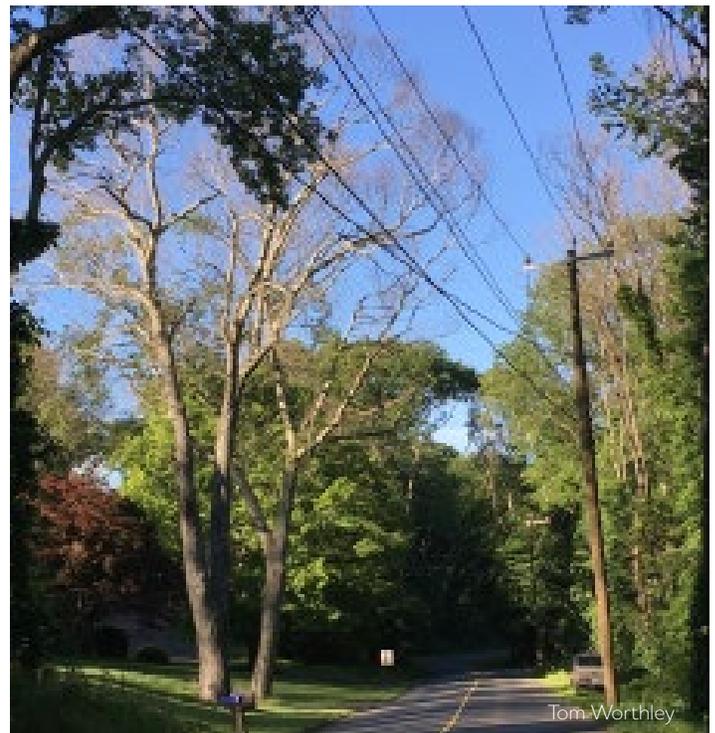
Funding: Annual tree removal budget of \$8,000 was raised to \$12,000 in 2020. Annual budget for replacement trees is usually \$300. Town bond request of \$154,000 for removing ash trees passed in late summer, 2020.

Wood Utilization: Property owners are asked if they want the wood. If they do, it is left on their property, if not, the wood is left in the town right-of-way for the public to take.

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David Gustafson



Tom Worthley

Road in Sprague with 60 ash in one mile

High-potential-risk trees

ESTIMATED COSTS

In his 2016 report on the state of ash trees in Sprague, Gustafson included estimates for treating all of the public ash with insecticide and estimates for replacing them with new trees. Since then, the town has run into other unanticipated expenses, so the tree warden is now focused on public safety and removing as many trees as possible before they become infested and start to die. In his words, “Let’s get the trees down first, then once we get the trees down, let’s see what the canopy is like.”

Activity	Cost per Unit	No. of Trees	Work Done By	Estimated Cost (2020)
Treatment¹	N/A	N/A	N/A	N/A
Removal	Average of \$1,600 - \$2,000 for days work	526	Contractor	\$350,000 for removals & stump grinding (approx. \$665 per tree)
Stump Grinding	\$3 per inch DBH or about \$250 per stump	40 stumps closest to roads at average of 20 inch DBH	Road Crew	
Replanting: Cost of Trees & Labor	\$200 per balled and burlapped tree ²	50	Tree Warden & Road Crew	N/A
Grand Total	\$308,000 to \$350,000 (starting in 2020)			

¹Gustafson and the town decided against treating any ash trees.

²Gustafson says costs for replacement trees can vary greatly depending on what types of trees are chosen. In his 2016 report, he estimated replacement trees and labor could cost up to \$50,000 for balled & burlapped trees. Do you want to replant balled and burlapped trees or seedlings? My annual budget for replacement trees is \$300. I can get 100 seedlings for \$50 plus \$2 for orange stakes so the road crew doesn’t mow them over. There is a large local nursery that has a big sale in October where I can get a balled and burlapped maple for \$50. Then I just have to talk the Road Foreman into letting me use the road crew to help plant the trees before December.

ON THE GROUND

You can't wait until the ash die. There have been a number of towns in the area with accidents, and people who have been hurt. One woman died when her motorcycle ran into a tree that had come down. Removal may seem expensive until you have to pay out liability claims. And removal is much more expensive after the trees die. They break in very unpredictable ways. You don't want to wait until all the trees start to die at the same time.

David Gustafson, Tree Warden

LESSONS LEARNED

- **Do not wait. Be proactive.** Plan ahead and do what you can now. I don't know how I will get \$350,000 if all the ash trees start to die at once.
- **Consider sharing equipment:** Sprague already shares equipment with two neighboring towns. Gustafson investigated how much it would cost for the three towns to collaborate on purchasing and sharing a bucket truck and certifications for workers to drive and cut from the bucket truck. The price for a used 75-foot bucket truck was \$80,000 and training and certification for three workers was \$2,000. Although the towns are not able to do this now, sharing the equipment and labor would cost each town \$35,000, which would be cheaper than contracting the work. The town has use of a stump grinder twice a year that rotates between multiple municipalities. Sprague is one of a 13-town regional recycling/trash authority. The trash facility owns the stump grinder and rotates the grinder free-of-charge to each town twice a year. So we pile up all our trimmings, brush, and stumps at the transfer station and pile the mulch there too. To date we have generated about 300 yards of mulch that is free for townspeople.
- **Educate the public. I am also the tree warden for the neighboring town.** We took down a bunch of infested trees and peeled them back to show the galleries. I put the wood in our town halls with the bugs to show people what EAB will do to all the ash trees.
- **Think about what will happen once all the ash are removed.** You can already feel an increase of 10 degrees in temperature along stretches of road where there is no canopy.
- **Develop a good relationship with the utility company.** All of the linemen notify the tree warden when they are in town cutting underneath the utility lines. Gustafson has been able to work with them to take out as many ash trees underneath the utility lines as they could justify removing.

Vermont Urban & Community Forestry Program

Vermont Department of Forests, Parks and Recreation in partnership with University of Vermont Extension

