

Municipal Vulnerability Preparedness Program Action Grant Case Study

Municipality: Town of Westford

Project Title: Westford Tree and Invasive Species Inventory and Management Plan with Tree Planting Plan

Award Year (FY): FY22-FY23

Grant Award: \$ 79,200

Match: \$ 29,317

Match Source: \$108,517

One or Two Year Project: Two-Year Project

Municipal Department Leading Project: Land Use Management

Project Website URL: <https://www.westfordma.gov/1440/Westford-Tree-Invasive-Species-Plan>

Community Overview:

- What is the population size of your community and where is it located?
- Do you have any [Environmental Justice](#) or other Climate Vulnerable communities? (Think about both those who live and work in your town.)
- Other unique traits of your municipality like who the top employers are, geography, history, etc.

According to the 2020 Census, Westford's population is 24,643. One Environmental Justice area is located in Westford in the northeast corner of town, specifically along Groton Road (MA Route 40) which is the southern boundary of the EJ Population identified within Westford. In addition to Groton Road, the EJ Population is bounded by Dunstable Road to the west, the Tyngsborough town boundary to the north, and the Chelmsford town boundary to the east.

Westford has no municipal sewer which has a history of limiting some potential commercial and industrial uses, and therefore has a history of land-intensive development.

Project Description and Goals:

- Where was the project located?
- What climate change impacts did the project address?
- What were the specific goals and tasks of the project as stated in your application?
- Did your project meet the goals set forth in your application in terms of:
 - Employing nature-based solutions
 - Improving equitable outcomes for and fostering strong partnerships with EJ and other Climate Vulnerable Populations
 - Providing regional benefits
 - Implementing the public involvement and community engagement plan set forth in your application

- Finishing the project on time

The project was located entirely within a portion of the Town's public rights-of-way, including nine out of ten designated scenic roads and 25 miles of additional roads in western Westford in an area that was formerly an Environmental Justice community (during the course of the project as 2020 Census data was released, this area was no longer considered an Environmental Justice community).

The two primary impacts the project seeks to address are reducing heat island effect and absorbing stormwater.

The project should help the town to identify tree species that will help increase biodiversity, while also being sustainable, drought-tolerant and low maintenance. Additionally, mapping of invasive species will allow targeted management to protect the most ecologically sensitive areas.

The Town's consultant team, Davey Resources Group and Dodson & Flinker, have identified a number of recommended actions that will help the Town build staff capacity to continue public outreach, prioritize proactive tree care & maintenance, treat invasive species and develop a budget process in which to prioritize action items identified in the plan, particularly in the areas of the Town's scenic roads as well as current (and former) Environmental Justice populations.

Results and Deliverables:

- Describe, and quantify (where possible) project results (e.g. square footage of habitat restored or created, increase in tree canopy coverage, etc.). Report out on the metrics outlined in your application.
- Provide a brief summary of project deliverables with web links, if available.

The project included an inventory of trees and invasive species and helped the Town to understand the monetary costs and benefits to maintain and improve the Town's urban forestry. The inventory covered approximately 15% of all public trees along Westford's public rights-of way, so costs and future budgetary needs are extrapolated based on the findings from the inventory conducted.

Lessons Learned:

- What lessons were learned as a result of the project? Focus on both the technical matter of the project and process-oriented lessons learned.
- What is the best way for other communities to learn from your project/process?

Educational components of the plan development from both the perspective of Town Staff and the public, the knowledge obtained during the process, in particular pertaining

to invasive species identification and maintenance, has been extremely valuable. While many members of the public have an interest in addressing invasive species in a responsible manner, many people simply do not have the expertise to be able to identify invasive species correctly or know how to effectively treat them. However, we have already started to see benefits from the planning process. In fact, within the first week of the final plan being made available to the public, the Land Use Management Department already received inquiries and feedback from the public indicating their ability to now address invasives on their properties.

Additionally, gaining an understanding of the current diversity and age of the Town's tree ecosystem has been extremely helpful in order to develop a comprehensive strategy to ensure that a healthy balance of trees within in each stage of its life-cycle as well as a robust mix of tree varieties to ensure the Town is able to maintain a canopy resilient to pests and disease and assist with stormwater absorption and mitigating heat island effect.

Partners and Other Support:

- Include a list of all project partners and describe their role in supporting/assisting in the project.

Davey Resources Group and Dodson & Flinker: These two consultant teams partnered together in order to conduct the inventory, educate the Town and the public on the benefits and environmental factors that need consideration to develop a comprehensive strategy for maintaining and improving the Town's urban forestry, and codified the process through the development of the Plan.

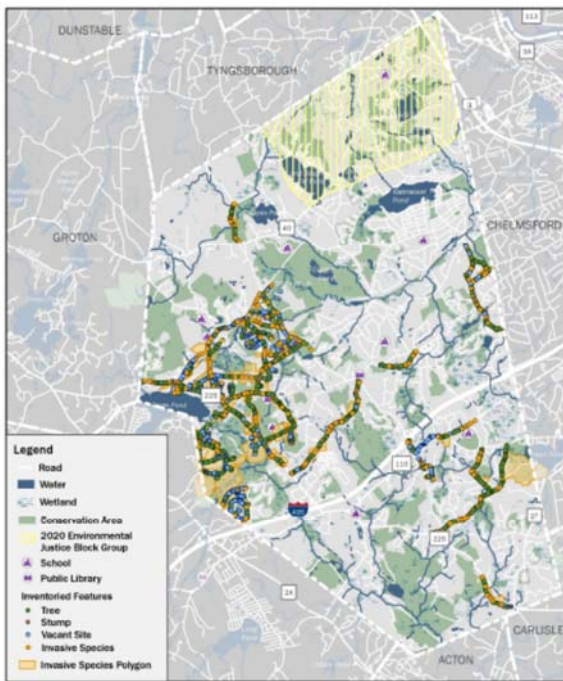
Town of Westford: The Town has had several staff members involved in the development of the plan, including the five-member Land Use Management Department, a Sustainability Coordinator hired after receipt of the grant, and members of the Public Works Department, including the Engineering Department, GIS Coordinator, DPW Director and Assistant DPW Director/ Tree Warden.

Project Photos:

- In your electronic submission of this report, please attach (as .jpg or .png) a few high-resolution (at least 300 pixels per inch) representative photos of the project. Photos should not show persons who can be easily identified, and avoid inclusion of any copyrighted, trademarked, or branded logos in the images. MVP may use these images on its website or other promotional purposes, so please also let us know if there is someone who should receive credit for taking the photo.

Please find photos attached in a separate document.

CASE STUDY PHOTOS – TOWN OF WESTFORD



2022 Full Inventory
 Tree & Invasive Species Inventory and Management Plan
 Westford, MA
 Draft: 12/13/22

Prepared by:
 DIXON & FLINCKER
 Ecological Rehabilitation and Planning
 Data Sources: MassGIS

