Municipal Vulnerability Preparedness Program Action Grant Case Study

Municipality: Foxborough
Project Title: Advancing Green Infrastructure in Foxborough for Enhancing Climate Resilience through Planning and Design
Award Year (FY): 2022
Grant Award: $ 166,543
Match: $ 54,326.00
Match Source: In-kind contributions and cash
One or Two Year Project: One
Municipal Department Leading Project: Department of Public Works
Project Website URL:
https://experience.arcgis.com/experience/1917bfaa771e46a697187e2a10b4d87d/
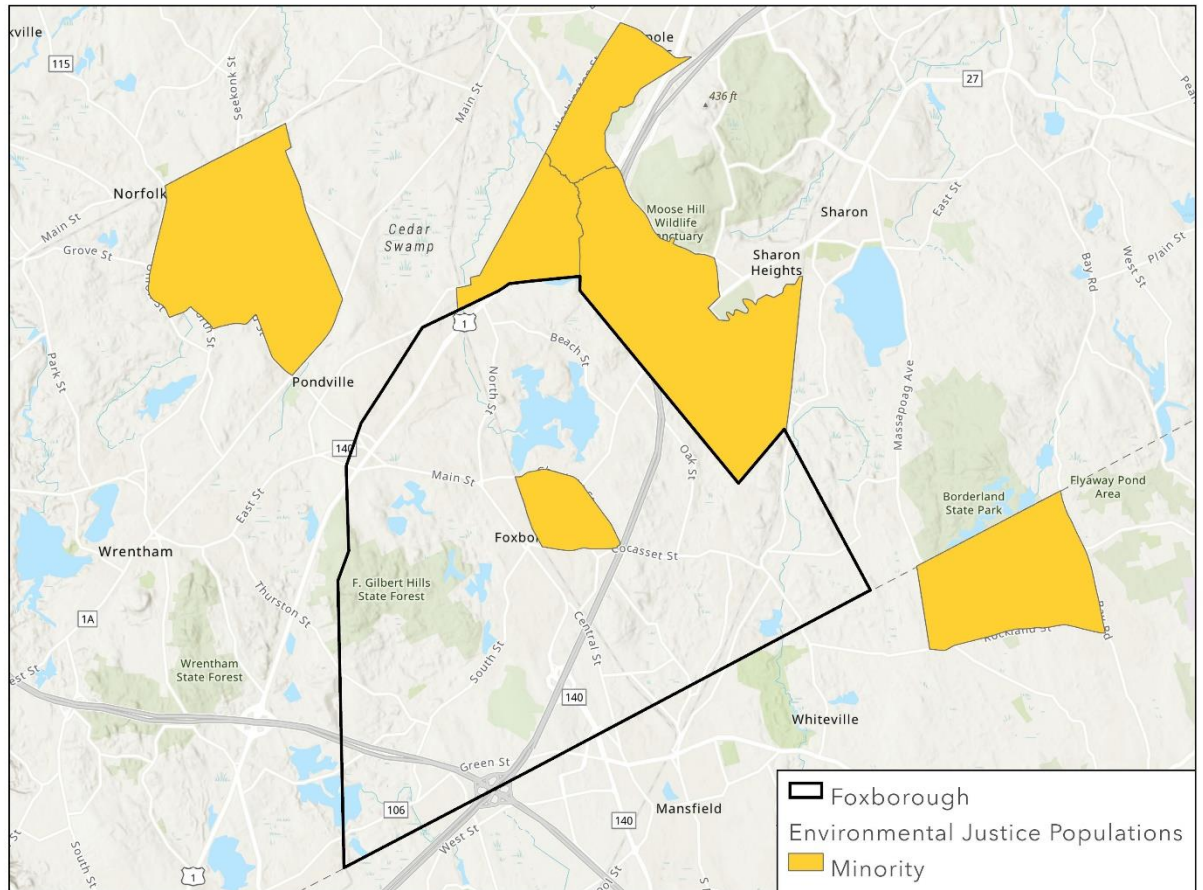
Community Overview:

- *What is the population size of your community and where is it located?*

  According to the April 1, 2020 Census there are 18,618 people in Foxborough, MA.

- *Do you have any <u>Environmental Justice</u> or other Climate Vulnerable communities? (Think about both those who live and work in your town.)*

  According to the Massachusetts Environmental Justice viewer there are at-risk communities downstream of Foxborough in both the Neponset River and Taunton River watersheds, the closest being a minority population just downstream in the Taunton watershed, and Canoe River Aquifer ACEC, in the Town of Mansfield. The Cocasset Street underpass GI location is directly upstream of minority population in Mansfield, MA. This population would specifically benefit from the Cocasset Street railroad underpass task once green infrastructure solutions have been identified, designed, and constructed. This population, immediately downstream of the project area, would see improvements to water quality and reduced occurrence of flooding due to treatment of stormwater and attenuation of peak flows specifically identified as goals of this particular task.

  Portions of Foxborough surrounding the Neponset Reservoir are listed in the 95th percentile for children under the age of five, and just south of this area is a similarly sized population in the 95th percentile for being above the age of 64. To address these vulnerable populations this project will work with already established school programs to attempt to reach, and receive feedback from, the parents of children less than five years old. The project will also engage the Council on Aging to involve populations in town over the age of 64.

- Other unique traits of your municipality like who the top employers are, geography, history, etc.

The top employers in the town include: PepsiCo, the Kraft Group, Rodman Ford Sales, ConnectPay, Kennedy-Donovan Center, Iconics, American Electrical Testing Company, and the Sage School.

History Fact: The town of Foxborough was once home to the world's largest straw hat factory, which was founded by local businessman E.P. Carpenter. The Union Straw Works burned to the ground in the early 20th century. The town post office now stands on the site.

Project Description and Goals:

- *Where was the project located?*

  The project primarily focused on the Cocasset Street railroad underpass (42.060969, -71.201917). Secondarily, the project focused the green infrastructure planning task on 9 locations around Foxborough where green infrastructure would be both feasible and beneficial.

- *What climate change impacts did the project address?*
  - This project provided plans to reduce flooding at the Cocasset Street rail underpass
  - Reduce nutrient inputs from non-point sources and increase recharge through infiltration stormwater BMPs, particularly around the Neponset Reservoir
  - Reducing the burden on existing systems and increasing the resilience of the Town's storm drainage infrastructure to increased precipitation and more intense and frequent storms
- *What were the specific goals and tasks of the project as stated in your application?*

The projects goals were to:

- Develop a Town-wide plan for future investments in green infrastructure
- Begin to address current flooding issues on Cocasset Street through feasibility study and preliminary design to support future permitting. The Cocasset Street project is also to be used to demonstrate the use of the GI principles, concepts, and recommendations outlined in the Town-wide master plan to address flooding and water quality.
- Engage the community on resilience and water quality issues in new ways to promote a long-lasting community investment in green infrastructure and climate resilience.

- Did your project meet the goals set forth in your application in terms of:
  - Employing nature-based solutions: Yes, plans for green-infrastructure implementation are complete.
  - Improving equitable outcomes for and fostering strong partnerships with EJ and other Climate Vulnerable Populations: Improving stormwater management has a net positive impact on both EJ communities and Climate Vulnerable Populations.
  - Providing regional benefits: Foxborough now has concept designs for green infrastructure in 9 locations around town and three locations adjacent to the Cocasset Street railroad underpass that once implemented will work to improve regional water quality.
  - Implementing the public involvement and community engagement plan set forth in your application: Social media was used to spread the word about events and to direct the public to the website to see project updates and to voice their opinion. In addition, several press releases were publicized drawing further attention to the project and the website for public engagement opportunities.
  - Finishing the project on time: Project deliverables completed by June 30, 2022.

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.
  - 9 green infrastructure concept plans within the watershed

- - o Feasibility study and preliminary design for future permitting along Cocasset Street.
- Provide a brief summary of project deliverables with web links, if available.
  - o Green Infrastructure Master Plan & 9 Green Infrastructure Concepts
  - o Cocasset Street Rail Underpass & 3 locations selected for green infrastructure implementation

- What lessons were learned as a result of the project? Focus on both the technical matter of the project and process-oriented lessons learned.

One lesson learned from this project was to make sure that any on-going or future projects planned for the Town are discussed with the entire project team as soon as possible. Future road improvements to a street in town was not initially discussed with the entire project team, which was selected as a possible location for green infrastructure. Lucky, this was caught early in the project before conceptual designs had started and another location was selected.

- What is the best way for other communities to learn from your project/process?

Make sure all team members are sharing information as soon as it becomes available. You never know what information may change or alter a project.

Partners and Other Support:

- Include a list of all project partners and describe their role in supporting/assisting in the project.
  - o Neponset River Watershed Association: collaboration on three educational workshops
  - o Fuss & O'Neill Team
    - William Guenther, MS
    - Allen Tevyaw, MS
    - Celicia Boyden, EIT, MS
    - Erik Mas, PE
    - Shawn Martin, PE
    - Stefan Bengtson, MS, MESM
    - Alex Duryea, MESM
  - o Town of Foxborough Team
    - Christopher F. Gallagher, PE - Public Works Director
    - Lance Priore - Town Engineer
    - William Keegan - Town Manager
    - Michael Johns - Assistant Town Manager

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.