

MVP Case Study Report

Municipality/Nonprofit Organization: Arlington and MyRWA

Project Title: Wellington Park and Mill Brook Corridor

Grant Award: \$399,490.00

Match: \$160,000.00 (CPA funds)

Community Overview:

Arlington is a town six miles northwest of Boston, with a population of approximately 42,844 (2010 U.S. Census). Arlington covers 5.5 square miles and is predominantly within the Mystic River watershed, though a small section of town is within the Charles River watershed. Arlington's land use is largely residential, with its major commercial corridor along Massachusetts Avenue.

Description of Climate Impact:

According to the MVP Community Resilience Building Workshop, Arlington is most vulnerable to extreme heat, storm surge and sea level rise, heavy rainfall and flooding, ice and snow storms, drought, and wind events.

In this project, Arlington has acted on the primary recommendation of the MVP report, which is to implement multi-benefit solutions along Mill Brook. Mill Brook, particularly along Wellington Park, has a history of flooding due to the overwhelming amount of impervious surface in its tributary. Homes, apartment buildings, businesses, and the park have suffered flooding around the project site. Through this project, 70 cubic yards of flood storage was built along the Mill Brook to reduce downstream flooding. The overflow channel built through this project is a demonstration green infrastructure project, through which residents can learn more about stormwater management and become inspired to manage their properties more effectively for stormwater. The project also built a porous asphalt pathway that transitions into an elevated boardwalk. This new walkway is ADA compliant and offers park-users an opportunity to get closer to Mill Brook. As part of this project, a chain link fence along the brook's bank was removed and a dense section of invasive Japanese Knotweed was removed. These enhancements have opened up the park, which was underutilized before.

Project Goals:

There are three main project goals for this grant. Goal #1 is to reduce Arlington's vulnerability to climate change by acting upon the recommendations of the community resilience workshop's final report. Goal #2 is to build a green infrastructure (GI) demonstration project along Mill Brook to reduce flooding and educate residents about the benefits of GI. Goal #3 is to

expand upon an existing Community Preservation Act (CPA) project to create a pedestrian-activated Mill Brook Corridor, increase access to the Mill Brook, and remove invasive species.

Approach and Results:

The Project Team was partially connected through a CPA funded linear park project prior to the start of this grant. The Town of Arlington, MyRWA, and Weston & Sampson were working together to assess the feasibility of a linear park when the MVP program was established. The Project Team decided to leverage this existing project to get MVP funding, which would address the known flooding issues within and around the project site.

The project includes the following results:

- The creation of 70 cubic yards of flood storage
- The removal of over 7,000 square feet of invasive Japanese Knotweed
- The removal of over 250 linear feet of decrepit chain link fence, opening up the brook
- The installation of over 400 native shrubs and herbaceous species
- The construction of a porous asphalt pathway
- The construction of an elevated boardwalk
- The addition of three educational signs, one of which is focused on the project's resiliency components

Lessons Learned:

Lessons learned from this grant include:

- 1) The importance of establishing metrics of success during the grant application and initial project meetings. While this project will reduce downstream flooding to a small degree, it will be difficult to measure its exact efficacy since no gauges or monitoring equipment was installed as part of the project.
- 2) The importance of maintaining open and honest communication with grant administrators. This grant has a very short timeline, especially for construction projects. It was very helpful to be in constant communication with the Executive Office of Energy and Environmental Affairs in the event that any unexpected issues arose.
- 3) The importance of ensuring that your community is an active project manager between the project's architect and contractor. Due to the grant's tight timeline, it is crucial to be aware of the various aspects of work occurring simultaneously. Monitoring the project's status can help you resolve any issues in a timely fashion, without jeopardizing the project's timeline or budget.

Partners and Other Support:

Project Manager: Town of Arlington, Emily Sullivan

As the property owner, Arlington was responsible for the final decisions made as part of this project. Arlington managed the project architect and the project contractor, tracked the project's budget, and communicated with the grant administrators.

Project Co-Manager: Mystic River Watershed Association, Amber Christoffersen

MyRWA set the foundation for this grant because MyRWA was conducting CPA-funded outreach to create a linear park along Mill Brook. Building off the work MyWRA had already done, the Project Team was able to expand the linear park concept into a park amenity and resilience building project.

Project Architect: Weston & Sampson, Jeanne Lukenda

Weston & Sampson had been hired during MyRWA's linear park project to conduct a feasibility study of the brook's corridor. Through the study, Weston & Sampson assessed the feasibility of a linear park through private property, assessed the environmental conditions of Wellington Park, and created a preliminary schematic design. Upon MVP funding, Weston & Sampson was hired to design the project, assist with project permitting, and conduct construction administration.

Project Contractor: RAE Contracting, Rich Campbell

RAE contracting was hired to construct the project designed by Weston & Sampson. To RAE's full credit, they were able to construct all aspects of the project in under two months. RAE is a fantastic contractor.