Greening Lord Pond Plaza

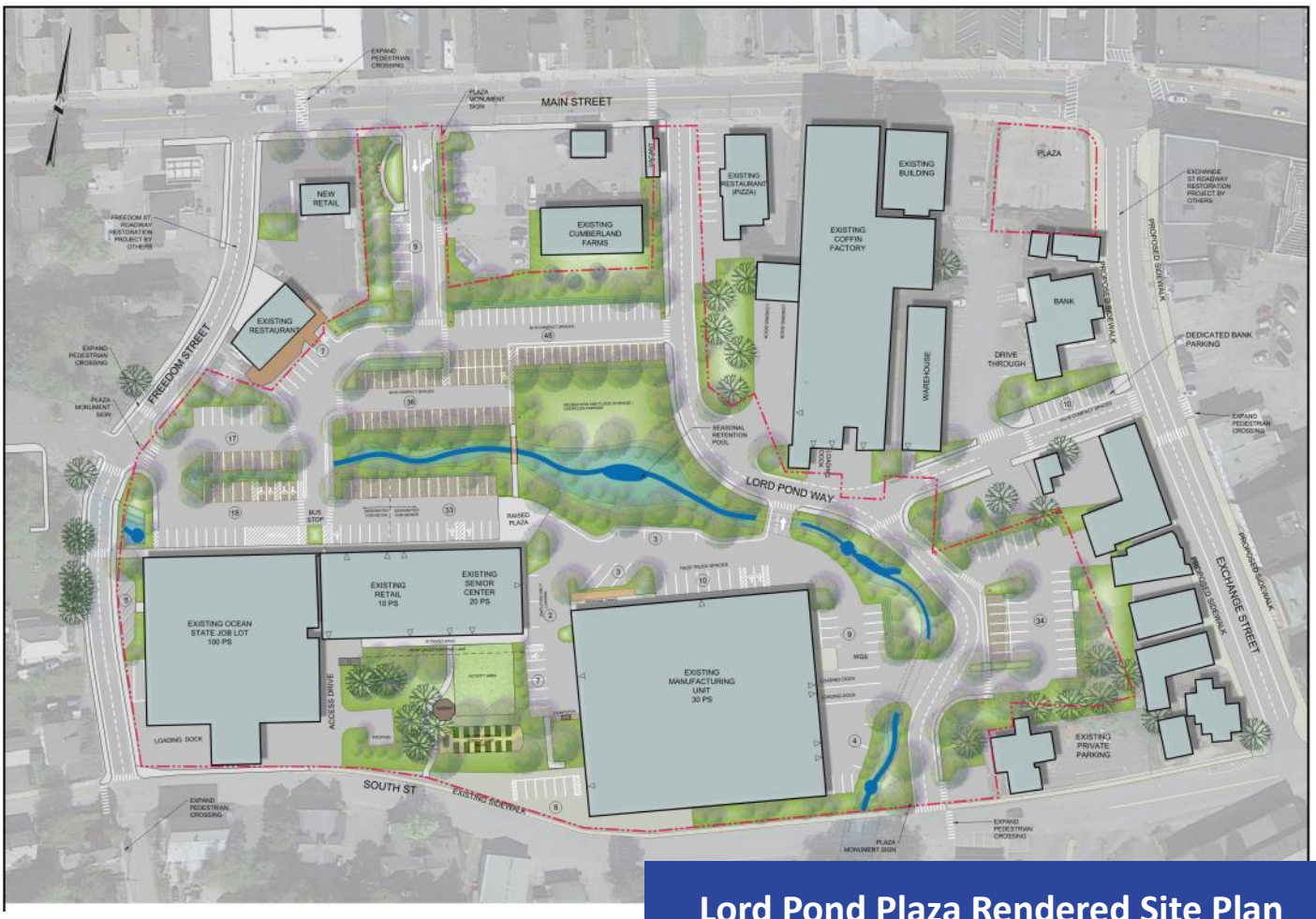
MVP REGION	Greater Connecticut River Valley
GRANT AWARD	$189,030
MATCH AMOUNT, SOURCE	$6,408 in-kind hours and $72,450 cash match
PROJECT TYPE	Design and Permitting
CORE VALUES EXEMPLIFIED	Employing Nature-Based Solutions; Achieving broad and multiple community benefits; and Furthering a community identified priority action to address climate change impacts.
OUTCOMES	Development of 100% design documents, construction specifications, and a cost estimate
ADDITIONAL RESOURCES	https://lordpondplaza.wordpress.com/

Community Background

The Town of Athol is a typical New England historic manufacturing town with a population of 12,000. Athol is in the North Quabbin region of Central Massachusetts, 70 miles west of Boston. Athol's history as a mill town is characterized by its proximity to the Millers River, which meanders through the town in an east to west direction. Factories powered by the Millers River through the mid - to late-19th century established Athol's legacy as "Tool Town" by supporting numerous high-precision tool manufacturers, notably L. S. Starrett Company, which remains the town's largest local employer. Athol is an environmental justice community with socially vulnerable populations, low-income elderly populations, and teens/ transition age youth.

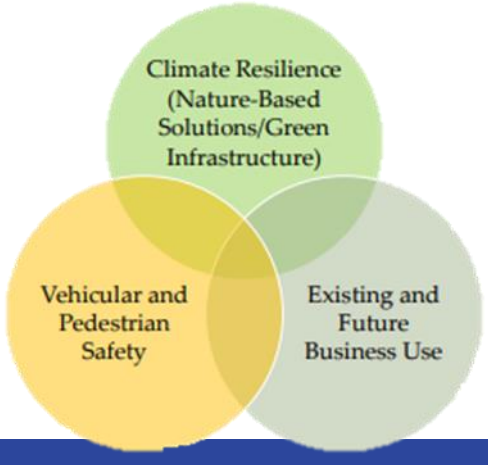
Project Goals

Lord Pond Plaza was identified as a key source of climate vulnerability in the community during previous climate resilience planning initiatives in Athol. The goal of the project is to redevelop Lord Pond Plaza in a manner that addresses two key sources of climate exposure: extreme temperatures/ urban heat island effect and inland/urban flooding due to extreme precipitation events. The effects of urban heat island effect and inland flooding present significant social, economic, and environmental vulnerability for the Town of Athol. These goals were identified through community engagement strategies during previous climate resilience planning in Athol as well as community



Lord Pond Plaza Rendered Site Plan

engagement feedback (surveys, public site walks and information sessions, municipal stakeholder feedback). This resulted in the conceptual design evaluation framework seen here.



Conceptual Design Evaluation Framework

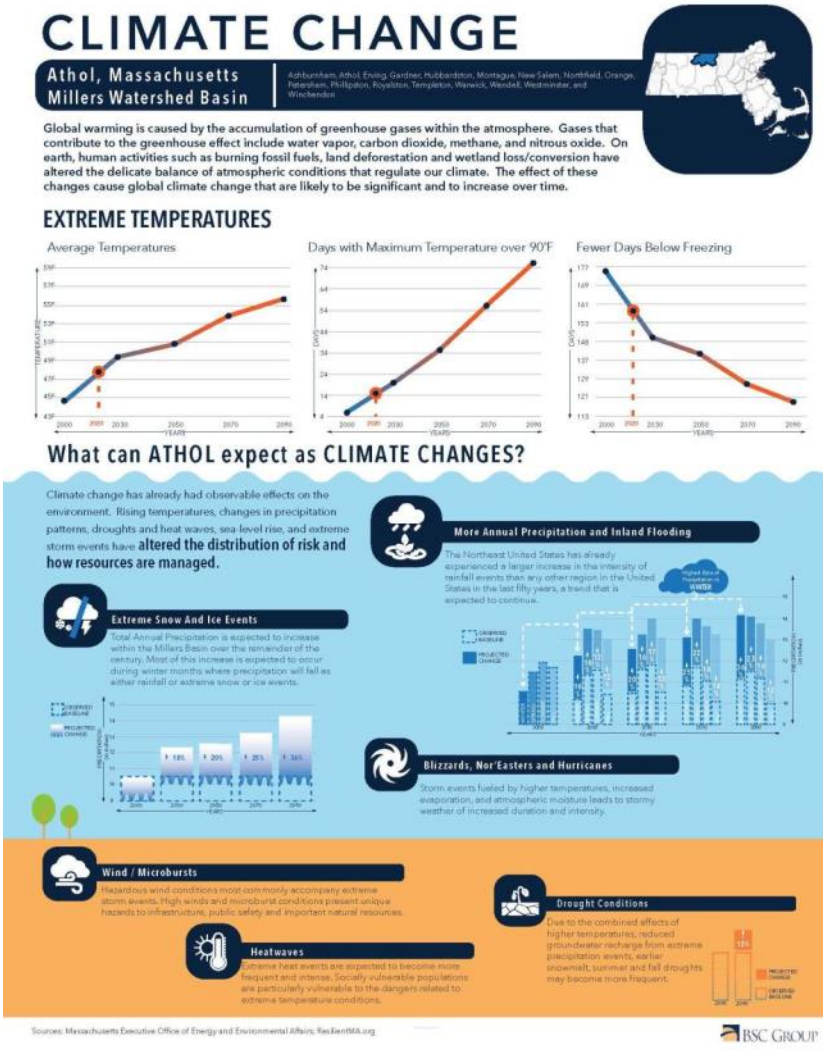
Project Outcomes

The Greening Lord Pond Plaza project resulted in the development of 100% design documents, construction specifications, and a cost estimate for the Town to proceed to the construction phase once funding is obtained. The project addressed two key sources of climate exposure related to social resilience. These were extreme temperatures/urban heat island effect and inland flooding due to extreme precipitation events . Nature-based solutions were applied in the daylighting of a section of Mill Brook, the creation of wetlands and wildlife habitat, and the increase of flood storage and stormwater bioswales, These solutions will address the heat island effect, provide passive recreational opportunities, and

improve stream connectivity. It is estimated that the project will create close to 12,000 square feet of wetlands while daylighting over 500 linear feet of the perennial Mill Brook (currently culverted beneath the plaza) Additional co-benefits include a significant reduction of impervious surface at the plaza, increased tree canopy cover, the creation of pollinator habitat, and improved vehicular and pedestrian safety.

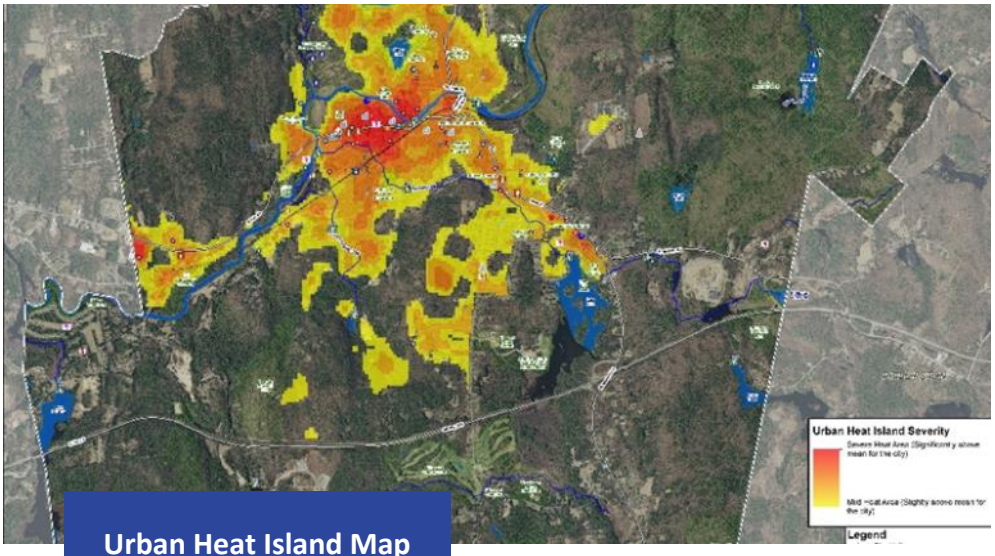
Lessons Learned

First, not all public engagement strategies will be successful. Initially, Athol tried to incorporate Photovoice into their public engagement process. Photovoice is a participatory photography and digital storytelling platform. Despite providing information on Photovoice and blasting it out to the public, they did not receive any participation and had to switch the approach to alternative methods of public engagement – such as focusing on keeping the project website up to date and creating an ArcGIS Storymap for the project.



Climate Change Infographic focusing on Athol

Second, understanding the permitting process is critical to a smooth design process. Originally, the projects leaders were unsure of what federal, state, and local permits might be triggered by the project design and budgeted for them all. Ultimately, they had budgeted for permitting that was not deemed necessary as the design progressed.



Urban Heat Island Map