

## **Municipal Vulnerability Preparedness Program Action Grant Case Study**

**Municipality:** Holyoke

**Project Title:** Urban Forest Equity Plan

**Award Year (FY):** 2021

**Grant Award:** \$135,032

**Match:** \$45,585.60

**Match Source:** In-Kind Staff Hours

**One or Two Year Project:** Two

**Municipal Department Leading Project:** Office of Conservation and Sustainability

**Project Website URL:** [holyoke.org/ufep](http://holyoke.org/ufep)

### **Community Overview:**

Holyoke has a unique legacy as one of the first planned industrial cities in the country, still evident in the densely developed and populated downtown with a system of three canals that once powered a massive complex of paper mills. The dam that diverts water to these canals from the Connecticut River now provides most of the city's electricity. In contrast with Holyoke's industrial downtown neighborhoods, the western portion of the city is relatively rural, containing a small agricultural belt and conserved natural areas, including the Mount Tom Reservation and watershed forest owned and managed by the Holyoke Water Department.

Large portions of Holyoke are classified as EJ populations, including the four neighborhoods of Holyoke's urban core which were the focus of this grant project: The Flats (Census Tract 8114), South Holyoke (Census Tract 8815), Downtown (Census Tract 8117), and Churchill (Census Tract 8116). According to 2010 census data, the entirety of these neighborhoods are classified as EJ populations under all three categories: income, with an average of \$17,083.00 per household; minority, with an average of 87.5% of individuals identified as Hispanic; and English language isolation, with an average of 66% of 6-17 year olds and 78% of adults speaking Spanish at Home.

### **Project Description and Goals:**

- Where was the project located?

This project consisted of four interrelated strategies aimed at fundamentally reshaping Holyoke's relationship with its trees and people. The Regulatory Review examined city-wide ordinances and regulations. The Urban Forest Equity Plan also evaluated management practices throughout Holyoke, but focused on strategies for adding canopy to the four neighborhoods in the city core with the highest proportion of impervious surface, as did the Public Tree

Inventory. The Historic Trees of Holyoke identified specimens city-wide but also focused on notable trees downtown.

- What climate change impacts did the project address?

Our project most directly addressed increased summer temperatures and urban heat island impacts with associated ground-level ozone. It also addressed stormwater management and localized flooding, with some considerations for wildlife habitat connectivity, particularly the regulatory review.

- What were the specific goals and tasks of the project as stated in your application?

Though the scope of study was on Holyoke's urban forest and overall management, the Urban Forest Equity Plan, Public Tree Inventory, and Historic Trees of Holyoke projects gave particular focus to the four downtown neighborhoods that currently have the lowest levels of tree canopy cover. The Regulatory Review process evaluated city codes and ordinances for practices that promote the protection, enhancement, and expansion of canopy cover in our target area.

Overall, our goal was to research and implement long-term institutions for the enhancement, expansion, and real-time monitoring of Holyoke's urban forest. The Urban Forest Equity Plan, was intended to provide an analysis of the state of Holyoke's urban forest, set goals for continued resilience in a changing climate, and most importantly, establish a mandate and strategies for expanding maintenance and monitoring through sources for new operational costs and labor hours. The Public Tree Inventory provided crucial data for this plan and provided a tool for monitoring and prioritizing efforts, upgrading the capability of the city to manage its urban canopy.

- 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

Overall our project met or exceeded all goals set forth in the application. The Urban Forest Equity Plan provided a strong "roadmap" for improving tree canopy and health outcomes in areas with high proportions of impervious surface, with the Inventory and Regulatory Review providing ongoing tools to evaluate progress over time.

Though the Covid-19 pandemic caused our project team to revise the approach to public engagement, we were still able to undertake meaningful dialogue with community stakeholders and the public through a combination of online forums and survey about experiences with

Holyoke's urban forest. The success of these efforts was due in large part to our non-profit community partners who worked with the City and contracted consultant to craft a thoughtful campaign.

The project was completed entirely within the originally proposed schedule, with the majority of the deliverables completed in FY21, and Historic Trees of Holyoke guide completed in early FY22.

### **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.

Holyoke Urban Forest Equity Plan: Planning Document that outlines a long-term vision and strategy to equitably expand and improve the urban canopy, develops tools and strategies for better maintenance and care of Holyoke's public trees. Informed by a series of four public forums, interviews with key staff and stakeholders, community survey, and public tree inventory. Available at: <https://www.holyoke.org/ufep/>

Public Tree Inventory: Inventory of 3,028 public trees in the four target neighborhoods, with data fields for species, size, growing environment, and health metrics. Available at: <https://hol yokema.treekeepersoftware.com/index.cfm?deviceWidth=1920>

Regulatory Review: Marked-up review of ordinances and regulations, informed by 5 meetings of the Regulatory Review Advisory Working Group. Review documents included annotated versions of Holyoke's Stormwater, Zoning, Subdivision, and Floodplain ordinances and associated regulations.

Historic Trees of Holyoke: Field Guide and map to 28 historic trees in Holyoke, with interpretive information and images. Available at: <https://www.holyoke.org/historic-trees/>

### **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?

The most pertinent lessons from this project related to community engagement and incorporating feedback into planning documents. Though our remote forums and survey methods were successful in terms of participation, we found that continued outreach is needed

beyond the scope of the original project timeline. During the online community forums, for example, the project team was able to report on preliminary results from the tree inventory and previous studies of Holyoke's canopy. The feedback was incorporated into the final plan, and then had to be reshared with community members outside of the MVP project timeline. The UFEP and Inventory are useful resources but will need to be updated every 5-10 years to remain relevant and properly track progress. Other communities should carefully consider how to maintain this dialogue with the public over long time periods.

### **Partners and Other Support:**

#### City Staff

Yoni Glogower (Office of Conservation and Sustainability): Overall project management, including preparation of RFQs for hiring contractor services, scheduling and hosting kick-off meetings and community forums, overseeing work and submitting monthly progress reports to the Regional MVP Coordinator, reviewing and providing feedback on plan drafts, management of funds and reimbursements, and all other activities related to ongoing grant management.

Cynthia Espinosa (Office of Planning and Community Development): Technical assistance on public and community engagement and shaping the community forum process for the Urban Forest Master Plan.

Michael McManus (Department of Public Works): General support with drafting RFQs and hiring process, technical assistance and input with drafting the Urban Forest Equity Plan and Regulatory Review.

John Twohig (City Forester, Department of Public Works): Additional consultation for The Urban Forest Equity Plan process and Regulatory Review.

Kate Preissler (Director, Holyoke Wistariahurst Museum): Management of the "Historic Trees of Holyoke" project in collaboration with the Conservation and Sustainability Director, including regular coordination with the intern who will conduct the work.

#### Consultant Team

Davey Resource Group: Drafting Urban Forest Equity Plan and Public Tree Inventory

Fair Forests Consulting: Advisory support for public engagement component of the Urban Forest Equity Plan

Community Circle: Community Forum facilitation for the Urban Forest Equity Plan

### Community Partners

Neighbor to Neighbor: Consultation on UFEP public forum outreach, event recruitment

South Holyoke Safe Neighborhood Initiative: Consultation on UFEP public forum outreach, event recruitment

OneHolyoke CDC: Consultation on UFEP public forum outreach, event recruitment, dissemination of hard copy surveys

Holyoke Media: Consultation on UFEP public forum outreach, host of virtual events

### **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.