

GREAT LAKES RESTORATION INITIATIVE

OVERVIEW

The Great Lakes Shoreline Cities Green Infrastructure Project – Near East Side deploys green infrastructure to manage and retain stormwater in areas outlined by the Lower East Side Action Plan (LEAP) and RecoveryPark. The projects are located within the Detroit Water and Sewerage Department’s East Jefferson district that experiences combined sewer overflows to the Detroit River. In the LEAP area, The Greening of Detroit deploys green infrastructure in coordination with the community, building off of pilot efforts in the Cody Rouge neighborhood. In the RecoveryPark area, the Detroit Water and Sewerage Department (DWSD) contracts for implementation of various techniques for managing runoff, including bioswales, bioretention, and other green infrastructure techniques. As part of the first phase of RecoveryPark, excess runoff is collected and transferred to storage facilities for use as irrigation in urban agriculture. Lawrence Technological University monitors the impact of these green infrastructure treatments on stormwater runoff to the combined sewer system.

OBJECTIVE

- Reduce stormwater runoff to the combined sewer system in an area affected by combined sewer overflow (CSO) discharges into the Detroit River
- Construct a system that will lead to harvesting rainwater for use in urban agriculture
- Beautify the area

RESOURCES

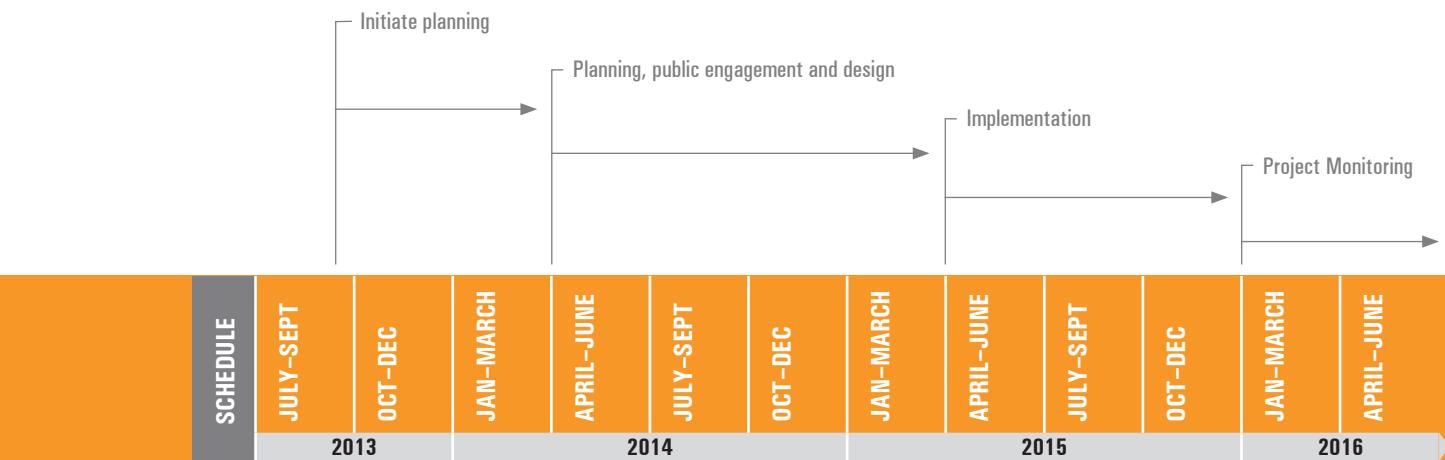
Funding is requested under the Great Lakes Shoreline Cities Green Infrastructure Grants Program through the Great Lakes Restoration Initiative. The Fred A. and Barbara M. Erb Family Foundation and The Kresge Foundation contribute local matching funds.

EVALUATION METRICS

Lawrence Technological University develops a rigorous monitoring and evaluation approach that serves as a model for measuring the effectiveness of green infrastructure in managing stormwater in the city of Detroit. Their approach measures, before and after treatment, the volume of stormwater managed per unit, cumulative volume of stormwater managed, and cost vs. benefit of green infrastructure in stormwater management. LTU uses various hydrology methods to conduct monitoring, and thereby evaluate the effectiveness of different stormwater management techniques.

IMPLEMENTATION STRATEGIES

- C INTRODUCE NEW FORMS OF DEVELOPMENT
- D CREATE NEW AND DIVERSE OPEN SPACE SYSTEM FOR THE CITY
- B CREATE LANDSCAPES THAT WORK
- D REPURPOSE VACANT LAND TO CREATE GREEN NEIGHBORHOODS
- F UTILIZE PRODUCTIVE LANDSCAPES AS THE BASIS FOR A SUSTAINABLE CITY
- B USE VACANT LAND AS A TOOL FOR NEIGHBORHOOD STABILIZATION
- C TRANSFORM LARGELY VACANT AREAS THROUGH BLUE AND GREEN INFRASTRUCTURE
- E INCORPORATE MORE INNOVATIVE VACANT LAND APPROACHES



INITIATIVE VITALS

CONTRIBUTING ORGANIZATIONS: DWSD, SEMCOG, Michigan Land Bank, RecoveryPark, The Greening of Detroit, Warren/Conner Development Coalition, Lawrence Technological University (LTU), Detroit Economic Growth Association (DEGA), Detroit Future City, The Kresge Foundation, Fred A. and Barbara M. Erb Family Foundation

DFC INITIATIVE TYPE: Partner

DFC REPRESENTATIVES: Chris Dorle, Erin Kelly, Ingrid White

INITIATIVE SCALE: 30-50 vacant lots in the LEAP Area; 32 acres in the RecoveryPark Area

INITIATIVE DURATION: Planning was initiated in July 2013. If awarded, public engagement, design, implementation and monitoring will take place from May 2014 through June 2016

RELEVANT PLANNING ELEMENTS: Land Use, City Systems, Neighborhoods, Land and Buildings Assets

DFC APPROACH

Amy Mangus from SEMCOG leads the initial work plan development, in strategic coordination with Detroit Future City, and with contributions from other key partners to the project.

The Detroit Water and Sewerage Department (DWSD) is the applicant for the project and receives the grant funding. DWSD partners with DFC's fiduciary, the Detroit Economic Growth Association (DEGA), to administer some portion of the project activities. SEMCOG, in partnership with DWSD and DEGA, manages the overall project.

The Warren/Conner Development Coalition and RecoveryPark are project partners. Lawrence Technological University (LTU) provides project guidance and construction project monitoring. All property utilized in this project is publicly-owned in collaboration with the City of Detroit and the Michigan Land Bank. The Greening of Detroit is the not-for-profit contractor for the vacant lots in the LEAP area. The DFC implementation Office provides strategic leadership to ensure coordination with the DFC Framework and other new and ongoing initiatives in Detroit.

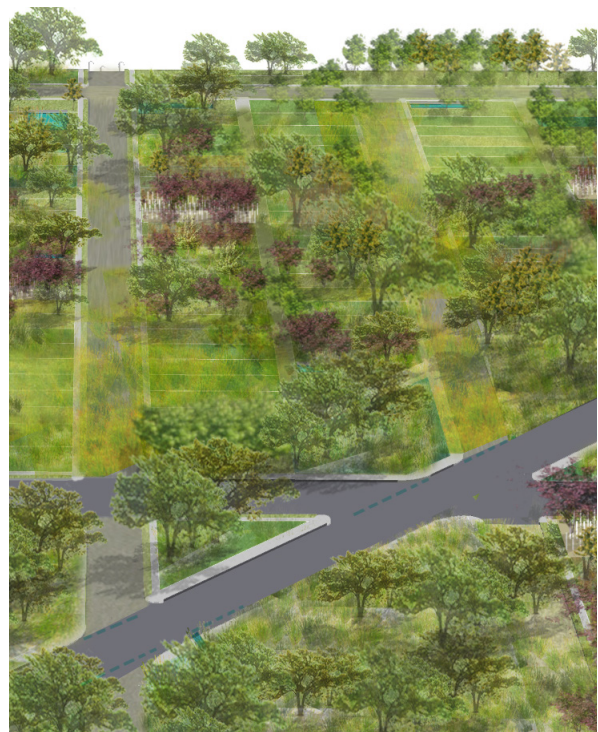


Image Source: Detroit Future City