

DENDRO-REMEDICATION PILOT PROGRAM

OVERVIEW

Dendro-remediation is the process by which trees are planted to reduce and eliminate toxic substances in the soil over time. Certain former industrial and some commercial sites (such as auto repair garages and laundromats) may introduce toxicity into the soil through their operations. This can create challenges in areas where the future land use will move away from industrial use. Dendro-remediation is a low cost means for treating the soil and preparing it for future use. Detroit Future City will support The Greening of Detroit in identifying sites for dendro-remediation implementation.

OBJECTIVE

The primary objective of this project is to reduce soil toxicity by introducing green infrastructure to select former industrial and commercial sites. Secondary objectives include improving stormwater management, improving air quality, and beautifying vacant lots in a way that reduces maintenance costs for the City of Detroit.

RESOURCES

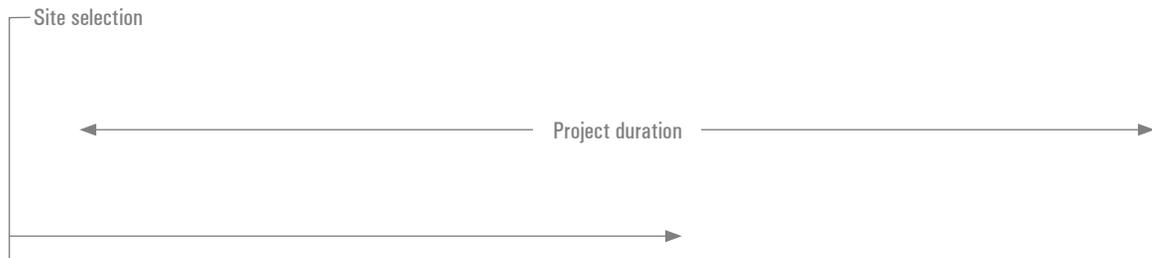
- DFC staff support
- Hamilton Anderson Associates staff support
- Soil quality data - TBD

IMPLEMENTATION STRATEGIES

- E** LAND REGULATIONS, TRANSACTIONS, AND ENVIRONMENTAL ACTIONS
- 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
- E** MAKE LANDSCAPE INTERVENTIONS CENTRAL TO DETROIT'S RENEWAL

EVALUATION METRIC

- Improvement in soil quality



INITIATIVE VITALS

CONTRIBUTING ORGANIZATIONS:

The Greening of Detroit, DFC

DFC INITIATIVE TYPE: Partner

DFC REPRESENTATIVE: Chris Dorle

INITIATIVE SCALE: Up to 20 acres of vacant land to start

INITIATIVE DURATION: July 2013 – March 2014 site selection and mapping

RELEVANT PLANNING ELEMENTS:

Economic Growth, Land Use, City Systems, Neighborhoods, Land and Buildings Assets

DFC APPROACH

The Greening of Detroit has requested and received funding for dendro-remediation in the city and has approached the DFC Implementation Office for assistance in site identification. DFC provided an initial list of sites based on specific criteria (publicly owned, larger than 2 acres, estimated prior industrial/commercial use). DFC will continue to refine and build this site list, and it will engage Michigan’s Department of Environmental Quality (DEQ), the Environmental Protection Agency (EPA), and other partners in search of soil quality data with the goal building a comprehensive map of potential brownfield sites to be targeted for dendro-remediation.

As sites are identified, The Greening of Detroit will deploy dendro-remediation treatments appropriate for the soil quality.



Image Source: Detroit Future City