BUILDING RESILIENCY THROUGH GREEN INFRASTRUCTURE.

A Community Wealth Building Approach

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In the following excerpt from the report *Building Resilience Through Green Infrastructure: A Community Wealth Building Approach*, we explore one of four examples of social enterprises and worker cooperatives across the United States active in green infrastructure. These case studies were picked to study different contexts, climates and business models. Each case study analyzes the ways that the business model was used to build community wealth, as well as how the enterprise started, how it operates today, and where it builds strategic partnerships. The full report, as well as a separate monograph on each case study, is available at democracypartnership.org/greeninfrastructure.
Overview of practitioner case studies

Eastside Community Network’s Green Team

A new social enterprise in the city of Detroit, seeking to provide eastside Detroit residents with opportunities for employment while also harnessing the vast amount of vacant land—an outcome of both deindustrialization and the housing crisis—for community benefit.

<table>
<thead>
<tr>
<th>Organizational Structure</th>
<th>Location</th>
<th>Founding Year</th>
<th>Employment</th>
<th>Focus of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Enterprise</td>
<td>Detroit, Michigan</td>
<td>2017</td>
<td>In the process of deciding if The Green Team will operate on a cohort training or longer-term job model.</td>
<td>Maintenance for green spaces (mowing, leaf blowing, weeding, etc.) Installation including raingardens and bioswales.</td>
</tr>
</tbody>
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Verde Landscape

Verde Landscape seeks to ensure environmental wealth is open to all. Working in the largely Latinx neighborhood of Cully, Verde works with other partner organizations to create green infrastructure assets in community spaces and new affordable housing buildings.

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<tr>
<td>Social Enterprise</td>
<td>Portland, Oregon</td>
<td>2005</td>
<td>Four-year training program, with three pathways for graduation: (1) continue to work for Verde, (2) acquire long-term job elsewhere, (3) start your own business.</td>
<td>Installations including urban tree plantings, rain gardens, and bioswales. Maintenance of green infrastructure.</td>
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Landforce provides a robust training program for underserved community members in the post-industrial city of Pittsburgh, providing everyone from returning citizens to refugees an opportunity to get back on their feet while also performing an environmental service.

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<tr>
<td>Social Enterprise</td>
<td>Pittsburgh, Pennsylvania</td>
<td>2015</td>
<td>Eight-month season cohort model, then placed at longer-term jobs.</td>
<td>Trail construction, Habitat and vacant land restoration, Installations including raingardens, bioswales, etc., Maintenance of green infrastructure.</td>
</tr>
</tbody>
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Dig Cooperatives, Inc.

Dig Cooperatives, Inc. is one of the few worker cooperatives in the field. It has taken on the task of redefining what it means to work in the construction sector by committing to a democratic workplace and sharing the surplus of revenues. The coop operates in Oakland, which is seeing an increase in gentrification and the climate impacts of drought.

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<tr>
<td>Worker Cooperative</td>
<td>Oakland, California</td>
<td>2005</td>
<td>Six-month trial period and a contribution of $2,000 to become a worker-owner.</td>
<td>Installations of rainwater catchment systems, also referred to as graywater systems, Additional sustainable construction projects.</td>
</tr>
</tbody>
</table>
The Green Team, Eastside Community Network

Type: Social enterprise, landscape maintenance business

Location: Detroit, Michigan

Green Infrastructure Type: Green infrastructure installation and maintenance, such as rain gardens and bioswale medians. General maintenance, including property mowing and leaf blowing.

The Green Team, a project of the Eastside Community Network (ECN) is a new social enterprise focused on employing local Eastsiders, residents of a neighborhood hard-hit by disinvestment and the 2008 recession, to install and maintain green infrastructure assets in their community. With huge
swaths of vacant land in Detroit, there is a need to leverage the untended areas for stormwater management to stop the pollution of an important freshwater source, The Great Lakes, and limit chronic flooding in low-income areas. As a new venture started in 2017, the Green Team is proving its business model on ECN’s network of properties and is in the process of expanding its customer base.

**City background:** In the 1950s, Detroit had 2 million residents and laid claim to the highest per capita income of any American city.\(^{63}\) As a city heavily dependent on its automobile corporations (Ford, Chrysler, and General Motors), Detroit was hard-hit by the decline of domestic manufacturing in recent decades and the 2008 recession wiped out many of the remaining jobs that Detroit’s inhabitants had relied on. By then, the city became home to the zip codes with the most foreclosed buildings in the country from the housing crisis. That was worsened in part by unpaid water bills: In 2014 alone, 11,979 homes that went to auction had water debt included in the property taxes.\(^{64}\) Today, the Detroit Land Bank Authority, an agency that acquires and manages abandoned and foreclosed property, owns one in every four parcels of land in the city.\(^{65}\)

Detroit sits at the intersection of two of the largest freshwater lakes in the world—Lakes Erie and Huron—making taking care of Detroit’s water system and sewer overflows all the more important. Higher volumes of precipitation associated with climate change are likely to increasingly overwhelm the city’s old, combined sewer system and spill into the Rouge and Detroit Rivers, which will take the sewage directly to the Great Lakes.\(^{66}\) Detroit’s large percentage of low-income families are less likely to have the money, time, or ability to handle the flooding, exacerbating such public health concerns as mold and vector-borne diseases. Furthermore, the Detroit city government reported 22,000 vacant houses throughout the city as of the spring of 2018,\(^ {67}\) many with people squatting in them, that aren’t being maintained but are still being affected by these overflow instances.\(^{68}\) Making matters worse, in 2014 DWSD started cutting off water supplies to its lowest-income
users who were unable to pay to alleviate their debt, leading to a water crisis in the city.69

In 1999, Detroit was put under a consent decree requiring action to limit excess combined sewer overflows, which was fulfilled and lifted in 2017. The city now operates under a National Pollutant Discharge Elimination System (NPDES) permit that requires them to invest $50 million in stormwater management by 2029 with specific stipulations for green infrastructure.70

**How Eastside Community Network builds community wealth:** Eastside Community Network has worked alongside Eastside Detroiter for over 30 years to build a resilient, equitable community that fosters support for community members. ECN’s work has catalyzed a community development bank, a credit union, two health clinics, and, most recently, investment in green infrastructure in the local area.71

> ECN prioritizes turning vacant plots into productive spaces for community—such as thriving gardens—that alleviate flooding from stormwater overflows.

In the wake of the 2008 mortgage crisis, whole swaths of Detroit were left vacant. To revitalize these neighborhoods and leverage the now-open space, ECN prioritizes turning the vacant plots into productive spaces for community—such as thriving gardens—that alleviate flooding from stormwater overflows. The nonprofit acquires, sells, and maintains properties through a range of creative land assemblies and local partnerships with investors and developers. As a partner of the Detroit Land Bank Authority, ECN has been able to acquire land at a low price and preserve it for the needs of Eastsiders.72 For instance, Chandler Park residents and ECN are collaborating to implement green infrastructure designs that will support community needs and limit stormwater overflows in the vacant space.73
**ECN’s Green Team:** ECN has recently launched “The Green Team,” which has been developing its expertise and business model. As Andrea Benson, ECN’s Economic Development Manager described it, “The Green Team can be stewards and potentially fill a gap in the market and reinforce the importance of stormwater management. This team will hopefully will be able to get a head start on the potential demand we see for managing or installing projects of various scales in the community.”

Currently funded and contracted by ECN, The Green Team considers itself in the “piloting” stage of development. Right now, it is working on getting its first cohort trained up and working. The Green Team currently employs three workers and a manager for 25 hours per week with hopes to expand both the team and the hours. The nonprofit hopes to spin off The Green
Team into its own self-sustaining enterprise that can provide Eastsiders green jobs that serve its community members.

As a young team, it is still strategizing how to provide the most job benefits to Eastsiders. In other words, should the program act as a workforce training program that shepherds on cohorts to full-time positions with other companies or does it provide long-term, stable employment to a smaller group of Eastsiders?74

Workforce development: One of the main goals beyond building green infrastructure is to provide Eastsiders—particularly those who lack access to the workforce—with good, equitable, reliable jobs. Detroit’s downturn and precipitous fall into bankruptcy following the 2008 crash was a wake-up call—Detroiter can’t just rely upon big companies to provide the jobs. Instead, they need employment programs that will be there for the long haul and provide job opportunities that give them a second chance. While the unemployment rate has dropped since its high of between 28 and 50 percent in 2009, its rates are still higher than that of Michigan state or the nation.75

Jobs that prepare Detroit for the effects of climate change, transitioning land from vacant to productive, and creating public good could be a positive answer. However, in a city with four seasons like Detroit, winter is a quiet time for green infrastructure installations. This poses a major question: Should The Green Team provide year-round employment in order to deliver on a reliable job, and if so, how? “This goes back to equity and sustainability,” Andrea says, “Based on this work, it can be seasonal or year-round—and what are the implications for stability in someone’s life if you just hire them for a season?”76

Keeping workers on staff for a full year at $15-$20 an hour without enough cashflow during slow seasons could run the organization dry. That’s why
the Green Team and ECN are partnering with other organizations to identify other types of important work, such as snow removal, that could help residents or small businesses in the area and can keep the Green Team afloat during the colder seasons.

**How ECN’s social enterprise got started:** Originally, ECN set out to educate residents about stormwater management and how to install rainwater gardens and rainwater catchment systems with a grant from the Institute for Sustainable Communities. However, a combination of factors made ECN shift focus in order to achieve its ultimate goal: developing a sustainable, resilient, and thriving Eastside community.

The program’s residential focus targeted lowering residents’ water bills by gaining rebates on stormwater fees. The Detroit Water and Sewerage Department’s recent changes to stormwater fees had created a need for lowering stormwater bills for residents.

However, when it became clear that the Authority did not have the capacity to individually inspect and accept green infrastructure implementation, such as the rain gardens ECN wanted to train residents to establish, the authority decided to provide all residents with a 20 percent reduction in their stormwater bill “in good faith” that they would initiate downspout disconnects and other green infrastructure tactics. To receive additional stormwater rebates, residents had to prove their plans would achieve more than a 20 percent reduction—which can be challenging and expensive.

Realizing this, ECN tacked course. The better opportunity, paired with better incentives, was to focus on larger-scale green infrastructure installation and maintenance, particularly on small- to medium-sized business land,
since the new stormwater fee structure would affect this group more substantially. Plus, ECN identified the opportunity to employ Eastsiders with this new focus, achieving their goal of community-scale sustainable change and providing economic opportunity to local residents. The new project was dubbed “The Green Team.”

The umbrella nonprofit, ECN, has proven an important resource by providing space for tools and capacity for overhead costs like payroll and insurance that allowed The Green Team to get on its feet. But as the program grows and projects increase in complexity, The Green Team will have to find long-term funding streams to become sustainable on its own.

**Major contracts:** As a young social enterprise, ECN continues to incubate its Green Team in-house. ECN cancelled its contracts for lawn mowing, gardening, and general landscape maintenance on its properties in order to redirect those funds towards the Green Team’s work. This has allowed the Green Team time and a protected space to build up both skills and a portfolio, while dealing with early-stage hurdles. Providing the Green Team access to ECN’s properties, well known on the Eastside, gave the Green Team the opportunity to socialize with the larger community so other local businesses or residents can hire its services.

While ECN continues to buy more property from the Land Bank for community-based development, relying only on ECN property will not sustain the social enterprise alone. The Green Team expects to build out its green infrastructure work through installation contracts, but also in large part through general maintenance projects, like mowing.

**Funding, financing, and revenues:** ECN was able to secure a $28,000 grant from the Institute for Sustainable Communities, which helped finance the ideation and some of the initial costs of the social enterprise. Furthermore, ECN’s support in the form of a space, general operating assets like printers
or computers, also delivers capacity that a startup without nonprofit support may not have had.

**Key partnerships:** Since the Green Team is a burgeoning social enterprise without many contracts in place now, its key partnership is with its incubating organization—ECN. However, ECN’s deep relationship with many organizations, businesses, and residents in Detroit provides it with opened doors to speak and learn with others across the city, and across the United States. In fact, ECN has been in contact with Landforce—another social enterprise profiled in this report—to exchange ideas, particularly around how to structure employment at the organization. The Green Team has interest in building partnerships with other skill-building organizations to shape in-house capacity for training on green infrastructure, as well as identify other jobs to fill the “off-season,” such as home weatherization or snow removal.

While ECN has partnered with the government in a nonprofit capacity in the past, the Green Team to date has not pursued government contracts because of the immense amount of time and effort that it takes to apply. Instead, it is looking for contracts with real estate managers, local businesses, and even some residential contracts to diversify the client base and job-type.

**Lessons learned**

- In a four-season climate like that of Detroit, it can be hard to keep workers employed all year with enough green infrastructure projects or mowing contracts. This proves to be a major concern for providing long-term stability in a construction
industry typically seen as providing work that is seasonal and unpredictable.

• Having land as an asset is a key way to incubate a small green team. This opens up the opportunity to contract in-house, proving the business model while also defraying costs like initial insurance coverage and physical space to store equipment. Such access can make a huge difference in giving more space to work out the kinks of the social enterprise.
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