

October 2015

BOOSTING PRODUCTIVITY:

Lessons from the Green Reuse and Vacant Land Maintenance Learning Exchange

Center for Community Progress



**Author:**

Jennifer Leonard

Vice President and Director of National Leadership and Education
Center for Community Progress

For more information contact Chelsea Allinger
Director of Communications and Development
callinger@communityprogress.net

Center for Community Progress – National Office:

1001 Connecticut Avenue N.W. Suite 1235
Washington, D.C. 20036
(877) 542-4842
www.communityprogress.net

ABOUT CENTER FOR COMMUNITY PROGRESS

Founded in 2010, the Center for Community Progress is the only national 501(c)(3) nonprofit organization solely dedicated to building a future in which entrenched, systemic blight no longer exists in American communities. The mission of Community Progress is to ensure that communities have the vision, knowledge, and systems to transform blighted, vacant, and other problem properties into assets supporting neighborhood vitality. As a national leader on solutions for blight and vacancy, Community Progress serves as the leading resource for local, state, and federal policies and best practices that address the full cycle of property revitalization. Major support for Community Progress is generously provided by the Charles Stewart Mott Foundation and the Ford Foundation.

TABLE OF CONTENTS

About the Green Reuse and Vacant Land Maintenance Learning Exchange	4
Section 1: Small Scale Disposition, Maintenance, and Alternative Land-Use.....	5
Decreasing Stormwater Impacts through Innovative Rain Gardens	6
Leveraging Resident Action to Turn Publicly-Owned Properties into Community Assets	8
Making a Visible Difference in Residents' Lives through Code Enforcement Alternatives	10
Returning Lots to Productive Use by Ramping Up Lot Disposition	12
Section 2: Large-Scale Alternative Land Use.....	14
Using Green Infrastructure to Support a Healthy Stormwater System	15
Supporting a Robust Local Food System	17
Using Trees to Clean Contaminated Land.....	19
Leveraging Private Enterprise to Make a Large-Scale Impact	21
Reducing Long-term Maintenance Needs through Well-Designed Landscapes.....	23
Section 3: Outreach and Engagement	25
Soliciting New Ideas through a Design Competition.....	26
Generating Grassroots Community Support for Alternative Land Uses	28
Section 4: Resources	30

ABOUT THE GREEN REUSE AND VACANT LAND MAINTENANCE LEARNING EXCHANGE

Intentional green reuse of vacant land is both practical and aspirational. It is practical, because municipal resources available to maintain vacant lots (mowing, clearing debris, etc.) and respond to safety concerns they cause often are inadequate to meet the demand. Reusing vacant land can reduce the inventory of what the public sector must maintain by transferring properties to a responsible community stakeholder or designing low-maintenance landscapes. Green reuse is aspirational because, by using land in “alternative ways,” cities’ public leaders, private sector, and residents can work together to create a different future – one where land contributes to safer neighborhoods, increased food production, engaged citizens, a healthier environment, and community spaces where residents and visitors enjoy spending time.

Two cities that have been making a fundamental shift in their approach to vacant land maintenance and green reuse are Detroit and New Orleans. In January 2015, the Center for Community Progress convened a group of public and private community revitalization practitioners from these cities to share with each other how they have been shaping their strategies to meet important community needs and reduce public land maintenance through vacant land reuse.

During the learning exchange, participants presented a series of projects related to small-scale and large-scale land reuse and maintenance, and discussed successes, strategies, and challenges from their communities. This report presents key lessons from that learning exchange in four sections. The first three highlight specific programs and lessons learned. The final section is a resource list that links to programs mentioned throughout the learning exchange. The four sections are as follows:

- Small-Scale Disposition, Maintenance, and Alternative Land Use
- Large-Scale Alternative Land Use
- Outreach and Engagement
- Resources

We hope that this document serves as a useful reference not only for New Orleans and Detroit, but also for individuals in other cities seeking ways to maintain and reuse vacant land.

Throughout this document we use multiple terms to refer to addressing land that is structure-free, primarily using “green” or “alternative” reuse, land use, or maintenance. Practitioners, including the learning exchange participants, also use a variety of terms to refer to treating structure-free land. Although these terms can describe a variety of treatments, our use in this document generally refers to vacant land maintenance and land use that involves more than mowing and keeping a lot clean.

SECTION 1: SMALL SCALE DISPOSITION, MAINTENANCE, AND ALTERNATIVE LAND-USE

Popular images of vast tracts of vacant land in New Orleans and Detroit, empty of structures or residents, mask the reality that a substantial amount of these cities' vacant land is scattered throughout neighborhoods that many residents call home. This vacant land profoundly affects residents' quality of life and undermines their confidence in their community. Examples of this type of vacant land include small clusters of empty lots, corner lots, and lots next door to homes, all within occupied neighborhoods.

To minimize the negative impact of these vacancies, New Orleans and Detroit maintain the lots by mowing the grass and clearing trash that has been dumped. The cost of this maintenance activity is significant. As an example, the New Orleans Redevelopment Authority (NORA) mows approximately 2,500 properties 18 times each year. At \$25 per cut, NORA spends over \$1 million each year to mow vacant lots. Vacant land maintenance costs are rarely recovered from private owners.

For vacant lots that the cities have determined are not buildable due to size or configuration, as well as those that are not part of a site assembly effort to create a larger parcel, the cities have developed "small-scale" disposition, maintenance, and green land-use treatment options that stabilize neighborhoods, attract investment, and reduce the cost of maintenance.

The New Orleans programs and project highlighted in this section show what can be done on vacant lots to positively impact the city's stormwater management system, improve public safety, and engage residents in their community. The Detroit program highlights an effective way to allow residents to purchase lots adjacent to their home.

These are the programs highlighted in Section 1:

- NORA Green-Green Infrastructure
- Filmore Neighborhood Rain Garden
- NORA Green-Growing Green
- NORA Green-Growing Home
- NOLA for Life-Fight the Blight Lot Maintenance
- Detroit Land Bank Authority Side-Lot Sales Fair

DECREASING STORMWATER IMPACTS THROUGH INNOVATIVE RAIN GARDENS

Speakers

Jeff Hebert, Executive Director, New Orleans Redevelopment Authority

Colleen McHugh, Resiliency Planning Fellow, New Orleans Redevelopment Authority



Overview

In addition to hurricane storm surges and levee failures, regular rain events can pose a danger to New Orleans neighborhoods and to the environmental health of the region's bodies of water. In order to protect the public and the region's natural resources, the City must design and implement effective ways to manage stormwater. Given the high cost of building traditional stormwater infrastructure and the abundance of available land, New Orleans and many other cities have increasingly turned to using land to capture stormwater. These green infrastructure efforts decrease flooding, as well as the amount of polluted stormwater runoff in regional waterways. One way the City has focused on this goal is through the NORA Green initiative, launched in 2014. NORA Green, housed in the New Orleans Redevelopment Authority (NORA), consists of five programs: Green Infrastructure, Growing Green, Growing Home, Lot Stabilization, and Alternative Land Use. Some of these programs are highlighted in this section and in Section 3.

Program: NORA Green-Green Infrastructure

As part of their comprehensive Green Infrastructure program, NORA is working with local designers, contractors, and community organizations to design and develop pilot rain gardens that push the limits of stormwater management techniques as well as test resident reactions to the sites. Each of the five pilot rain gardens, located in different neighborhoods, has unique features, but also some consistent elements. All of the rain gardens use plants native to Southeast Louisiana and have signature branding elements. Across the city residents can spot the bright orange benches, the NORA logo, and educational signage that allows the community to easily identify the cared-for space as part of this initiative.

Project: Filmore neighborhood rain garden

The rain garden located in the Filmore neighborhood is particularly ambitious. It not only captures rain that falls directly on the site, but also takes in stormwater from the street due to a curb cut and runnel in the sidewalk. That street runoff is temporarily stored and drained within 48 hours, preventing it from flooding the street and flowing directly into the nearby catch basins, canals, and Lake Pontchartrain. Quick drainage prevents the standing water from attracting mosquitoes.

Lessons Learned

Based on the first year of NORA Green's rain garden pilot projects, leaders at NORA shared several lessons learned:

- **Push for City permitting to match innovative site design and engineering.** The curb-cut that allowed water to flow from the street onto the Filmore neighborhood rain garden was the first time the City had ever approved a curb-cut for something other than a driveway; getting it approved took persistence. Because of this improvement, the site can temporarily store 89,000 gallons of water.
- **Set a high standard for landscape design and maintenance, and be willing to spend extra money to maintain pilot sites.** The pilot rain gardens are critical for gaining buy-in from the community for a land use with which they may not be familiar. NORA wanted to literally turn people's heads and, in so doing, open their minds to alternative land uses. For that reason, eye-catching landscape design that is well-maintained is important. Maintenance contractors, who are often hired to simply clean debris and mow, also need to understand additional maintenance needs. NORA was willing to spend the extra time and money to ensure that the contractors knew, for example, how to differentiate between an intentional plant or flower and a weed, essentially becoming landscapers.
- **Work incrementally and prepare your partners for success.** Although NORA worked with community organizations in the first round of rain garden pilots, NORA has remained the land owner and the entity ultimately responsible for management of the gardens. In the next round, the community organizations will become the leaseholders and entities responsible for maintenance. NORA will support this transition by keeping their maintenance contractor on board to train the organizations for one year after they take responsibility for the rain gardens.
- **"Brand" lots with signature design elements.** NORA enhanced the visual and educational impact of the rain garden sites by installing bright orange benches, an organization logo, and educational signage on all of the lots. These elements identify the lots as part of the NORA Green-Green Infrastructure program and distinguish them from uncared for land.

LEVERAGING RESIDENT ACTION TO TURN PUBLICLY-OWNED PROPERTIES INTO COMMUNITY ASSETS

Speakers

Jerry Graves, Director of Land Stewardship, New Orleans Redevelopment Authority

Lemuel Hancock, Land Stewardship Project Manager, New Orleans Redevelopment Authority



Overview

Growing Green and Growing Home, two programs within the NORA Green initiative, rely on individual residents and community-based organizations to turn vacant land into community assets. Through the programs, these community stakeholders gain access to and/or ownership of vacant land and help improve the quality of life in their neighborhood. In turn, NORA reduces the inventory that it is responsible for in a way that benefits the community.

Program: NORA Green-Growing Green

The Growing Green program, which focuses on neighborhood-scale urban agriculture and beautification projects, makes properties available to the public to help meet four objectives: eliminating blight and improving neighborhood stability, fostering neighborhood safety and sustainability, making fresh produce available to underserved populations, and promoting a sense of community. Individuals, nonprofit organizations, businesses, and other entities are eligible to apply for a one-year lease that costs \$250. Participants who manage a project successfully for two consecutive years may be offered a third one-year lease with an option to purchase. NORA increases program capacity by contracting with a local nonprofit, Parkway Partners. Parkway Partners' work includes providing assistance to Growing Green participants, developing and conducting educational workshops for existing and prospective participants, and informing NORA of any issues with project sites.

Program: NORA Green-Growing Home

The Growing Home program offers lot purchase discounts to individuals purchasing a property through NORA's Lot Next Door program, in exchange for green infrastructure improvements

such as planting trees, installing rain barrels, and using permeable surfaces. Through this incentive, homeowners acquire the lot bordering their property at a reduced rate and receive free design and budgeting consultation while also beautifying the neighborhood and helping to manage stormwater. Program participants have one year to implement the plan, and the Growing Home coordinator typically visits sites every few months in order to monitor progress.

Lessons Learned

NORA leaders shared several lessons learned based on experiences with Growing Green and Growing Home.

- **Help individuals understand the positive impact they can make.** Growing Home program staff discuss stormwater management with every Lot Next Door buyer to help show that each landscaping improvement they make impacts the environment. For example, if an individual wants to add a concrete driveway, staff suggest more environmentally friendly approaches, such as reducing the size and installing plants along the side, rather than trying to change the resident's mind entirely.
- **Keep an eye on, and protect, long-term goals.** The Growing Green program incentivizes community-based stewardship to meet community needs. Ultimately, however, the program must also achieve NORA's goals—including ensuring that's the lot doesn't once again become blighted—and there are program stipulations to ensure alignment over time. NORA ensures that properties purchased continue to meet the Growing Green objectives for five years after the sale of property or NORA may take the property back. Growing Green staff conduct two site visits per year for up to five years in order to ensure the program participant is properly maintaining the site. NORA also reserves the right to refrain from selling any property in order to preserve other redevelopment opportunities.

MAKING A VISIBLE DIFFERENCE IN RESIDENTS' LIVES THROUGH CODE ENFORCEMENT ALTERNATIVES

Speaker

Liana Elliott, City of New Orleans, Program Manager, Lot Maintenance Program



Overview

New Orleans' 12-month growing season leads to year-round tall grass on unmaintained land, creating numerous health and safety hazards. As a result, the City receives thousands of calls from concerned residents each year, including more than 5,000 calls about tall grass in 2013. The traditional code enforcement process generally governs vacant land maintenance activity on private property, such as grass cutting and debris removal. However, this process does not always occur at the speed the community needs. To address maintenance problems more quickly and efficiently, the City created a new legal and programmatic pathway to fast-track grass cutting and debris removal.

Ordinance: Chapter 66

Existing legislation already authorized the City to abate non-compliant private property in the interest of public health and safety. The City could cut overgrown or noxious vegetation, remove debris, perform routine maintenance on private property, and record costs on the property owner's tax bill. However, this abatement activity could only take place after an extensive legal process that requires research, notices, hearings, and a guilty judgment. To address this shortcoming, the City Council passed an amendment, Chapter 66, in 2014.

Using Chapter 66, the City can fast-track abatement. Properties with overgrown vegetation, debris, or noxious growth are inspected and cited on the spot. A sign is placed on the property and a Correction notice is mailed to the address listed in the Orleans Parish Assessor's Office database. The property is re-inspected after seven days, and if the violations have not been corrected the property is assigned to one of the City's community partners to cut and routinely maintain overgrowth and debris until the owner requests a hearing or removal from the program, or until the code enforcement case has reached a judgment.

Program: NOLA for Life-Fight the Blight Lot Maintenance

Authority given through Chapter 66 is put to use through the Fight the Blight Lot Maintenance program, a part of the City's homicide reduction strategy, NOLA for Life. NOLA for Life, run by the Health Department, implements initiatives in five "pillars": Stop the Shootings, Invest in Prevention, Promote Jobs and Opportunity, Get Involved and Rebuild Neighborhoods, and Strengthen the New Orleans Police Department. The Fight the Blight Lot Maintenance program is a proactive, place-based response to blight that has targeted six high-crime neighborhoods with the goal of reducing visible blight by at least 200 properties in each neighborhood in one year. Additional goals include rebuilding neighborhoods, improving safety, and creating access to jobs. To conduct the lot maintenance and to maximize the program's impact, the City partners with Covenant House, a local nonprofit organization with a complementary mission. Through this relationship, they jointly work towards the goals of clearing at least 1,200 private lots in one year and providing job training to youth and young adults experiencing homelessness or those otherwise at risk.

Lessons Learned

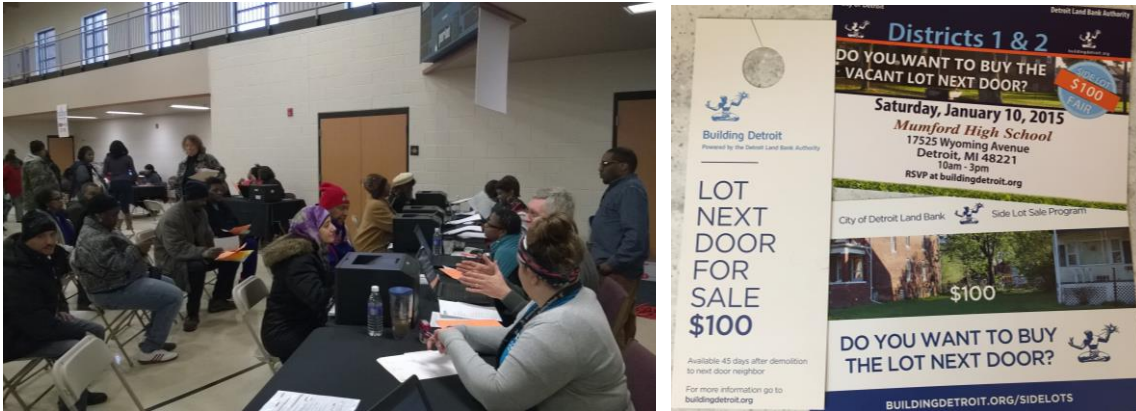
The presenter shared the following lessons learned as a result of New Orleans' experimentation with code enforcement alternatives.

- **Use data to maximize program outcomes and concentrate impact.** To select the six neighborhoods in the Fight the Blight Lot Maintenance program, the program directors considered a range of data including homicides and shootings, code enforcement cases, and city investments. They looked at a number of sources, including the City's Market Value Analysis, 311 intake calls and complaints, crime data, and the City's BlightStat program.
- **Use shared goals to identify the right partners.** The City wanted to accomplish multiple goals with the Fight the Blight and NOLA for Life programs: reducing blight and violence in targeted communities, as well as creating a pathway to job opportunities for youth and young adults. They found a well-aligned partner in Covenant House which, in addition to on-the-job landscape training through their White Dove landscaping company, provides shelter, food, clothing, health care, and case management.

RETURNING LOTS TO PRODUCTIVE USE BY RAMPING UP LOT DISPOSITION

Speaker

Carrie Lewand-Monroe, Deputy Director, Acquisitions and Land Reuse, Detroit Land Bank Authority



Overview

The effectiveness of a vacant land maintenance and green reuse strategy depends heavily on the public sector's ability to efficiently dispose of publicly owned properties in a way that supports their ultimate goals, such as increasing market strength, creating safer neighborhoods, and managing stormwater. The Detroit Land Bank Authority (DLBA), which as of May 2015 held title to over 80,000 parcels of property, is using a variety of methods to transfer ownership out of the land bank into the hands of private, responsible parties. Although many parcels will be held for long-term green land uses and many more will be sold for development, there are thousands of properties that sit adjacent to occupied homes and the DLBA is making many of those properties available, as side yards, to the homeowners living next door. Since taking ownership to a large number of the properties, the DLBA has been employing a variety of streamlined methods to allow residents to purchase these properties so that they are returned to the tax roll, including through its website and side-lot fairs.

Program: Detroit Land Bank Authority Website

In order for the DLBA to efficiently transfer ownership of a large number of vacant lots to residents, they built an easy-to-use purchase system into their website. Through buildingdetroit.org, residents can purchase the lot next to them for \$100 with a credit card. Although the process for purchasers is very simple, the database that powers it is very sophisticated. Every vacant parcel owned by the DLBA has been geocoded to the occupied structure next door, so that all interested residents have to do is type in their address to see what parcels they are eligible to purchase. The database also links to the county treasurer's website so that the DLBA can determine if potential purchasers are current on their taxes. Finally, the use

of a credit card verifies the identity of the purchaser, since every credit card is tied to a person and an address. If the DLBA's follow-up due diligence checks out, the DLBA will record the deed and send it to the purchaser in the mail.

Program: Detroit Land Bank Authority Side-Lot Fairs

The DLBA side lot fairs are all about “taking the government to the people” and making the purchase process even more accessible. Although the website is simple to use, not everyone has access to the Internet or is comfortable making a purchase online. The side-lot fairs essentially set up a remote office in each of the city's districts, with DLBA and county treasurer's office staff serving interested residents. The DLBA markets side lots and the fairs through multiple strategies, including through door hangers left on houses adjacent to properties that have been demolished and through postcards mailed to owners with an eligible lot next door. Although the fairs are still a relatively new initiative, resident participation is growing: 312 people attended the first side-lot fair in December of 2014 and over 650 attended the third fair just one month later. The fairs are set up with stations that walk homeowners through the process to purchase a side lot. Staff at the first station tell the homeowners if they are eligible (i.e. a vacant lot next door to their home is in the DLBA inventory), and staff at the second station find out if the homeowner owes taxes (if yes he/she can pay the taxes on site). If everything goes smoothly, the homeowner receives a deed at the final station.

Lessons Learned

The following lessons emerged during the session presentation and subsequent discussion.

- **Roll out a side-lot disposition program in phases.** In the initial phase of the side-lot sales, homeowners may only purchase a single adjacent property. The DLBA is increasing its capacity to clear title to properties in order to complete dispositions and, as a result, has seen increasing sales at the fairs. In the next phase of the program, a homeowner will be able to purchase the lot immediately adjacent to them and also the one next to that – up to two lots per homeowner. This increases the number of properties returning to the tax roll and being maintained.
- **Ensure properties end up in the hands of a responsible party.** One of the objectives of the side-lot program is to return properties to the tax roll. A homeowner with delinquent taxes in Wayne County, or one who has lost a property due to tax foreclosure in the county in the three years prior to a side-lot sale, may not purchase a lot. The fairs do allow people to pay their taxes on site.

SECTION 2: LARGE-SCALE ALTERNATIVE LAND USE

Although it is true that many vacant properties in Detroit and New Orleans can be found scattered throughout areas that have a viable future as residential, commercial, or industrial neighborhoods, there are many large tracts of land where that is less likely to be the case. And as one learning exchange participant from Detroit noted, “New vacant land is created every day,” due to the strategic but aggressive demolition taking place in the city.

While the scale of vacant land in these cities may be larger than in many others in the U.S., public and private stakeholders are using the large volume of vacant land to solve challenges that are found across the country. They are making transformational investments in projects that help manage stormwater and reduce combined sewer overflow incidents, clean contaminated land, grow food, and produce renewable energy sources.

The programs and projects highlighted in this section offer lessons about productive landscapes for cities confronting similar challenges. These are the programs and projects highlighted in Section 2:

- Detroit Water and Sewerage Department’s Green Infrastructure Program
- Detroit Market Garden
- Garden Resource Center
- Greening of Detroit’s Dendroremediation Pilot
- Hantz Woodlands
- Mack Avenue Pennycress Project
- NORA Green-Alternative Land Maintenance Program

USING GREEN INFRASTRUCTURE TO SUPPORT A HEALTHY STORMWATER SYSTEM

Speaker

Palencia Mobley, City of Detroit, Mayor's Office, Detroit Water and Sewerage Department Transition Manager



Overview

Like many older cities, Detroit has a combined sewer system, in which sewage and rain water flow into the same pipes. Rain events which generate large amounts of precipitation may result in overflow of untreated sewage into the region's waterways. Each year in the city approximately 14 percent of the rainfall converts into combined sewer overflow (CSO) volume. To reduce the discharge of untreated

flows, the City of Detroit has invested over \$1 billion over the last two decades in traditional "gray" infrastructure, including sewer improvements, construction of retention treatment basins, and expansion of the wastewater treatment plant. To reduce these expenses, the City negotiated with the Michigan Department of Environmental Quality (MDEQ) to implement green infrastructure as an alternative to reduce CSO events. With many partners, the City has been designing and implementing a green infrastructure program that uses a variety of natural measures to capture and reduce stormwater, reduce the overall burden on the combined sewer system, minimize untreated CSO discharges, restore water quality, and protect the public's health.

Program: Detroit Water and Sewerage Department's Green Infrastructure Program

As part of the MDEQ negotiation, the Detroit Water and Sewerage Department (DWSD) will invest \$50 million in green infrastructure over 20 years. This investment is concurrent with other stakeholders' work to decide how best to use vacant land throughout the city. Most notably, other city departments, Detroit Future City, the Detroit Land Bank Authority, and other organizations are exploring a range of green land use typologies, as described in the Detroit Future City framework, which articulates a long-term vision for the city, based on a two-year planning and community engagement process. DWSD launched their green infrastructure program in an area of the city for which a \$1.2 billion deep storage tunnel was proposed to reduce untreated CSO discharges. The program area covers nearly one-quarter of the city.

DWSD is targeting green infrastructure activities based on likely CSO mitigation results, but also on knowledge about what activities are already taking place or planned in the city (e.g. demolitions, tree plantings, development), and on vacancy rates. For example, in low-vacancy

areas where vacant lots will likely be developed in the future, the City is supporting neighborhood stabilization and economic development efforts through tree planting, demolition as necessary, greening vacant lots, and downspout disconnection. In areas of high vacancy, the City is exploring ways to implement large-scale green projects, including meadows, stream daylighting, and road decommissions, that can be sustained for the long term.

Lessons Learned

The presenter shared the following lessons learned based on Detroit's experience thus far with large-scale green infrastructure.

- **Residents need to better understand the role of green infrastructure.** Green infrastructure's many benefits have led more and more municipalities to embrace this stormwater management approach. However, many residents are not knowledgeable about what green infrastructure is. By creating opportunities for residents to experience the benefits of green infrastructure (e.g. helping keep residents' basements dry by using rain barrels or rain gardens to avoid seepage), the City can start to educate the public. DWSD staff have invested significant time in meeting with residents and community groups in order to increase awareness about the plan, and to engage them. Residents, for example, have helped identify priority demolitions and selected tree planting locations.
- **Partnerships are crucial to success.** Although DWSD is the agency responsible for controlling CSO in Detroit, agency staff are working with many stakeholders to plan, implement, and raise awareness. Multiple city departments, the Greening of Detroit, the Southeast Michigan Council of Governments, and others are helping ensure the goals and implementation of the Green Infrastructure Program are consistent with regional targets while also working to achieve long-term goals for development and land use in the city.
- **The impact of activities must be measured and adjusted as necessary.** The impact of each of the green infrastructure-related activities, including demolition, downspout disconnection, tree planting, and vacant lot greening, is measured to estimate runoff reduction. From this, DWSD can adapt its plan to achieve more impactful results. For example, many people in Detroit understand the importance of demolition as a neighborhood stabilization and revitalization activity, but evaluation has also shown it is effective for stormwater management. A 2012 Green Infrastructure Program Progress Report noted that a 17 percent reduction of stormwater runoff volume was anticipated during a rain event that equals approximately 2.25 inches of rainfall in a 24-hour period (a "two-year, 24-hour storm") due to the increased pervious surface created through building demolition. In late 2014, the City of Detroit modified demolition specifications to require at least four inches of loosely compacted topsoil on each site for final grading, allowing the site to absorb more rainwater. It is estimated that as much as 75 percent of rain water can be absorbed by each site for the 2-year, 24-hour storm.

SUPPORTING A ROBUST LOCAL FOOD SYSTEM

Speakers

Dean Hay, Greening of Detroit, Director of Green Infrastructure

Sue Weckerle, Erb Family Foundation, Program Officer



Overview

The volume of contiguous vacant land in Detroit affords numerous opportunities for urban agriculture as a land use strategy. These efforts use land in a productive way, help provide healthy food, job and business creation opportunities, and offer places where community members can connect with each other. These speakers discussed two of the many initiatives underway to facilitate food production and gardening throughout the city, with a focus on education and training.

Program: Detroit Market Garden

In 2012, the Greening of Detroit opened the Detroit Market Garden (DMG), a year-round production, training, and education garden located on a 2.5-acre former brownfield site that sat vacant for over 30 years. After a comprehensive study and cleanup process, DMG staff and apprentices began site construction and started planting – all in less than 18 months after property acquisition. The DMG produces almost 6,000 pounds of produce for sale and donation, trains adult apprentices, teaches children from a neighboring school about nutrition and gardening, and hosts tours and on-site educational workshops.

Program: Garden Resource Program

The nonprofit-operated Garden Resource Program (GRP) is a “backbone” to support the large number of urban agriculture and community garden efforts in Detroit, as well as in Hamtramck and Highland Park, two small cities that are entirely surrounded by Detroit. Over the last 11 years the GRP has ramped up from supporting 80 gardens to over 1,300. By providing resources (e.g. seeds, tools, and compost), education, and volunteer assistance, their work supports approximately 250 acres of community, school, family, and market gardens in the city.

The GRP members are a network of gardeners and advocates promoting a thriving local food system.

Lessons Learned

Presenters shared the following lessons learned from efforts to activate a local food production system on vacant land in Detroit.

- **Quick and low-cost access to land is important to make a project successful.** Greening of Detroit purchased the 2.5-acre site for the Detroit Market Garden from the City for \$55,000. The Garden Resource Program provides guidance about land access to its network members.
- **Contaminated land is not an impenetrable barrier.** Traditional and raised-bed farming takes place on the DMG site. Raised beds keep produce away from contaminated ground soil. Additionally, the types of plants grown are based on the level and type of contamination in the soil. For example, with fruit trees, the toxins from the ground bio-accumulate at the root and not the in the fruit.
- **Garden size should relate to its location.** Whether gardens are small, medium, or large, they must fit into the neighborhood they are a part of. At 2.5 acres, the DMG is well-scaled for its location adjacent to the mixed-use Eastern Market. A garden of this scale does not require heavy machinery, so is compatible with reusing land in residential neighborhoods.
- **Create support for building a resident-driven food system.** Many people involved in the Garden Resource Program are not gardening experts; they are “normal people who like to grow things.” To help widespread urban agriculture succeed, the GRP has created a range of opportunities for people to gain skills and knowledge, build community and social capital, and grow small businesses.

USING TREES TO CLEAN CONTAMINATED LAND

Speaker

Dean Hay, Greening of Detroit, Director of Green Infrastructure



Overview

Detroit's robust industrial past left behind a significant amount of contaminated land, which must be cleaned before it can be used for a non-industrial use. One green decontamination method being tested in the city today is dendroremediation, which is the use of trees to clean up pollutants from soil, groundwater, and sediment. The deep root base of trees is effective for reducing transportation of contaminated soil and water, and absorbing pollutants. Serving multiple purposes, trees also reduce stormwater runoff and provide a more appealing alternative to blight.

In multiple lab studies, poplar and willow trees have proven to be efficient systems for soil decontamination. However, effectiveness in the ground depends on many factors, including climate, type of toxins, and tree management.

Project: Greening of Detroit's Dendroremediation Pilots

Greening of Detroit is conducting a scientific experiment that hopes to demonstrate that dendroremediation is both effective and economically feasible. A pilot project will show what trees survive and absorb the most contaminants with the fewest resources.

To conduct the experiment, which will include measurements over one-, five-, and ten-year periods, Greening of Detroit has selected a two-acre site that supports a number of test plots. Over time they will be able to determine what trees survive the contamination, climate, and maintenance, and what trees are most effective at remediating contaminants.

Lessons Learned

Leaders shared the following lessons learned based on efforts to use green reuse strategies for brownfield remediation.

- **Test a range of factors to see what works in the ground.** As a method for decontaminating soil, dendroremediation's effectiveness depends on factors including climate, type of toxins, and tree management. To test trees for decontamination potential, select a pilot site at which the soil contains the contaminants that match potential future planting sites, plant a variety of trees, and maintain the trees in the same manner that is expected to occur on future sites, such as watering trees through irrigation.
- **Outreach is important.** Although residents often know that they live near a brownfield, they don't want to be reminded. In order to inform neighbors about the pilot and to generate support, Greening of Detroit staff posted informational fliers in the neighborhood, discussed the project at community meetings, and conducted door-to-door outreach.

LEVERAGING PRIVATE ENTERPRISE TO MAKE A LARGE-SCALE IMPACT

Speakers

Jackie Bejma, East Side Community Network, LAND Inc., Executive Director

Erin Kelly, Detroit Future City, Blue Green Infrastructure, Program Manager



Overview

The private sector is an important partner in revitalizing cities, often bringing new ideas, capacity, capital, and an ability to work more nimbly than the public or nonprofit sectors. This doesn't come without challenges, but nevertheless brings opportunity.

Project: Hantz Woodlands

When Detroit resident and businessman John Hantz proposed developing a 640-acre urban agriculture project, and then acquired 150 of those acres (as 1,900 noncontiguous parcels) from the City in 2013, fears of a corporate takeover of land and concerns about the effects of such a large farm on smaller growers exploded. Hantz revised his proposal, and rather than growing produce, Hantz Woodlands grows trees; staff and volunteers have planted maple and other saplings on over 100 lots. Since 2013, Hantz Woodland's activities have converted many initially skeptical or oppositional Detroiters into supporters. Hantz was required to remove garbage from the parcels, demolish at least 50 blighted structures, and prove that he could maintain the properties with frequent mowing. Hantz Woodland staff completed the debris removal and demolition nearly one year early, and continue to maintain the sites. All of these efforts have made a visible difference in the neighborhood; burnt-out houses and overgrown and trash-strewn lots are now well-tended and aesthetically pleasing. Today, Hantz Woodlands represents a first step in securing and reusing land in the area.

Project: Mack Avenue pennycress

In another part of town, a commercial developer is priming a green comeback for the Mack Avenue commercial corridor. The project scope incorporates a number of elements, including an initiative to clean the contaminated land while transitioning vacant lots to biofuel

production. The biofuel project, which is currently in a small-scale demonstration phase, grows pennycress and converts it into biofuel. Pennycress is a low-growing, non-invasive plant that not only chokes out other weeds, but also needs no irrigation beyond natural rainfall and pulls heavy leads out of the soil, thereby leaving the land in better shape if someone wants to develop it at a later point in time. For the pennycress/biofuel project to be profitable, there are two critical components: 1) a biofuel company end user, and 2) hundreds of acres of land. Land Inc., the nonprofit working with the biofuel company, estimates that for the biofuel company to make a profit they would need approximately 350 acres for the crop. The hope is that the City will lease the land to Land Inc., who will in turn lease the land to the biofuel company.

Lesson Learned

Presenters shared the following lesson learned based on partnerships with private business leaders on wide-scale alternative reuse.

- **Property disposition at scale requires cities to accept some risk of the unknown.** For many for-profit alternative land use projects to succeed, there must be a radical shift in scale. Even for cities like Detroit and New Orleans, where there are large inventories of vacant land, it is a challenging concept to commit the amount of land needed to make projects financially viable without knowing they will succeed. New Orleans has been willing to lease land for pilot land use projects, preserving a way to take the land back if necessary.

REDUCING LONG-TERM MAINTENANCE NEEDS THROUGH WELL-DESIGNED LANDSCAPES

Speaker

Wes Michaels, Louisiana State University, Robert Reich School of Landscape Architecture, Associate Professor



Overview

At their best, alternative land maintenance strategies create landscapes that contribute to the neighborhood – stabilizing weak markets, providing ecological services, and positively reshaping public perceptions of land. Ideally, they cost little to maintain over time. To have the most productive impact possible, good landscape design is critical.

Project: NORA Green-Alternative Land Maintenance Program

The Alternative Land Maintenance Program (AMP) is a collaboration between NORA and Louisiana State University's Urban Landscape Lab; its purpose is to generate prototypical low-maintenance, cost-effective landscape designs for NORA-owned lots. The program, underway on 23 NORA lots in different clusters around the city, is evaluating performance and perception of landscapes and other amenities around the sites. NORA and LSU are testing many elements of the program including different tree types to see what grows best and how fast they shade the ground cover, the increase in ecological and economic performance of the landscape, and the neighborhood residents' acceptance of the treatment. In addition to a variety of flowering trees, design treatments include wildflower lawns (which have a lower initial financial investment but higher long-term costs), meadows (which may be good in areas of long-term vacancy), and cypress groves (which have a higher initial investment but lower long-term needs).

Lessons Learned

The following lessons emerged during the session presentation and subsequent discussion regarding landscape designs that minimize long-term costs.

- **“Cues to care” mark the difference between intentional landscapes and abandonment.** The work of Joan Nassauer (University of Michigan) was presented to highlight the need to create at least minimal order so that residents don’t misconstrue landscaped sites as abandonment. NORA took additional lessons from the Pennsylvania Horticultural Society’s LandCare program, in which staff members post white split rail fences around vacant lots that they maintain. The AMP sites have colorful fencing painted with a “NORA stencil,” birdhouses, and boxes containing one-page fliers with information about alternative maintenance strategies and a contact for community feedback.
- **Test everything.** In addition to evaluating landscape treatments, the AMP is also testing many different materials, styles, and colors of fences for performance and perception. So far they have found that chain link fences are vandalized with graffiti less often than wooden ones. In addition, plants can grow in chain link, creating trellis-like “living fences.” All of the fences NORA is testing are 3 feet high – tall enough to prevent dumping but low enough to see into the lots.
- **Start small, evaluate, and then go to scale.** Rather than conducting resident land use preference surveys before planting, NORA chose to put small projects in place and then to evaluate the landscape’s performance and people’s reactions. After evaluation occurs, NORA will go to scale with landscapes that both performed well and received a positive response.
- **Ecological impact must be balanced with neighborhood perception.** A discussion about trees highlighted just one of the many ways that people perceive landscapes differently. While they provide ecological benefits, many people fear that trees will fall on their house and that trees provide hiding places for criminals. This knowledge has altered the ways in which both cities design areas with trees – in some cases planting trees that at maturity will reach just six- to eight-feet in height and planting them such that passersby can see between them.
- **Work with, and educate, contractors to accommodate small budgets.** Few contractors in New Orleans are accustomed to producing landscapes like those designed for the AMP sites. As a result, bids often are higher than what NORA’s limited budget allows. NORA and LSU work with the contractors to bring costs down, but over time they expect that more contractors will become educated about the work and that will result in more competitive bids.

SECTION 3: OUTREACH AND ENGAGEMENT

Throughout the learning exchange, participants discussed their desire to develop and implement vacant land maintenance and reuse strategies that attend to both today's and tomorrow's needs, to leverage the knowledge and skills of multi-sector stakeholders, and to ensure that existing residents are engaged in creating and implementing solutions.

The programs and projects highlighted in this section showcase outreach and engagement initiatives at many scales, from the neighborhood level, to citywide, and even internationally. These are the projects highlighted in Section 3:

- Future Ground Design and Policy Competition
- Detroit Land Forums
- Hope Village Initiative
- Lower Eastside Action Plan

SOLICITING NEW IDEAS THROUGH A DESIGN COMPETITION

Speaker

Colleen McHugh, New Orleans Redevelopment Authority, Resiliency Planning Fellow



Overview

Local design competitions are common ways for cities to seek and support interesting ideas from residents who want to reuse vacant lots in their community. Many competitions, such as Lots of Progress in Youngstown, Ohio and the Land Lab competition in St. Louis, have led to reuse of hundreds of vacant lots. Professional design competitions, on the other hand, are often aimed at a national or international urban design community and seek bold, new, and implementable ideas to reshape the landscape of a city.

Project: Future Ground Design and Policy Competition

Future Ground, in New Orleans, moves beyond typical professional design competition goals. NORA and the Van Alen Institute launched the Future Ground Design and Policy Competition in 2014 in order to “generate flexible design and policy strategies that forecast and accommodate changes in density, demand, climate, and landscape over the next half-century in New Orleans, transforming abandoned landscapes into resources for the current and future city.” This makes Future Ground unique in two ways: 1) it is focused on policy in addition to design and places an emphasis on implementable ideas, and 2) it asks teams to look toward the long term, envisioning potential futures for the city over the next one, ten, and 50 years. As part of the competition, the finalist multidisciplinary teams, including architects, landscape architects, urban planners, engineers, lawyers, brownfield experts, and community development and finance experts, have been working with regional experts in landscape architecture, demographics, geography, climate change, and real estate to forecast scenarios for how the city might change. Given the competition’s emphasis on policy and implementation strategies, many of the design teams’ work focused on process and policy more than on a design vision. One example was the development of a simulated negotiation process with multiple stakeholders (e.g. health officials, wildlife advocates, housing developers) to help them better

understand other perspectives, flexibility in the laws governing land use, and the potential for collaboration.

Lessons Learned

The speaker shared the following lessons learned about making the most of a design and policy competition.

- **Dedicate sufficient staff time throughout the competition to provide the teams the information they need.** Engaging people outside of the local government and the traditional local stakeholder community to develop innovative ideas can reap great rewards, because it invites in people who have addressed similar challenges in other communities, bringing more ideas to the table. In order for the ideas to be effective and implementable however, NORA needed to provide information and data to the competition teams throughout the competition.
- **If you're going to have a competition, implement the ideas, but be flexible in understanding what "implementation" can mean.** NORA is committed to implementing the ideas that came from Future Ground. The three finalist teams each received a \$15,000 stipend to help develop their ideas. Given the design teams' focus on process and policy, the most important outcome of the competition may be a change in how NORA engages with other city agencies, community members, and new stakeholders as part of the decision-making and land reuse process.

GENERATING GRASSROOTS COMMUNITY SUPPORT FOR ALTERNATIVE LAND USES

Speakers

Jackie Bejma, Eastside Community Network, LAND Inc., Executive Director

Jerrell Harris, Focus: HOPE, Placemaking and Planning Manager, Detroit Revitalization Fellow

Erin Kelly, Detroit Future City, Blue Green Infrastructure, Program Manager



Overview

Designating ostensibly urban land for non-development uses requires numerous stakeholders working together. To truly engage community members in a long-term partnership where they are excited about maintaining and reusing land in new ways, policymakers and land reuse advocates must understand resident perceptions of vacant land and perceptions of how it is—and could be—used. Equally critical is that a city’s residents have an opportunity to learn how to acquire publicly held vacant land so that they can secure an ownership stake in the community’s revitalization. Detroit has undertaken a number of initiatives to accomplish this.

Project: Land Forums

The Detroit Land Bank, the Greening of Detroit, Michigan Community Resources, Loveland Technologies, the Damon J. Keith Center for Civil Rights, and Wayne State’s Program for Entrepreneurship and Business Law have collaborated on a series of forums aimed at demystifying the process of buying vacant land in the city and building a cohort of informed buyers from the community. The forums provide direct access to agencies that control land as well as information about topics including land ownership searches and alternative land treatment ideas.

Project: Hope Village Initiative

Focus: HOPE, in Detroit, works with residents in the Hope Village service area, located in a 100-block area that spreads over many neighborhoods. Through the Hope Village Initiative, Focus: HOPE partners with residents and businesses to rebuild the physical fabric of the

community. Through resident meetings, data-sharing, block captains, social media, community clean-ups, reuse efforts, and more, Focus: HOPE and residents coordinate their activities with those of the City. For example, during the summer of 2015, they held a three-day event called “Keep it 100!” (100% clean, 100% safe, 100% beautiful) that combines City work, including updating street lights, demolishing houses, and repairing potholes, with resident work, like cleaning lots, creating public art, and planting trees.

Project: Lower Eastside Action Plan (LEAP)

LEAP is a community-driven planning effort on Detroit’s Lower Eastside through which, to date, over ten community organizations, eight technical partners, and 7,000 residents have been engaged in developing recommendations for blight mitigation projects. After the plan was completed in 2010, the steering committee and stakeholder advisory group have continued to meet regularly, and they play a crucial role in land reuse in the area. A recent resident-driven success is the 2015 City Council resolution to support LEAP Standards for Blight Elimination – requirements drafted by residents for the city or investors conducting demolition or blight elimination activity in the community.

Lessons Learned

Presenters shared the following key lessons about ways to make sure land reuse efforts both genuinely address resident needs and preferences, and have resident buy-in:

- **Work with community members to identify the scale and context of the problem before working toward solutions.** Community revitalization practitioners and residents need to discuss day-to-day experiences, market data, current land use and trends, and the realities of limited municipal resources before talking about land maintenance and reuse solutions. Especially in neighborhoods with a significant amount of vacancy, this step can be critical to developing solutions that are positive and equitable in the long-term.
- **Use a variety of technology mediums.** In order to engage community members in making decisions about their neighborhoods, data and resource materials need to be provided through means that reach the residents, using a variety of languages and mediums (such as mobile access and paper for those that do not have Internet).
- **Build community outreach and engagement into project budgets.** Community engagement is time-consuming and resource-intensive, and should be incorporated as an expected project cost.

SECTION 4: RESOURCES

The resources below include a number of program descriptions, articles, and reports referenced during the Green Reuse and Vacant Land Maintenance Learning Exchange.

SECTION 1: SMALL-SCALE ALTERNATIVE USE TREATMENT OPTIONS

[NORA Green Initiative](#)

[NORA Green-Growing Green application](#)

[NORA Green-Growing HOME](#)

[NORA Lot Next Door](#)

[Parkway Partners](#)

[Fight the Blight Lot Maintenance Program](#)

[NOLA for Life](#)

[BlightStat \(City of New Orleans\)](#)

[Detroit Land Bank Authority online side-lot purchase](#)

[Detroit Land Bank Authority Side-Lot Fairs](#)

SECTION 2: LARGE-SCALE ALTERNATIVE LAND USE PROJECTS

[2011-2012 Green Infrastructure Program Progress Report by Detroit Water and Sewerage Department](#)

[Greening of Detroit](#)

[Detroit Market Garden](#)

[Garden Resource Program](#)

[Hantz Woodlands](#)

[Mack Avenue article](#)

[Detroit Land Bank Authority side-lot program](#)

[Joan Iverson Nassauer article](#)

[Pennsylvania Horticultural Society-Philadelphia LandCare](#)

SECTION 3: OUTREACH AND ENGAGEMENT

[Future Ground Design and Policy Competition](#)

[Detroit Land Forum](#)

[Hope Village Initiative](#)

[Keep it 100!](#)

[LEAP Standards for Blight Elimination](#)

Photo Credits

Cover:

New Orleans Redevelopment Authority – Wildair Rain Garden

Page 6:

New Orleans Redevelopment Authority – Filmore Neighborhood Rain Garden signature bench and curb cut

Page 8:

New Orleans Redevelopment Authority – Langlois Growing Green project

New Orleans Redevelopment Authority – Growing Home project

Page 10:

City of New Orleans, Fight the Blight lot before and after

Page 12:

Craig Fahle, Detroit Land Bank Authority – DLBA Side Lot Fair

Jennifer Leonard – DLBA Side Lot Fair marketing

Page 15:

University of Michigan Water Center, Detroit Land Bank Authority, and Detroit Water and Sewerage Department – green infrastructure project rendering

Page 17:

Jennifer Leonard – Greening of Detroit

Michigan Municipal League – rooftop garden in Detroit

Page 19:

Dean Hay, Greening of Detroit – early stages of the Greening of Detroit dendroremediation project

Page 21:

Jennifer Leonard – Hantz Woodlands lot

Payton Heins – Pennycress project

Page 23:

New Orleans Redevelopment Authority – cypress groves

Page 26:

Andrea Marby – Future Ground working meeting and tour

Page 28:

Eastside Community Network – LEAP meeting

Focus: HOPE – Keep it 100! board painting