RE-IMAGINING CLEVELAND » IDEAS TO ACTION

RESOURCE BOOK

Prepared by
Kent State University's Cleveland Urban Design Collaborative
1309 Euclid Ave., Suite 200 • Cleveland, Ohio 44115
www.cudc.kent.edu

&

Neighborhood Progress, Inc.
1956 West 25th St., Suite 200 • Cleveland, Ohio 44113
www.neighborhoodprogress.org

Editor
Lilah Zautner, Sustainability Manager
Neighborhood Progress

Design
Gauri Torgalkar
Kent State University's Cleveland Urban Design Collaborative

In collaboration with
The City of Cleveland

January 2011

CONTENTS

INTRODUCTION 2

THINGS TO CONSIDER 5

VACANT LAND RE-USE STRATEGIES:

VINEYARD 10

ORCHARD 12

MARKET GARDEN 14

COMMUNITY GARDEN 16

SIDEYARD EXPANSION 18

STREET EDGE IMPROVEMENT 20

NEIGHBORHOOD PATHWAY 22

POCKET PARK 24

NATIVE PLANTING 26

RAIN GARDEN 28

IDEAS & INSPIRATIONS 30

PLANNING A COMMUNITY PROJECT 33

COMMUNITY RESOURCES 37

» INTRODUCTION

Welcome to the world of what's possible on your street and in the city of Cleveland! Join the movement of individuals and groups who are turning vacant lots into community projects that beautify neighborhoods, feed people, capture stormwater and teach about the environment. The fact that you have opened this book means you are one of those special people who want to make a difference in your neighborhood. Whether you are already a busy community leader or are new to this kind of thing, there is a place for you and there are people and organizations who want to help you bring your vision to life.

The purpose of this book is twofold:
1) To put ideas and helpful information into the hands of people who can and will change the city for the better, and
2) To introduce you to some local heroes who are leading the way - greening, gardening, and growing produce all over the city.
They are young, old, black, white, native Clevelanders, recent immigrants, east siders and west siders.

There are people like Curtis Banks, who has lived in the Hough neighborhood for 40 years, since he was a baby, and was inspired to follow in his father's footsteps by creating a new pocket park on Kosciuszko Avenue. He says "When I was a little kid, there was a house torn down next to us. My father being just one generation removed from sharecropping, loved to play in the dirt. He would plant gardens every year and the food he grew in the garden helped to feed our family. He often grew more than we could consume, so he would give stuff away to people who were in need. So it became part of me to want to carry on that tradition of gardening."

And there is Todd Alexander, who with friends Sarah Sampsell and Matthew Pietro are creating an eastside and a west side market garden (growing fruits and vegetables for sale) in the Central and Ohio City neighborhoods. They are putting their entrepreneurial spirits and recent college degrees in sustainability into action and helping to address "food deserts" where fresh fruits and vegetables are limited.

And there is teacher Michelle DeBock from Watterson Lake Elementary School in the Detroit Shoreway neighborhood, who is creating a learning garden on a vacant lot next to the school where students can observe butterflies and birds and see how food is grown. With a dozen or more raised bed gardens that will have themes like "Peter Rabbit" and "Salsa", she is creating a

garden that reflects the different cultures in her school and draws students into observing nature in a fun way. She says "I'm hoping that the kids start to gain more respect for their environment. I hope they can be proud of their efforts and say - Wow! Look what we have done to this vacant lot."

You can learn more about land reuse projects and many other local heroes on *ReImaginingCleveland.org*. There are recorded interviews with some project leaders and photos that show the fruits of their labor. We also invite you to post your own projects there – adding to the tapestry of greening efforts around the city and the people who are making them happen.

SPECIAL THANKS TO THE CITY OF CLEVELAND

The *Re-imagining Cleveland* movement is a partnership of grassroots community leaders and individuals working with the City of Cleveland and non-profit organizations to re-purpose vacant lots into useful and productive spaces for neighborhoods. It started with a vacant land study completed in 2008. The movement has been nurtured through a small grant program and supportive actions made by the City of Cleveland. To empower residents and promote stewardship of vacant land the City has improved its land bank operations, water department practices, and zoning code. The City has forged partnerships with Neighborhood Progress, grassroots groups, individuals, and non-profit organizations to help envision a greener future for neighborhoods and build stewardship throughout communities.

The *Cleveland Community Development Department Land Bank* is surmounting regulatory issues and public sector challenges to respond to the increased volume of vacant land and the public's interest in using land bank lots for community improvement. Through inter-departmental and non-profit collaboration, the *Re-imagining Cleveland* initiative is demonstrating how grassroots vacant land reuse promotes entrepreneurship and community engagement, while empowering citizens to increase the quality of life and restore environmental function to their neighborhoods. Aligning public resources and private energy on the challenging issue of vacant land has created powerful changes that will serve the city well for the coming decades. Our neighborhoods will be better because of this.

"When you look at a city, it's like reading the hopes, aspirations and pride of everyone who built it."

- Hugh Newell Jacobsen

Students and teachers at Watterson-Lake School Community Garden

Photographs and images for this publication were provided by:
Greta DeMeyer
Greg Donley
Joyce Hairston
Susan Kaeser
Helen Liggett
Keep Indianapolis Beautiful, Inc.
Marilyn Polivka
Maurice Small
ReImagining Cleveland pilot project leaders
Bobbi Reichtell
Lilah Zautner

Illustrations for this publication, unless otherwise noted, are created by Kent State's Cleveland Urban Design Collaborative

GRATEFUL ACKNOWLEDGEMENTS FOR ASSISTANCE

This *Re-imagining Cleveland Ideas to Action Resource* Book and the many vacant land reuse projects happening around the city would not have been possible without the dedicated work of the following individuals and organizations. Thanks to all of you for helping to build a movement towards a sustainable city in which we are all caretakers of the land in our communities.

Mayor Frank G. Jackson
The *Re-imagining Cleveland* Land Reuse Pilot Project Leaders
The City of Cleveland Department of Community Development
The City of Cleveland Planning Department
The City of Cleveland, Division of Water
The Cleveland Foundation
The George Gund Foundation
The Surdna Foundation
Kent State University's Cleveland Urban Design Collaborative
ParkWorks Inc.
Ohio State University's Cuyahoga County Agricultural Extension Service
Cleveland Public Art
Cleveland State University History Department and Levin College of Urban Affairs
Cuyahoga County Soil and Water Conservation District
Earth Day Coalition
Entrepreneurs for Sustainability – Local Food Cleveland Network
Curtis Moll and MTD Products, Inc.
Community Housing Solutions Tool Loan Program
Sonia Jakse, Plan It Green Designs, LLC
Kurtz Brothers
Emmy Levine
Beverly Johnson
Beverly Moore
Northeast Ohio Regional Sewer District
U.S. Environmental Protection Agency Region 5

THINGS TO CONSIDER »
WHEN PLANNING A COMMUNITY LAND REUSE PROJECT

ACCESSING LAND

The first step to planning a community land reuse project is identifying and researching a site. There are nearly 20,000 vacant lots in the City of Cleveland. About 8,000 of these lots are owned by the City of Cleveland Land Bank – one of the oldest land banks in the United States. Once you have a site in mind, visit the Cuyahoga County Auditors website to determine who owns the site (http://auditor.cuyahogacounty.us/repi/default.asp). If the lot is privately owned, you must contact the owner to gain permission to access the site. If the City of Cleveland Land Bank owns the lot, you may be able to lease or purchase the property. To learn about lease and purchase options for Land Bank lots, contact the City of Cleveland, Community Development Department, Division of Real Estate, (216) 664-4053.

SOIL CONDITIONS

Because vacant land in cities has been used before, the condition of that land may be adversely impacted. Depending on what the previous use was, there may be issues such as pollutants, debris, and compacted (compressed) soils. Here are ways to remedy or avoid these issues:

1. POLLUTANTS
   - You should have soil tests performed to determine if your site is safe to work on. Soil testing should be done before you commit to buying or leasing a site.
   - The OSU Extension offers soil tests for a minimal cost that will determine levels of common contaminants. You can also collect the soil yourself and send it to the University of Massachusetts for testing (see Resources page for contact information). Soil tests cost between $10 and $15.
   - Do not select a site that was previously used for industry, a dry cleaner, or a gas station unless you are working with a knowledgeable agency to help assess risks.

2. DEBRIS
   - Before 1996, demolition meant knocking the house into its foundation. Generally if there is a demolished house under the ground, you will see a depression on the surface. Call the Department of Building and Housing's Demolition Bureau at (216) 664-2959 and ask when the building was demolished to see if this could be an issue for you.
   - Be sure to take appropriate precautions when removing debris from a lot. If you are working with volunteers, be sure that they understand safety guidelines and potential risks.

- A simple solution for building a garden on a lot with buried debris or excessive tree roots is to avoid digging into the ground and use raised beds instead.
- If your budget allows and the investment makes sense, professional site clearing and grading services are available. Site grading varies in cost according to grading specifications, lot size and existing conditions.

3. COMPACTED SOILS
   - Compacted soils make it difficult for plants to grow. They are caused by heavy machinery previously putting weight on the soil.
   - To tell if your soil is compacted, dig a small hole about 6" deep and pour water into it. If the water sits in the hole without absorbing after a minute or so, then the soil is either compacted or has high clay content. Depending on the nature of your project, this may be a problem.
   - Tilling the soil and/or adding topsoil, compost or soil amendments could remedy this problem.
   - A simple solution for gardens would be to construct raised beds.

ACCESSING WATER

For nearly all projects, water is required for at least the first year or growing season. If drought tolerant plants native to Ohio are used, water won't be required after the plants are established. All food production gardens will require water on a regular basis during every growing season. Where possible, rainwater from nearby roofs and hard surfaces should be captured using rain barrels and cisterns and used to water your garden. Generally, a second source of water is required. You can ask a neighbor for access to their hose or apply for a water permit from the Water Department. Depending on the type of project, you may qualify for a low cost fire hydrant permit or you may need to install an underground water line and a water meter. To inquire about hydrant permits in the City of Cleveland call the Department of Community Development, (216) 664-4059.

PERMITS

In the City of Cleveland and most other cities and towns, the municipality regulates land use and building codes. Most cities have zoning rules about where parks, gardens and other greenspaces can be located. Also, most have building codes that mandate the type and location of out-buildings, fences, compost bins and signs. Before planning & designing your land reuse project, research local building and zoning codes on-line or in person at the municipal building & housing department.

- Before doing certain types of construction, you are required by law to apply for and receive a permit before performing the work. The permissions process gives the city

an opportunity to check to make sure that what you are proposing meets all health and safety codes. The Board of Zoning Appeals can grant variances to the building code in some cases.

- Permits or licenses are required for building fences, buildings, hoop houses, sheds, greenhouses, sitting walls, parking, driveways, disconnecting downspouts, accessing hydrant water, installing signage and raising farm animals.
- The permit process will generally require a drawing or set of drawings. The complexity of the drawings depends on the complexity of your project.
- If your project is in a designated Landmarks District, your permit application will have to be reviewed by the City of Cleveland Planning Commission and Landmarks Commission. Small improvements may only need a staff review while larger improvements may require a presentation to a local design review committee or the Planning or Landmarks Commission.
- You will be required to schedule an inspection at certain times during construction.
- In Cleveland, permitting questions can be answered by contacting the Department of Building and Housing, City Hall, 601 Lakeside Avenue, Room 505, (216) 664-2282.
- If you are hiring a contractor to build something that requires a permit, you are encouraged to have them apply on your behalf so they retain liability for their work.
- Visit these websites for more information on zoning & permitting in the City of Cleveland:

  On-Line Permitting Guide: http://www.city.cleveland.oh.us/CityofCleveland/Home/Government/CityAgencies/BuildingHousing/PermitGuide

  Building Code Law and Fee Schedule:
  http://caselaw.lp.findlaw.com/clevelandcodes/cco_part3_3105.html

  NEW – Building Codes for Agriculture Uses in Residential Areas:
  http://planning.city.cleveland.oh.us/zoning/pdf/337-02%20UrbanAgricultureinResidential.pdf

  NEW – Building Codes for Keeping Small Farm Animals:
  http://caselaw.lp.findlaw.com/clevelandcodes/cco_part3_347.html

CALL BEFORE YOU DIG – IT'S THE LAW

By law, everyone must contact the Ohio Utilities Protection Service (OUPS) at least 48 hours but not more than 10 working days before beginning any digging or excavation work. This law includes smaller projects such as fencepost holes, deck anchors, tree planting and tree root removal. Once you

place the call, the local utility companies will visit your site marking the location of underground lines. The service is free of charge. However, if you don't call before you dig and damage is caused, you are responsible for the full cost of repairs. Call 1-800-362-2764 or 8-1-1 or visit *http://www.oups.org/*

EQUIPMENT NEEDED

Installation: Shovels, rakes, hoses, small garden tools, access to a roto-tiller. Power tools may be needed to anchor sheds to the ground or construct beds.
Maintenance: Lawn mower, weed whacker, rakes, shovels, wheel barrow, hoses, small garden tools, access to a roto-tiller.

FENCING

The decision to add a fence around the lot depends on many factors. When making this decision it is important to discuss the following factors with your project team & the neighbors living around the site:

- *Project Budget:* Does your budget allow for fencing? Fence costs vary greatly on the type of fence, height of the fence, size of lot, size of entry gate and the presence or absence of underground debris. Typically chain link and wood picket fences are lower in cost then wrought iron, aluminum or wood stockade fences. Keep in mind that most municipalities restrict the type and height of fences in residential and commercial areas. To determine if your budget allows for a fence, it is recommended that you call a local contractor for an on-site visit and quote. Once you have determined the cost of the fence, weigh it against the amount of investment going into the site (furnishings, plants, trees, sheds, etc.).
- *How Public Is Your Project?* Is the space meant to be private, semi-private with restricted access or open to the general public? Projects such as rain gardens, pocket parks and native plant gardens are typically planned as public spaces and not generally fenced. Depending on the adjacent land uses, fencing or tall shrubs are sometimes used to shield neighbors from noise and pedestrian traffic. Community and market gardens may be considered private or public places. Those planning and maintaining the site should determine whether or not a fence is needed. Many gardeners opt to install fences, large stones and/or brambles along the street edge of their gardens to discourage loitering and pedestrian traffic.

PLANT SELECTION – NATIVE PLANTS

When planning your community project, it is important to select plants and trees that are hardy, low maintenance and beautiful year-round. Choosing native plants for your project is the easiest way to meet these goals. Native plants are species that were found in your region before

modern development or plants that were naturalized over many generations. Native plants are accustomed to our natural weather patterns, soil types and wildlife. Simultaneously our local environment depends on native plants for many reasons. Native plants absorb and filter storm water before it reaches our lakes and rivers. The wildlife in our region depends on native plants for food, shelter and mating grounds. And native plants filter pollution, such as carbon dioxide from the air. During their first growing season native plant gardens require the same amount of maintenance as traditional landscapes. They must be watered, weeded and mulched. However, because they have adapted to our natural environment, once native plant gardens are established they require less maintenance than traditional landscapes. Native plants never require the use of chemical based fertilizers – a main source of local water pollution.

To choose the right native plants for your project, you must consider sun exposure, water flow on and off your site, and soil characteristics. Refer to the Resources Section of this book for local expert advice.

IMPORTANT INFORMATION REGARDING THE BUDGETS PROVIDED:

The materials lists and budgets included in this publication are meant to be a guide for planning your project. They provide the basic components necessary to complete a vacant land reuse project. Prices for permits, tools and optional items such as lighting and decorative components or upgrades are not included because they are dependent on your project plans and site conditions. Be sure to research and include these items in your plan and budget.

Material prices fluctuate often and depend greatly on the quantity being purchased. Also, prices will vary according to the type of project you are doing (commercial, residential, community, etc). The landscape material prices in this book relate to community-led projects and were based on conversations with suppliers in Cleveland. During the planning process be sure to contact local suppliers directly for current quotes.

When planning your budget, be sure to explore opportunities for donated or low cost recycled or reused materials. Reclaimed materials save money, save resources and add character.

"I'd always thought that I was waiting for someone to come and change things - but what I really learned was that I was waiting for myself."

— Bevelynn Bravo

VINEYARD

Sample site size – 12,000 sq. ft.

COST ESTIMATES	cost per unit	units	total cost
construction			
site grading	contingent on site conditions		**TBD**
landscape materials			
compost	$20/cu. yd.	15	**$300**
topsoil	$20/cu. yd.	38	**$760**
20-20-20 fertilizer (25 lb. bag)	$39	2	**$78**
plant materials			
frontenac grape vines	$3.95/each	140	**$553**
traminetle grape vines	$3.95/each	34	**$135**
furnishings			
wood garden shed	$1,000	1	**$1,000**
trellis materials (posts, wire, and fasteners)			**$1,350**
drip irrigation system (not including spigol & meter)	$300	1	**$300**
subtotal cost	$0.37/s.f.		**$4,476**
contingency 10%			**$447**
TOTAL PROJECT COST			**$4,923**

Depending on the purpose of your site, level of public access desired and surrounding land uses, fencing should be considered. Fencing costs vary according to site conditions, length and style.

IDEAL LOCATION

- A large lot or a few adjacent vacant lots where future development is not planned.
- Vineyards are best situated in areas with good air circulation and full sun exposure.

BENEFITS AND OPPORTUNITIES

- Depending on the scale of the project, a vineyard can provide economic opportunities for the neighborhood.
- As the project develops, it may become a location that attracts tourists and business to the neighborhood in which it is located.

LEVEL OF COMMUNITY COMMITMENT NEEDED

- This project requires a high level of teamwork to install the trellis and irrigation systems. Once the vineyard is planted it will only require a few people who are dedicated to making the project a success for years to come.
- Maintenance will include regular litter pick-up, frequent watering and seasonal fertilizing and pruning. Caring for vineyards is more difficult than other gardens, so involving an expert grower early on will make for a more successful project.

TO SEE A LOCAL VINEYARD

Relmagining Cleveland **Chateau Hough** – East 66th Street and Hough Avenue, Cleveland, OH
Relmagining Cleveland **East 66th Street Grapes** – East 66th Street and Regent Road, Cleveland, OH

Vineyards of Château Hough

FEATURED PROJECT LEADER

Mansfield Frazier

Mansfield and Brenda Frazier reached out to a host of volunteers from inside and outside of the community, a number of agencies that provide services to juveniles, adults residing in a nearby halfway house, and workers from Court Community Services. This cadre of workers was able to establish a vineyard previously unknown in an inner-city location. The long-term goal is to replicate the vineyard on as many vacant lots around the City as possible.

"The Vineyards of Château Hough is envisioned as a project that will knit together the fabric of the community in which it is located, while serving as a precursor and template for wealth-building."

Mansfield Frazier

Councilman T. J. Dow's visit to Chateau Hough

ORCHARD

Sample site size – 34,000 sq. ft.

COST ESTIMATES	cost per unit	units	total cost
construction			
site grading	contingent on site conditions		**TBD**
walkway/paving materials			
compacted crushed gravel	$26/cu. yd.	11	**$286**
landscape materials			
compost	$24/cu. yd.	22	**$528**
mulch	$35/cu. yd.	4	**$140**
plant materials			
apple tree - goldrush whip	$25	6	**$150**
apple tree - enterprise whip	$25	6	**$150**
apple tree - jonomac whip	$25	5	**$125**
apple tree - macintosh whip	$26	5	**$130**
apple tree - liberty whip	$25	5	**$125**
peach tree - red haven whip	$25	5	**$125**
cherry tree - montmorency whip	$24	5	**$120**
cherry tree - compact stella whip	$24	5	**$120**
strawberry early glow bush	$9	10	**$90**
strawberry everbearing bush	$9	10	**$90**
raspberry carolina bramble	$14	5	**$70**
raspberry ann bramble	$15	5	**$75**
blackberry arapaho bramble	$14	4	**$56**
furnishings			
wood garden shed	$1,000	1	**$1,000**
subtotal cost	$0.10/s.f.		**$3,380**
contingency 10%			**$338**
TOTAL PROJECT COST			**$3,718**

IDEAL LOCATION

- A minimum of two lots (8,000 sq. ft.) where future development is not planned.
- To avoid frost and freezing conditions, orchards are best situated atop a ridge or high ground as compared to a valley.
- Fruit trees do best in areas that receive direct sunlight throughout most of the day.

BENEFITS AND OPPORTUNITIES

- This project will provide food and engage neighbors for generations to come. Many community activities can be planned around the orchard as it begins to bear fruit. (Think apple cider and jam-making parties!)
- The chance to share recipes and traditions among neighbors and establish and/or increase community dialogue around healthy, local food selection and production.
- Add a community inspired mural, horseshoe pit, gazebo, picnic tables or outdoor chess table to create a neighborhood gathering space.

LEVEL OF COMMUNITY COMMITMENT NEEDED

- This project requires a group of people who will be committed to its success for years to come.
- Maintenance will include regular litter pick-up and seasonal mowing. During the first year watering will be required. Fruit trees require annual spraying and pruning. It is helpful to have someone experienced in tree care with whom to consult.

TO SEE A LOCAL ORCHARD

ReImagining Cleveland **Brooklyn Centre Orchard** – West 34th Street and Louisiana Avenue, Cleveland, OH

ReImagining Cleveland **Gennesareth II Orchard** – East 61st Street and Quincy Avenue, Cleveland, OH

Materials list is modeled from the ReImagining Cleveland Brooklyn Centre Community Orchard. Note that the fence and arbor are not included in sample budget.

Brooklyn Centre Community Orchard

View showing the orchard layout; prepared by Brooklyn Centre Orchard volunteers

FEATURED PROJECT LEADERS

Reverend Brenda Taylor Rosario

Reverend Brenda Taylor Rasario was born and raised in the Central neighborhood. She and her family have lived across the street from the new orchard site on East 61st Street since1959. In 2010, Mayor Frank Jackson honored Reverend Taylor Rasario for her commitment and passion for community service by presenting her a Key to the City.

"We take the neighborhood kids and grandkids to the orchard. They dig the holes, trim the trees and taste the fruit. They experience hard work and the glory of God's bounty. They gain true knowledge and wisdom and that will take them far in life."

Brooklyn Centre Community Orchard

The Brooklyn Centre Community Orchard was a collaborative effort of many dedicated volunteers, and the resulting successes were made possible by their shared energies and expertise. Project leaders included Johanna Hamm, Darren T. Hamm and Brian Avery.

"This project is intended not only to bring fresh, healthy fruit into our neighborhood, but to reconnect people with the source of their food - By reclaiming lost lands and traditions, we ultimately envision residents establishing a stronger physical and spiritual bond with their natural environment".

Left: Rev. Brenda Taylor Rasario and Ray Rasario;
Right: Gennesareth II Orchard

MARKET GARDEN

Sample site size – 14,400 sq. ft.
Total growing space – 5,687 sq. ft

COST ESTIMATES	cost per unit	units	total cost
construction			
site grading	contingent on site conditions		**TBD**
landscape materials			
compost	$20/cu. yd.	35	**$700**
mulch (can be substituted with low cost or donated wood chips)	$28/cu. yd.	17	**$476**
plant materials			
dwarf fruit trees	$50	10	**$500**
annual seed costs			
seed (dependent on number of plantings in each bed and variety of seeds)	$300-$1,000 annually		**$650**
furnishings			
wood garden shed	$1,000	1	**$1,000**
subtotal cost	$0.23/s.f.		**$3,326**
contingency 10%			**$333**
TOTAL PROJECT COST			**$3,659**

Depending on the purpose of your site, level of public access desired and surrounding land uses, fencing should be considered. Fencing costs vary according to site conditions, length and style.

IDEAL LOCATION

- Multiple adjacent parcels in a residential or commercial area that is unlikely to be developed in the future.

BENEFITS AND OPPORTUNITIES

- Economic opportunities for market gardeners.
- If produce is sold on site or nearby, the garden provides healthy eating options to the community.

THINGS TO CONSIDER

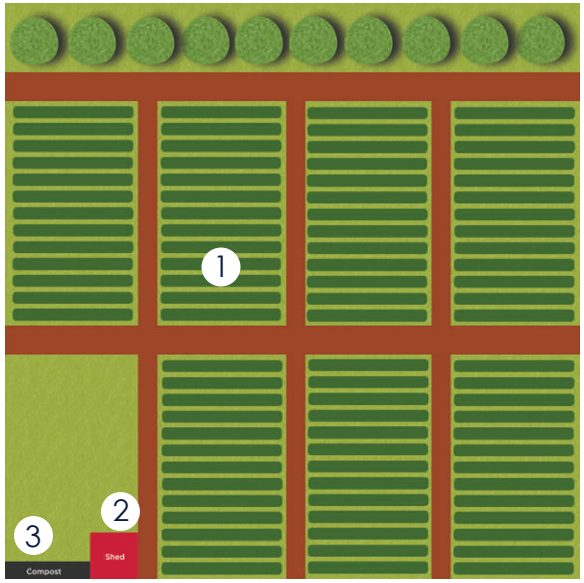
- Previous vegetable gardening experience and/or training is recommended for project leaders.
- Unlike a community garden, participants are growing food to sell and should plan on running the garden as a business.
- Soil testing is an important first step to ensure that daily contact with bare soil will not pose health risks to gardeners or neighbors. (See previous section on Things to Consider)
- Site conditions such as soil type (compacted, clay, sandy, etc.), southern sun exposure and access to water should be considered.

LEVEL OF COMMUNITY COMMITMENT NEEDED

- Depending on the size of the garden, this project requires a number of people who will be committed to dedicating a significant amount of time to maintaining the project, particularly during the growing season from March through October.

TO SEE A LOCAL MARKET GARDEN

Relmagining Cleveland **Urban Growth Farm** – 2049 West 48th Street, Cleveland, OH
Relmagining Cleveland **EcoVillage market garden** – 1963 West 57th Street, Cleveland, OH
Relmagining Cleveland **Old Hushers Farm** – 4790 West 130th Street, Cleveland, OH



1 planting beds
2 shed
3 compost

Plan showing the market garden layout; prepared by Urban Growth Farms

EcoVillage market garden

Old Hushers Farm & Justin Husher

FEATURED PROJECT LEADER

Justin Husher

Justin Husher of Old Hushers Farm is a Cleveland area transplant who has wanted his own farm since earning a Botany degree in 1998. Having turned the recession frown upside-down, Old Husher is excited to help create models for sustainable, for-profit urban farming and local food distribution.

"The greatest unexpected benefit that I've gotten from all of this is the amazing amounts of positive feedback that I get from everybody under the sun."

» COMMUNITY GARDEN

Sample site size – 4,800 sq. ft.
Total growing space – 1,536 sq. ft.
12 plots with 128 sq. ft. of growing space each

COST ESTIMATES	cost per unit	units	total cost
construction			
site grading	contingent on site conditions		**TBD**
landscape materials			
planting mix (can be substituted with less expensive topsoil with organic compost content)	$30/cu. yd.	60	**$1,800**
mulch for pathways (can be substituted with low cost or donated wood chips.)	$28/cu. yd.	17	**$476**
raised growing beds			
8' x 2" x 12" fir timbers	$11.27	24	**$271**
16' x 2" x 12" fir timbers	$23.39	48	**$1,123**
8' x 4" x 4" fir timbers (if your budget allows, fir timbers can be substituted with cedar)	$12.50	18	**$225**
hardware for bed construction			**$100**
plant materials*			
fruit trees	$25	3	**$75**
furnishings			
wood garden shed	$1,000	1	**$1,000**
subtotal cost	$1.06/s.f.		**$5,070**
contingency 10%			**$507**
total project cost			**$5,577**

** Vegetables and herbs can be purchased by the group or individually. Programs such as the City of Cleveland Summer Sprout Program provide free vegetable plants to participating community gardens.*
For more information visit: http://cuyahoga.osu.edu/topics/agriculture-and-natural-resources/summer-sprout

IDEAL LOCATION

- Very near an elementary school, senior living home and/or apartments or homes with small yards.
- The number of willing participants should determine the size of the garden and the number of adjacent vacant lots.

BENEFITS AND OPPORTUNITIES

- This project provides the opportunity for people who have limited yard space to grow vegetables and herbs.
- Community gathering space for residents and students.
- Healthy eating options for gardeners and their friends and family.
- A network of neighbors committed to increased health and quality of life.

THINGS TO CONSIDER

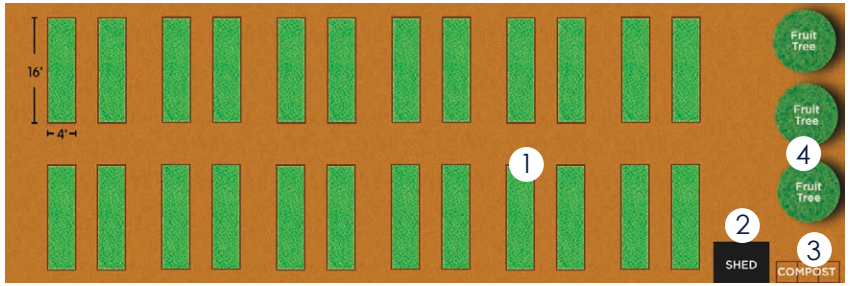
- Soil testing is an important first step to ensure that daily contact with bare soil will not pose health risks to gardeners or neighbors. (See previous section on Things to Consider.)
- Site conditions such as soil type (compacted, clay, sandy, etc), southern sun exposure and access to water should be considered.
- For lots with buried debris or poor soil, raised beds should be considered.

LEVEL OF COMMUNITY COMMITMENT NEEDED

- This project requires a number of committed community members who will spend approximately 5 hours per week tending the garden during the growing season.
- Several individuals will need to take on leadership roles to coordinate the logistics and maintenance of the garden during the growing season.
- Maintenance may include regular litter pick-up, mowing, and weeding of common areas. Individual plots will need to be tilled, planted, watered, weeded and harvested throughout the growing season.
- Community gardens require an annual source for plants and soil amendments. Many gardens charge a small plot fee to cover these costs.

TO SEE A LOCAL COMMUNITY GARDEN

Relmagining Cleveland **Watterson-Lake School garden** – 1449 West 75th Street, Cleveland, OH
Relmagining Cleveland **Liberian Refugee garden** - 6614 Wakefield Avenue, Cleveland, OH



1 planting beds
2 shed
3 compost
4 fruit trees

Plan showing the community garden layout; prepared by Urban Growth Farms

Volunteers working on the construction of raised beds for a community garden

FEATURED PROJECT LEADERS

Krahn Tribe of Liberia

Mr. Kannon Doebo and Mr. Daniel Doe are both members of the Krahn tribe, from Liberia. Genocidal civil war erupted there over 20 years ago, and many Krahn left everything behind, living in Ivory Coast refugee camps for about 15 years. Over 150 of these refugees were subsequently settled in Cleveland. Mr. Doebo was a junior high teacher, a religion catechist, and a small farmer who grew coco, coffee, and orange trees. He has lived in Cleveland for 6 years. Mr. Doe was also a small farmer, a rubber tree tapper and a sugar-cane farmer. He has lived in the U.S. for 8 years. They have led a group of about 12 Liberian gardeners to develop their 30 x 130 ft. plot to promote self sufficiency and to share their harvest with the greater community, their fellow Liberians as well as their American and other refugee neighbors who live around their garden site. Mr. Doebo and Mr. Doe are also active in the Refugee Response/Ohio City Farm.

Michelle DeBock and the students, teachers and staff of Watterson-Lake School Community Garden

Michelle DeBock has been a teacher at Watterson-Lake School in the Detroit Shoreway Neighborhood for nine years. Over the last three years, since residing in the neighborhood, she has developed new friendships and enjoyed the cultural, entertainment and dining options and beautification efforts that continue to blossom.

Liberian Refugee garden leaders

Watterson-Lake students thank MTD for equipment donation

SIDEYARD EXPANSION

Sample site size – 4,560 sq. ft. with a frontage of 38 ft.

	OPTION 1 - LAND BANK LOT IS COMBINED WITH ONE ADJACENT PROPERTY			OPTION 2 - LAND BANK LOT IS SPLIT AND APPENDED TO TWO ADJACENT PROPERTIES		
COST ESTIMATES	**cost per unit**	**units**	**total cost**	**cost per unit**	**units**	**total cost**
construction						
site grading	contingent on site conditions		**TBD**	contingent on site conditions		**TBD**
plant materials						
magnolia galaxy tree	$150	2	**$300**	$150	2	**$300**
furnishings						
wood picket fencing (optional)	$17/linear foot installed	180	**$3,060**	$17/linear foot installed	180	**$3,060**
lot consolidation						
lot purchase	$1	1	**$1**	$1	2	**$2**
property transfer fees and county recording fee paid to city of cleveland	$28 (2 pages) of the deed & 8 for each addl. page		**$70**			–
professional survey of property and adjacent vacant lot			**$700**			**$1,500**
city of cleveland division of engineering and construction survey review	$100	1	**$100**	$100	2	**$200**
deed preperation	$100	1	**$100**	$100	2	**$200**
recording the consolidated plot map with cuyahoga county recorders office	$0.10/sq. in. of plat map - 40 minimum		**$45**	approx. $45 (0.10/sq. in. of plat map - 40 minimum)	2	**$90**
recording of the consolidated deed with cuyahoga county recorders office	$28 /2 pages of the deed & 8 for each addl. page		**$70**	approx. $70 (28 /2 pages of the deed & 8 for each addl. page)	2	**$140**
subtotal cost	$0.98/s.f.		**$4,446**	$1.20/s.f.		**$5,492**
contingency 5%			**$222**			**$275**
TOTAL PROJECT COST			**$4,668**	**$2,883/neighbor**		**$5,767**

If you live next to a vacant lot, you may be able to access the vacant lot to extend your side yard or formally split it with your neighbor. The first thing you must do is research the ownership of the lot by entering the address into the Cuyahoga County Auditor's website (http://auditor.cuyahogacounty.us/repi/default.asp). If an individual or company owns the property, contact the owner for permission to use the lot. If the City of Cleveland Land bank owns the property, often times you can purchase the lot from the City. The sale price is contingent on the size of lot. Non-Buildable lots with a frontage of less than 40 ft. cost $1 and lots with a frontage of 40 ft. or greater cost $10 per ft. of frontage. For example, a lot with a 50 ft. frontage would cost $500.

Upon purchasing a vacant lot from the City of Cleveland's Land Bank for yard expansion, it is strongly recommended that the lot should be consolidated with the owner's existing property. In doing so, the County Auditor will assign one parcel number for tax identification purposes. This is an advantage to the owner because it ensures the property will be treated as a single parcel in the event of a future sale, bank financing or planned improvements. In order for City permits to be issued for planned improvements, consolidation of the parcels must first be completed.

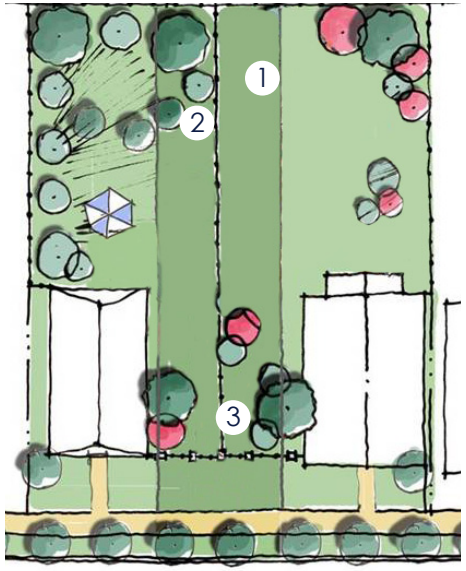
To begin the process of purchasing a City of Cleveland Land Bank lot, one or both neighbors must complete a Side Yard Expansion application. Contact the City of Cleveland, Community Development Department, Division of Real Estate, (216) 664-4126.

IDEAL LOCATION

- A vacant lot adjacent to one or between two owner-occupied homes.

BENEFITS AND OPPORTUNITIES

- Provides space for larger yards, expanded greenspace, gardens or a driveway.



1 lawn expansion
2 trees, shrubs
3 fence

Plan showing a lot split between two neighbors

View showing a lot split between two neighbors

THINGS TO CONSIDER

- The homeowner(s) taking ownership of the lot should have the interest and resources to maintain their properties.
- The homeowner taking ownership of the lot must not have code violations and must be current on all property tax assessments.

LEVEL OF COMMUNITY COMMITMENT NEEDED

- This project requires very little community commitment to install and maintain. However, the Land Bank application process incorporates input from City staff, local design review committees and the Councilperson, whose authorization is needed for the land bank sale.
- Maintenance will include typical yard maintenance.

TO SEE A LOCAL SIDE YARD EXPANSION

See many examples on **West 58th St. between Bridge Avenue and Franklin Boulevard**.

FEATURED PROJECT LEADERS

Diane Stimely and Dianne Krnc

Neighbors Diane Stimely and Dianne Krnc have lived on Edna Road in the St. Clair Superior neighborhood for a combined 75 years.

"Being able to split the lot between our homes gives us more room for a garden and our pets. We've been close neighbors for many years, but going through the formal process to split and improve the lot has brought us even closer together. The process of splitting a lot, instead of one person just taking it, on makes neighbors work together and get to know each other. It's a win-win situation."

Diane Stimely & Dianne Krnc are planning a sideyard expansion between their properites

STREET EDGE IMPROVEMENT

Sample site size – 4,000 sq. ft.

COST ESTIMATES: OPTION 1	cost per unit	units	total cost
construction			
site grading	contingent on site		**TBD**
landscape materials			
topsoil	$25/cu. yd.	1.5	**$38**
mulch	$35/cu. yd.	3	**$105**
plant materials			
sea green juniper	$30	1	**$30**
rosanne geranium	$8	12	**$96**
palibin dwarf lilac	$35	3	**$105**
galaxy magnolia tree	$150	1	**$150**
dwarf fountain grass	$10	3	**$30**
black eyed susan	$8	6	**$48**
blue cadet hosta	$8	12	**$96**
myrtle	$50	1	**$50**
subtotal cost	$0.19/s.f.		**$748**
contingency 10%			**$75**
TOTAL PROJECT COST			**$823**

COST ESTIMATES: OPTION 2	cost per unit	units	total cost
construction			
site grading	contingent on site		**TBD**
landscape materials			
topsoil	$25/cu. yd.	1.5	**$38**
mulch	$35/cu. yd.	0.5	**$18**
plant materials			
sea green juniper	$30	1	**$30**
galaxy magnolia tree	$150	2	**$300**
maiden grass	$20	1	**$20**
anthony waterer spiraea	$30	3	**$90**
subtotal cost	$0.12/s.f.		**$496**
contingency 10%			**$50**
TOTAL PROJECT COST			**$546**

IDEAL LOCATION

- A vacant lot in an area where development may occur in the foreseeable future.

BENEFITS AND OPPORTUNITIES

- Multiple vacant lots in one area can be planted with the same design adding a unified feel to the street or block.
- A low cost beautification strategy for neighbors and visitors to enjoy.
- Discourages illegal activities such as debris dumping.

THINGS TO CONSIDER

- If possible, trees should be planted strategically along the front of the lot so if development occurs the trees will not have to be relocated in order to build.

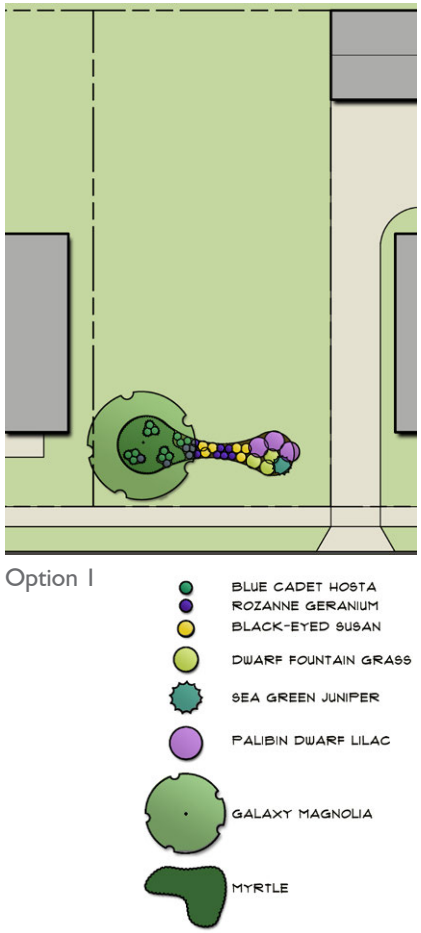
LEVEL OF COMMUNITY COMMITMENT NEEDED

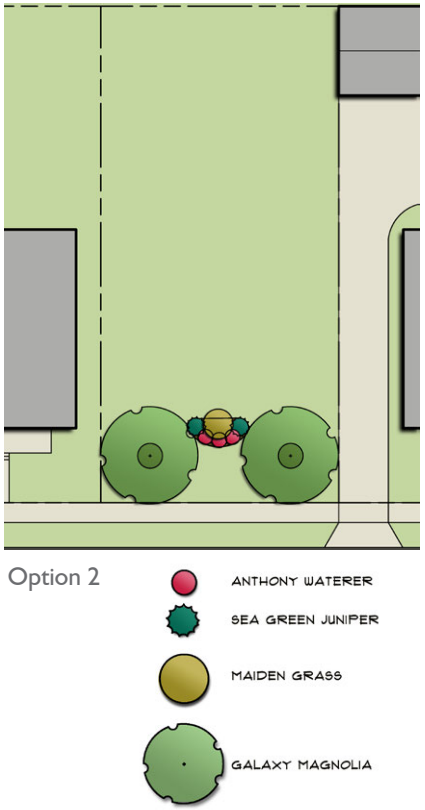
- This project requires a medium level of community involvement to install. Once the plants are established, it requires a low to medium level of involvement depending on the size of the lot and landscape design. Choose drought tolerant, hardy perennials and grasses to reduce maintenance needs.
- Maintenance will include regular litter pick-up and seasonal mowing. During the first year, weekly deep watering will be required. Depending on your plant selection, periodic mulching may be required.

TO SEE A LOCAL STREET EDGE IMPROVEMENT

Slavic Village Model Block – East 75th Street between Union Avenue and Aetna Road, Cleveland, OH
Detroit Shoreway Model Block – 1294 West 76th Street, Cleveland, OH

Depending on the purpose of your site, level of public access desired and surrounding land uses, fencing should be considered. Fencing costs vary according to site conditions, length and style.





Plans showing the layouts for streetedge improvement; prepared by Plan it Green Designs LLC.

Streetedge improvement options; prepared by Plan it Green Designs LLC.

FEATURED PROJECT LEADER

Marlane Weslian

Marlane Weslian has been a Development Officer with Slavic Village Development (SVD) since 1998. She carries out neighborhood planning, green space development and real estate projects in the Slavic Village/Broadway community, and has greened their model block with street edge improvements.

"I have lived in Broadway Slavic Village for 39 years and useable green space has always been in short supply – until ReImagining happened; now we have bigger yards, new trail connections and bigger gardens; it's truly a wonderful sight!"

Marlane Weslian

NEIGHBORHOOD PATHWAY

Sample site size – 20,000 sq. ft.

COST ESTIMATES	cost per unit	units	total cost
construction			
site grading	contingent on site conditions		**TBD**
walkway/paving materials			
compacted crushed gravel	$26/cu. yd.	63	**$1,638**
landscape materials			
topsoil	$20/cu. yd.	20	**$400**
plant materials			
4' upright shrub, viburnum	$40 ea.	80	**$3,200**
6' flowering tree, flwg. plum	$95 ea.	12	**$1,140**
wildflowers	$0.20/s.f.	500	**$100**
furnishings			
waste receptacle	$600 ea.	2	**$1,200**
subtotal cost	$0.38/s.f.		**$7,678**
contingency 10%			**$768**
TOTAL PROJECT COST			**$8,446**

Depending on the purpose of your site, level of public access desired and surrounding land uses, fencing should be considered. Fencing costs vary according to site conditions, length and style.

IDEAL LOCATION

- An area where blocks are very long and vacant parcels can be used to create a walkway mid block. The project space should be a minimum of two lots wide and two lots deep.
- Large vacant parcels on the corner that already serve as informal walkways.

BENEFITS AND OPPORTUNITIES

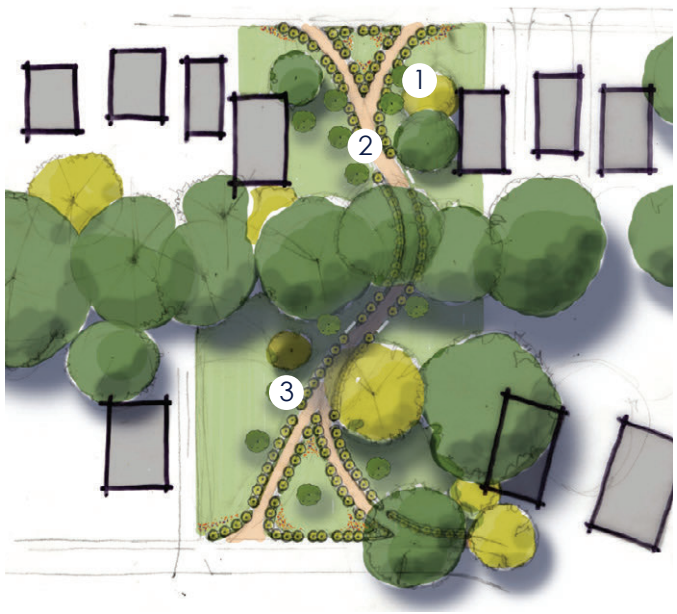
- A park-like passive space for neighbors to enjoy.
- Creates a formal walkway connecting two parallel or perpendicular streets.

THINGS TO CONSIDER

- Creating a design that allows neighbors to see from one end of the pathway to the other will make this an appealing place to walk.
- Depending on the site, solar lighting should be considered.
- Because pedestrian traffic may be directed through a residential area, neighbors living on all sides of the project should be consulted and in support of the project.

LEVEL OF COMMUNITY COMMITMENT NEEDED

- This project requires a high level of teamwork during the installation and throughout the life of the project. It is important to get a group of people together who will be responsible for the long-term upkeep of the neighborhood pathway. This could be an informal group of neighbors, a block club, a church group or a community development corporation.
- Maintenance will include regular litter pick-up and seasonal mowing and pruning. Until plants are established weekly deep watering will be required. Depending on your plant selection, seasonal mulching may be required.



1 flowering trees
2 gravel path
3 hedge row

Plan showing a neighborhood pathway layout

View showing a neighborhood pathway layout

Children enjoying riding through the Brooklyn Centre neighborhood pathway

Volunteers working on the construction of a pathway through the Brooklyn Centre Orchard

Bottles used as construction material for a pathway

POCKET PARK

Sample site size – 4,000 sq. ft.

COST ESTIMATES	cost per unit	units	total cost
construction			
site grading	contingent on site conditions		**TBD**
walkway/paving materials			
compacted crushed gravel	$26/cu. yd.	34	**$884**
landscape materials			
topsoil	$20/cu. yd.	44	**$880**
plant materials			
woodland edge seed mix	$0.31/s.f	500	**$155**
native plant seedlings	$105/flat	10	**$1,050**
8' evergreen - spruce, fir	$137	8	**$1,096**
6' flowering tree - flowering plum	$95	3	**$285**
furnishings			
waste receptacle	$600	1	**$600**
4' commercial garden bench	$590	1	**$590**
subtotal cost	$1.39/s.f.		**$5,540**
contingency 10%			**$554**
TOTAL PROJECT COST			**$6,094**

Depending on the purpose of your site, level of public access desired and surrounding land uses, fencing should be considered. Fencing costs vary according to site conditions, length and style.

IDEAL LOCATION

- Vacant lot on residential street or unbuildable odd shaped lot on a commercial street

BENEFITS AND OPPORTUNITIES

- Community gathering space for neighbors or a passive green space that beautifies the neighborhood.
- Add a community inspired mural, horseshoe pit, gazebo, picnic tables, or outdoor chess table for all to enjoy.

THINGS TO CONSIDER

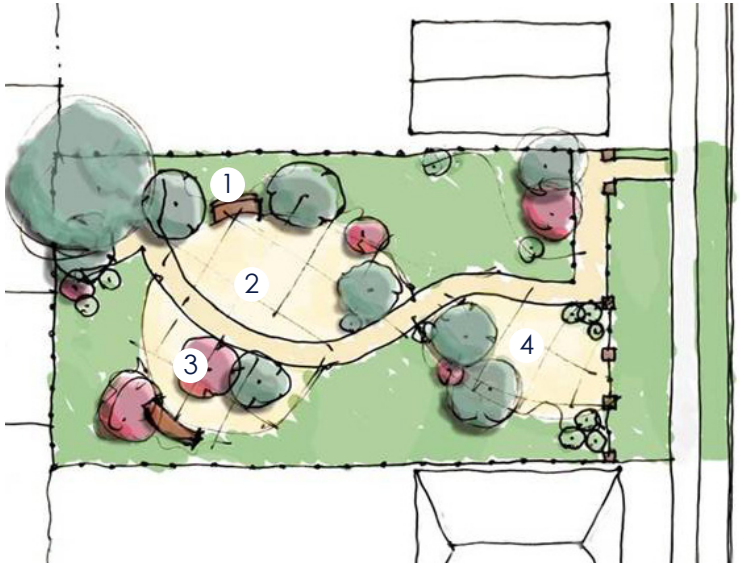
- If the lot is between two buildings, then plants selected for this project will need to thrive in the shade.
- Ideally, if your budget allows, the side and rear edges of a pocket park should have fencing, hedges, or other screening to buffer adjacent land owners from noise and activity in the park.

LEVEL OF COMMUNITY COMMITMENT NEEDED

- This project requires a high level of teamwork during the installation and throughout the life of the project. It is important to get a group of people together who will be responsible for the long-term upkeep of the park. This could be an informal group of neighbors, a block club, a church group or a community development corporation.
- Maintenance will include regular litter pick-up and seasonal mowing and pruning. Until plants are established, weekly deep watering will be required. Depending on your plant selection, seasonal mulching may be required.

TO SEE A LOCAL POCKET PARK

Simmons Park – West 58th Street and Bridge Avenue, Cleveland, OH
ReImagining Cleveland **Peace Space** – 2179 East 87th Street, Cleveland, OH



1 seating
2 crushed stone
3 fruit trees
4 gardens

Plan showing a pocket park layout

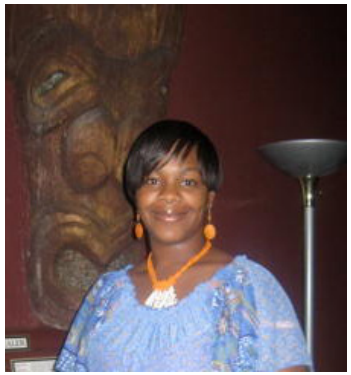
View showing a pocket park layout

FEATURED PROJECT LEADER

Akanni Thomas

Akanni Thomas is a native Clevelander who resides in the Fairfax neighborhood. She has organized block clubs and assisted residents and grass root groups with applying for funding for community projects. Akanni is also a strong proponent of cultural advocacy. Akanni received her education from the Cleveland School of Arts and Cleveland State University. She is the recipient of the 2010 Emerging Leader Award from Ohio Citizen Action, a local environmental non-profit.

"The Peace Park is a welcome addition to our neighborly street. We revived the dilapidated park on our street and the neighborhood youth joined a talented renowned graffiti artist to create a mural on the fence lining the park. The mural reads 'Think Bigger. Knowledge is Power'. This is a timeless message. Once the land was remediated of all contaminants, residents and volunteers planted new trees and shrubs. Next spring we will install beautiful native flowers and benches, and a picnic table. This park will finally be an intergenerational gathering place where families and neighbors can play, eat, and learn together."



Akanni Thomas

Mural in Peace Park

NATIVE PLANTING

Sample site size – 4,000 sq. ft.

COST ESTIMATES	cost per unit	units	total cost
construction			
site grading	contingent on site conditions		**TBD**
landscape materials			
topsoil	$20/cu. yd.	20	**$400**
straw	$5/bale	200	**$1000**
mulch	$28/cu. yd.	40	**$1,120**
cardboard (sq. ft.)		5000	
plant materials *			
native grasses and wildflower seed mix for 1/10 acre (smallest quantity available)	$140	1	**$140**
woodland, shrubland, prarie perennials	$10	75	**$750**
native trees	$240	4	**$960**
furnishings			
educational signage			**$300**
subtotal cost	$1.17/s.f.		**$4670**
contingency 10%			**$467**
TOTAL PROJECT COST			**$5,137**

* Choose plant types based on sun exposure and soil moisture.

Depending on the purpose of your site, level of public access desired and surrounding land uses, fencing should be considered. Fencing costs vary according to site conditions, length and style.

IDEAL LOCATION

- A vacant lot in need of beautification.

BENEFITS AND OPPORTUNITIES

- By using plants naturally found in Ohio, this project provides a habitat for birds, butterflies, and other wildlife.
- The root systems of native plants help soil absorb water, which helps to reduce erosion and runoff and improves local water quality.
- Native plants help clean the air and water by absorbing and processing pollutants.
- Add benches, bird houses, and plant identification signage to create a community gathering space and a place to educate visitors on the value of natural urban spaces.

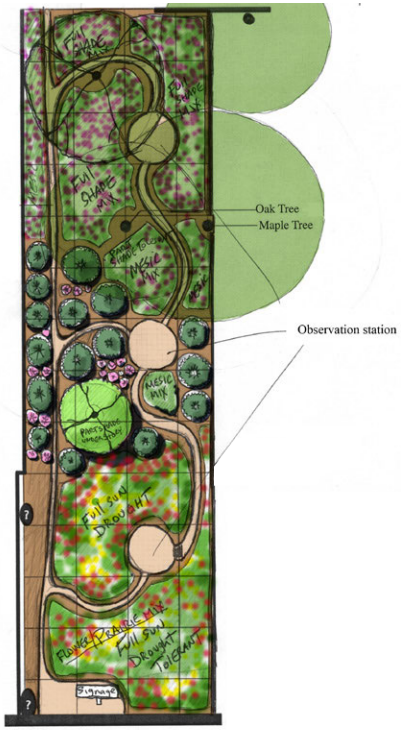
THINGS TO CONSIDER

- It is recommended to build soil by sheet mulching (cold composting). Sheet mulching involves layering topsoil, mulch and cardboard over the existing ground. The layers must cure for at least 8 weeks. It is best to sheet mulch in fall and plant in early spring.
- Selecting a native plant mix that grows to a limited height will ensure that this project is low maintenance.
- Native plantings do best on sunny lots; some shade can be utilized with the correct plant selection. Avoid lots that are overrun with invasive or non-native plants.
- While it is illegal to remove native plants from public parks, native plant rescue groups organize legal plant rescue events from public and private property. Contact the Earth Day Coalition for more information. Once you have a native plant garden, you can begin seed collection, propagation and plant sharing.

LEVEL OF COMMUNITY COMMITMENT NEEDED

- This project requires a high level of teamwork at the time of preparation, installation, and until the plants are established in the first growing season. Native plants are adapted to northeast Ohio's local conditions and are easier to grow and maintain once they are established.
- Maintenance will include litter pick-up and seasonal trimming. Until plants are established, a weekly deep watering is necessary, unless one inch of rain has fallen. Depending on plant selection seasonal mulching may be required.

For information on native plant park design, sheet mulching and plant/tree selection, visit the Earth Day Coalition Naturehood website: www.earthdaycoalition.org/naturehood_main.php



Plan showing a native planting layout

View showing a native planting layout

Brooklyn Centre Naturalist Native Planting

TO SEE A LOCAL NATIVE PLANTING

Relmagining Cleveland **Naturehood Site** – 3115 West 50th Street, Cleveland, OH
Relmagining Cleveland **Brooklyn Centre Naturalist Native Planting** – 3789 West 39th Street, Cleveland, OH

FEATURED PROJECT LEADERS

Brooklyn Centre Naturalists

A group of dedicated neighbors and business people formed Brooklyn Centre Naturalists in 2007 to educate and involve our community in creating a wildlife and people-friendly habitat in an urban setting. Brooklyn Centre is a place where residents make wildlife a priority because the health of our community depends on the health of our environment. Merging our natural heritage with our built heritage preserves our unique ecosystem.

"The gardens are a destination for neighbors showing their out-of-town guests what Brooklyn Centre has to offer. We have had people from as far away as California who have heard about our project through volunteers or on-line. They stop by for a few moments of solitude in 'a forest trail in the city'. What a delightful surprise!"

Naturehood volunteers

Signage with information about native plants

RAIN GARDEN

Sample site size – 4,000 sq. ft.
Rain Garden size is 300 sq. ft.

COST ESTIMATES	cost per unit	units	total cost
construction			
site grading	contingent on site conditions		**TBD**
landscape materials			
Bioretention rain garden soil mix	$45/cu. yd.	4	**$180**
mulch	$35/cu. yd.	2	**$70**
plant materials			
Rain garden plant kit (available for sunny and shaded garden)	$120/100 s.f.	3	**$360**
12' shade tree-river birch, maple	$225	1	**$225**
6' flowering tree-flowering plum	$95	2	**$190**
furnishings			
Piping for downspout connections from adjacent homes (optional, depends on distance)			**TBD**
subtotal cost	$0.26/s.f.		**$1,025**
contingency 10%			**$103**
TOTAL PROJECT COST			**$1,128**

Materials list is based on projects completed by the Cuyahoga County Soil and Water Conservation District.

Depending on the purpose of your site, level of public access desired and surrounding land uses, fencing should be considered. Fencing costs vary according to site conditions, length and style.

IDEAL LOCATION

- A vacant lot with a neighbor who will divert their downspouts to the rain garden area.

BENEFITS AND OPPORTUNITIES

- Rain gardens trap stormwater allowing it to seep back into the ground or nearby waterways instead of overwhelming storm sewer systems and nearby streams.
- Rain gardens planted with native plants provide needed habitat for insects and birds and are beautiful year round.
- Rain gardens help to filter contaminated stormwater from roofs, driveways and parking lots before it enters back into natural waterways.
- Add benches to create a resting place and birdhouses and plant identification signage to educate neighbors and passersby.

THINGS TO CONSIDER

- Diverting stormwater has many benefits. However, proper planning and construction of downspout disconnects is very important. Incorrect construction can lead to flooded yards or wet foundations. To ensure proper construction, the City of Cleveland requires a permit to disconnect your downspout. Permits can be obtained from the Department of Building and Housing, Division of Construction Permitting.
- Utility fees for the Northeastern Ohio Regional Sewer District are rising. Contact the Sewer District to learn about incentives for homeowners that disconnect their downspouts and reduce impervious surfaces on their property. http://www.neorsd.org/

LOCATING AND SIZING YOUR RAIN GARDEN

- Consult the Rain Garden Manual for Homeowners for more detailed information http://www.cuyahogaswcd.org/PDFs/RainGardenManual.pdf
- Rain gardens should not be within 10 ft. of your home. Creating a rain garden requires some excavation, so be sure to avoid trees and tree roots.
- If the lot collects water, the rain garden should not be in the natural depression. Instead it should be located just up the slope to trap the water before it collects in the depression.
- For areas with sandy soils, determine the size of your rain garden using a 5:1 ratio. Determine the surface area that will drain into your garden (sq. ft. of roof) and divide it by 5 to get the square footage of your garden. For example, if 500 sq. ft of your roof will drain into the garden, then the garden should be 100 sq. ft. For areas with compacted, poorly drained or clay soils, use a 2:1 ratio.

Volunteers working on the construction of a raingarden

Melissa Miller

- The depth of your rain garden is determined by the slope of the property. Gardens in vacant lots with a very slight slope should be 3 to 5 inches deep, medium slope should be 5 to 7 inches and lots with a larger slope should be 8 to 12 inches deep. The lot should have a slope no greater than 12% to prevent your rain garden from washing away.

LEVEL OF COMMUNITY COMMITMENT NEEDED

- This project takes about 6 to 10 volunteers to install the garden by hand in one day. Once the garden is installed it requires limited community involvement. Neighbors on either side of the lot can easily maintain the garden once it is installed.
- Maintenance may include regular litter pick-up, mowing (around the garden), and seasonal trimming and mulching. Until the plants are established, bi-weekly watering may be necessary.

TO SEE A LOCAL RAIN GARDEN

Relmagining Cleveland **Rain Garden** – 4354 West 131st Street, Cleveland, OH

FEATURED PROJECT LEADER

Melissa Miller

Melissa Miller is the Planning Coordinator for the Bellaire-Puritas Development Corporation. She works on various environmental projects in the neighborhood including stormwater projects along Big Creek and the preservation of the Puritas Wetlands.

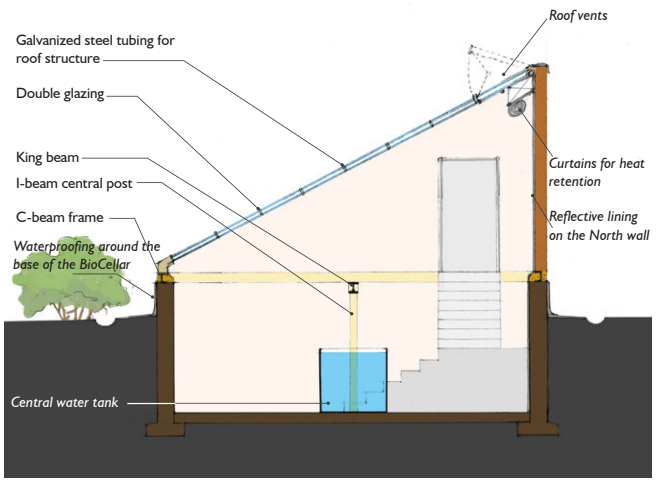
"Stormwater management is an issue that affects the entire region. Stormwater carries pollutants to the local waterways, and excessive stormwater can cause sewer overflows. By installing green stormwater demonstration projects on vacant lots in the Bellaire-Puritas neighborhood, we were able to begin to address the negative impact that stormwater has on the environment while improving the aesthetic appeal of the neighborhood."

View showing a raingarden layout

» IDEAS & INSPIRATIONS

BIOCELLAR

Food production BioCellar adjacent to a market garden



Section through a BioCellar

A BioCellar is a partially deconstructed house unit with a solar roof. It proposes to salvage a valuable part of a derelict house–its masonry foundation. An existing foundation wall, surrounded by earth, is an insulated container that can store energy and serve a variety of productive functions.

USES

- *Food Cellar:* The Cleveland Urban Design Collaborative, in collaboration with CW Waterworks and other research partners, are currently exploring the potential of a BioCellar to extend the growing season for crops as an upgrade to hoop houses. Using a BioCellar for regular crops can extend the season by two weeks in spring and two weeks in fall, adding four weeks to the normal 16 week season. However, if cool-season crops are grown in the BioCellar it can extend the growing season to about 32 weeks a year for a much higher economic impact.
- *Root cellar:* Another possible food related use could be to convert a section of the BioCellar into a root cellar, as a part of an urban farm to store food at a low temperature and steady humidity. A root cellar keeps produce from freezing during the winter and keeps it cool during the summer to prevent spoilage.
- A favorable interior environment makes food production an obvious use for the BioCellar, but it also opens up possibilities for other uses like energy production, composting, animal rearing, community center, etc.

LOCATION CRITERIA

The following criteria should guide site selection for a BioCellar:

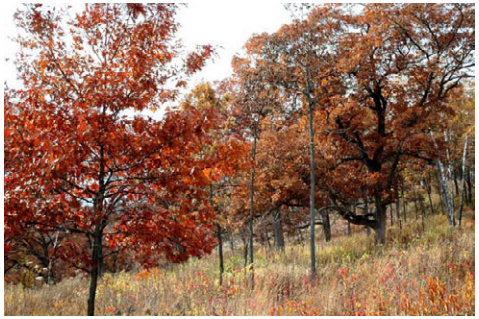
- *Building orientation:* No buildings, trees or other structures shoould obstruct the southern side of the BioCellar structure. Also, the longer wall of the BioCellar should face within 20° of true south.
- The bottom of the structure should be at least 5' above the water table, as water seepage can be a major issue for the basement.
- It should be ideally located within 1/4 mile of a public transit stop.
- For food production uses, the structure should be located within 1/4 mile radius of community gardens and/or urban farms.
- Adjacency to vacant land is preferred for BioCellars that need open land for supplementary uses.
- Collaboration with a local champion (community group or CDC) is advisable for the success of the project.

Please contact the CUDC for more information. *www.cudc.kent.edu*

URBAN SAVANNAH

Oak Savannas are unique plant communities that used to cover much of the mid-west before modern development. Aside from beautiful Oak trees, they are characterized by a wide diversity of perennial grasses and wildflowers. Urban savannas are good for our environment because they capture stormwater, cool the surrounding micro-climate and provide needed habitat for insects, birds and small mammals. As native landscapes, they remain attractive year-round. Urban savannas can be used as passive or educational spaces and require limited maintenance once trees and plants are established.

Newly planted urban savannah in the Slavic Village neighborhood



Mature Midwestern Oak Savanna
Photos by: Thomas D. Brock, University of Wisconsin-Madison

FOREST RAINGARDEN

Ashurst Stormwater Management Demonstration Project, University Heights, OH
Photos by: Jean Loria

A forest rain garden captures stormwater and allows it to infiltrate into the ground instead of rushing into and overwhelming nearby waterways. Forest rain gardens are similar to standard rain gardens, except that they are larger and include a successive variety of plants, including trees.

The Ashurst Project in University Heights, Ohio, demonstrates stormwater management using bioretention and swales. It has a 190-foot stone filled trench, fish-tail berm and swale constructs. The plantscape directs, detains, and allows rainwater to infiltrate into the soil. The rain garden includes plants that have compatible moisture requirements, provide appropriate ecological services for urban wildlife and provide aesthetics for residents. Novel to the project is the use of directed rain garden succession design featuring native plants—trees, shrubs, and perennials. This project is designed by CW Waterworks with support from the Northeast Ohio Regional Sewer District, and is located at 2603 Ashurst Road.

PUBLIC ART

Public art can enhance our greenspaces in many ways. Important benefits of most public artwork are beautification of its surroundings and beauty for its own sake, but it can also strengthen the identity of a place or call attention to a community project (or perhaps one important part of a project), and, especially when working with a tight budget, it can be called upon to function in practical ways. For example, there is no reason a rain barrel or a birdhouse cannot also be a work of art, and sitting down to rest on an artist-designed bench could certainly become a memorable experience.

There is almost no creative endeavor that cannot benefit from artwork or the skillful hands of an artist!

Images showing public art as a component of vacant land enhancement strategies

Parking lot in Tremont neighborhood designed by URS Corp. to provide bio-retention areas for managing stormwater; *Illustration by:* Katherine Holmok, URS Corporation

This document details a few ideas for vacant lot reuse, but the possibilities of how vacant land can be repurposed to improve the quality of life in our neighborhoods and health of our environment are endless. Besides basic greening and gardens, vacant lots can be used for in-fill housing development, or to add a needed driveway and garage to a home in a high density area without off-street parking. They can be used for energy generation through the installation of solar energy or geothermal systems that pull clean energy from the sun and earth. Vacant lots can also be used for temporary play spaces with mini-soccer fields, seasonal ice rinks or even pop up dog parks. With creativity, passion, perseverance and partnerships – anything is possible!

STEPS »
TO CREATE A SUCCESSFUL COMMUNITY LAND REUSE PROJECT

1. IDENTIFY VACANT LAND IN YOUR NEIGHBORHOOD

Find out who owns the site and learn more about its' condition.

- The best place to obtain ownership information is the Cuyahoga County Auditor's web site. You can find it at: http://auditor.cuyahogacounty.us/repi/default.asp. The City of Cleveland maintains an online data base of city-owned land bank parcels at: http://cd.city.cleveland.oh.us/scripts/cityport.php
- Using the Trust for Public Land's online Ohio Green Print at http://wwwohiogreenprint.org you can map all of the vacant lots in your neighborhood plus learn about soils, vegetation, neighborhood demographics and much more.
- Take a walk around the site several times at different times of the day. Take note of sun exposure, lot size, how neighboring plots are used, drainage of stormwater and other features such as trees, fences and sinkholes.
- Once you have learned about the site, think about the best way to use this land. The Cleveland City Planning Department's Land Use Decision Tree will be helpful. The Decision Tree is part of the ReImagining A More Sustainable Cleveland Vacant Land Reuse Study. You can find it online at: http://www.cudc.kent.edu/shrink/Images/reimagining_final_screen-res.pdf
- Set up a meeting with a representative from your local community development corporation (CDC). See the Resources section to identify the appropriate CDC. Ask the CDC about the long-term land use plan for the site and request help setting up a visioning session and coming up with a list of steps needed to complete your project.

2. PLAN A VISIONING SESSION

A visioning session is a meeting to come up with ideas about how you want your final project to turn out.

- Pick a date and time that will allow most people to attend. Early evening is usually best.
- Invite a representative from your CDC, your councilperson, and your neighborhood's city planner. Call (216) 664-2210 to find out who your planner is.
- Create a flyer for your meeting and use it to invite as many neighbors as possible. Be sure to include people who live next to the site and those who will use the site. You can also distribute flyers though the CDC, schools, churches and neighborhood businesses, etc.

- Gather what you will need for the session: a sign-in sheet to gather contact information (name, phone number, email and street addresses), markers, poster or flip chart paper and pictures of the site.

3. HOST THE VISIONING SESSION.

- Be sure to have everyone sign in.
- Have everyone briefly introduce themselves and share why they are interested in the project.
- Introduce the opportunity of reusing vacant land in a way that will be positive for neighborhood residents.
- Share what you've learned about the site from your online research and from your observations.
- Distribute copies of the *Re-imagining Cleveland Ideas to Action Resource Book* to help people think about ways to reuse vacant land.
- Ask for a volunteer to record the group discussion.
- Lead the discussion with questions like:
  i. What challenges do we currently have in the neighborhood?
  ii. How might improving this land help us with those challenges?
  iii. Who can benefit from this space? How can we get more neighbors involved?
  iv. What do we want to see in this space? (community gardens, benches, home for wildlife, open space) How do we want it to look?
- Decide on what type of project the group wants and what elements to include. Then continue the discussion with questions like:
  i. What resources do we already have in place?
  ii. What resources do we need to make our project happen?
  iii. How will we maintain the project once it is built?
- List all possible volunteer roles needed to complete the project. Be sure to include writing grant applications, recruiting volunteers, organizing the work on the site, and short/long term maintenance tasks.
- Ask for a core group of volunteers to form an action committee who will help to organize and move the project forward.
- Thank everyone for coming to the session and let them know what the next steps will be.

Simmons Park opening event

3. HOLD A FOLLOW-UP MEETING to plan the design and details of your project.

- Get help from the resource organizations that work with your type of project. See the listings in the Resources section of this booklet.
- Look at the project ideas and designs in this book and at other current projects on the ReImaginingCleveland.org website. You can also sketch out your own plan based on ideas from your visioning session.
- Come up with a budget. This book will be a helpful starting point but be sure to double-check cost estimates from suppliers since prices change over time. Also, keep in mind that most land re-use grants ask applicants to match what they're asking for with either in-kind donations or a financial match.
- Decide how to raise money and solicit donations for the project. Find suggestions for funding in the Resources section.
- Set a time line for your project.
- Create an implementation and maintenance plan and schedule for doing your project. Be sure to include how the project will be maintained after it is finished. See the Things to Consider portion of this book. Plan out the details:
    i. What needs to be done?
    ii. What permits will be needed?
    iii. Who will install the project?
    iv. Who will maintain the project? How often?
    v. How will the maintenance schedule change with the seasons?

- Identify a non-profit organization to be your fiscal agent for any project grants you receive. Often neighborhood CDCs take on this role. Ask your CDC contact person if they would be willing to do this. Be sure to discuss what is expected on their part and yours.

4. START WORK ON YOUR PROJECT and keep neighbors involved in the process

- Distribute copies of a flyer or newsletter with the design plan and important meetings and work days. Ask for volunteers and donations. Remember there are lots of people who hate meetings but will gladly show up for work days.
- If possible, have a few mini-events in advance to build a "buzz" for your big project work days. Think about a picnic on the site, a litter clean-up or a mini-fundraiser. You might even be able to get the neighborhood kids involved with a lemonade stand to make money for the project.
- If you are receiving grant funding, work with your CDC representative or a technical assistance organization to purchase supplies. Or if you are working with all donated materials, create a system for picking them up or having them delivered. Have clear communications with all volunteers so you have them at your site for the work days.
- Hold your volunteer work day(s). Be sure to end it with food and refreshments to celebrate your great work.
- Continue to maintain the site according to your plan.
- You may want to schedule a follow-up meeting to discuss how the work day(s) went and how site maintenance is going. Discuss any possible changes you need to make to your maintenance plan.

COMMUNITY RESOURCES »

These are some resources for advice, assistance, information, materials and funding to help you accomplish your project. No endorsement is implied for businesses listed, and no discrimination is intended of businesses not listed.

MAPPING TOOLS AND ONLINE INFORMATION ON VACANT LAND

Cuyahoga County Auditor
http://auditor.cuyahogacounty.us/

City of Cleveland Planning Commission
http://planning.city.cleveland.oh.us/gis/

Ohio Greenprint
http:// www.ohiogreenprint.org/

City of Cleveland Land Bank
Community Development Department – Division of Real Estate
http://www.city.cleveland.oh.us/CityofCleveland/Home/Government/CityAgencies/CommunityDevelopment/LandBank
Contact: Terry Robbins or Anna Sarto
Email: trobbins@city.cleveland.oh.us, asarto2@city.cleveland.oh.us
Phone: (216) 664-4053, (216) 664-4126

ADVICE ON APPROPRIATE LAND RE-USE STRATEGIES FOR YOUR NEIGHBORHOOD

Cleveland Urban Design Collaborative
www.cudc.kent.edu
Contact: Terry Schwarz
Email: tschwarz@kent.edu
Phone: (216) 357-3426

City of Cleveland Planning Commission
Land use planning
http://planning.city.cleveland.oh.us/
Phone: (216) 664-2210
Call the main number and ask to speak to your neighborhood planner.

Neighborhood Community Development Corporations (CDC)
For a listing of CDCs and their service areas visit:
http://www.nhlink.net/
OR call the Cleveland Neighborhood Development Coalition
Phone: (216) 928-8100

SOIL TESTING AND REMEDIATION

United States Environmental Protection Agency
A Citizens Guide to Phytoremediation
http://www.epa.gov/tio/download/citizens/citphyto.pdf

University of Massachusetts
Soil and plant tissue testing services
http://www.umass.edu/soiltest/index.htm
Email: soiltest@psis.umass.edu
Phone: (413) 545-1931
Prices range for testing - $10 and up

URBAN AGRICULTURE - TRAINING AND ADVICE

Ohio State University Cuyahoga County Extension
Community and market gardening training and technical assistance, Summer Sprout and soil testing
http://cuyahoga.osu.edu/
Email: cuya@cfaes.osu.edu
Phone: (216) 429-8200, ext. 224

The Cleveland Botanical Garden
Green Corps youth gardens and technical assistance
http:// www.cbgarden.org/
Contact: Geri Unger
Email: gunger@cbgarden.org
Phone: (216) 707-2817

The New Agrarian Center
Urban Agriculture training and technical assistance
http://web.me.com/blueheron55/NAC_Site/Welcome.html
Email: info@gotthenac.org
Phone: (440) 941-4009

The Countryside Conservancy
Agriculture training and technical assistance
http://www.cvcountryside.org/index.php
Email: info@cvcountryside.org
Phone: (330) 657-2542

Local Food Cleveland – an E4S Action Network
Network of community gardeners, urban farmers, bee keepers and local food advocates
http://www.localfoodcleveland.org/

PARKS AND NATURAL GREENSPACES

TRAINING AND ADVICE

Parkworks
Neighborhood greening strategies, planning and organizing volunteer projects
www.parkworks.org
Contact: Nora Romanoff
Email: nromanoff@parkworks.org
Phone: (216) 696-2122 ext. 124

Earth Day Coalition
Native plantings & Naturehood Program
http://www.earthdaycoalition.org/
Contact: Chris Trepal
Email: ctrepal@earthdaycoalition.org
Phone: (216) 281-6468

Cleveland Metroparks
Division of Natural Resources
Native plantings, wildlife habitats and vacant land assessment
http://www.clemetparks.com/Naturalresources/index.asp
Contact: John Mack
Email: jjm@clevelandmetroparks.com
Phone: (440) 331-8111

The Green Triangle
Permaculture technical assistance and volunteer recruitment
http://thegreentriangle.com/
Contact: Nick Swetye
Email: nick@greentri.org
Phone: (330) 221-4027

The Native Plant Society of Northeast Ohio
Local chapter of the Ohio Native Plant Society that promotes the use of native plants and organizes native plant rescues and educational events.
http://nativeplantsocietyneohio.org/

RAIN GARDENS, RAIN BARRELS, BIO-SWALES AND OTHER STORMWATER MANAGEMENT RESOURCES

TRAINING AND ADVICE

City of Cleveland Office of Sustainability
Information on local sustainability programs and issues including stormwater and the use of rain barrels
http://www.city.cleveland.oh.us/CityofCleveland/Home/Government/CityAgencies/PublicUtilities/Sustainability
Email: awatterson@city.cleveland.oh.us
Phone: (216) 664-2444

Northeast Ohio Regional Sewer District
Information and technical assistance on stormwater capture
http://www.neorsd.org/rainworkingforyou.php#house
Contact: Linda Mayer Mack
Email: mackl@neorsd.org
Phone: (216) 881-6600

Cuyahoga County Soil and Water Conservation District
Information and technical assistance on soil retention, rain barrel workshops and rain garden design and installation
http://www.cuyahogaswcd.org/
Rain garden manual for homeowners - *http://www.cuyahogaswcd.org/PDFs/RainGardenManual.pdf*
Contact: Todd Houser
Email: thouser@cuyahogaswcd.org
Phone: (216) 524-6584

FUNDING RESOURCES

CityWorks Grant Program
Cleveland Department of Community Development
http://www.city.cleveland.oh.us/portal/page/portal/CityofCleveland/Home/Government/CityAgencies/CommunityDevelopment/CityWorks
Contact: Donna Harris
Email: Dharris@city.cleveland.oh.us
Phone: (216) 664-4100

Gardening for Greenbacks
(for market gardens/urban farms)
Cleveland Department of Economic Development
http://www.city.cleveland.oh.us/CityofCleveland/Home/Government/CityAgencies/EconomicDevelopment/SmallBusinessandRetail#gardening
Contact: Ifeoma Ezepue
Email: iezepue@city.cleveland.oh.us
Phone: (216) 664-3622

Neighborhood Connections
http://www.neighborhoodgrants.org/
Email: neighborhoodconnections@clevefdn.org
Phone: (216) 393-4640

Cleveland Colectivo
http://www.clevelandcolectivo.org/
Email: info@clevelandcolectivo.org

REUSED MATERIAL RESOURCES

SOIL AMENDMENTS

Great Lakes Brewing Company
Brewery waste
http://www.greatlakesbrewing.com/sustainability/other-sustainability-projects
Address: 2516 Market Avenue
Cleveland, Ohio 44113
Phone number: (216) 771-4404, ext. 123

Cleveland Metroparks Zoo
Manure
http://www.clemetzoo.com/conservation/environment.asp#POO
Contact: Compost/Recycling Coordinator
Address: 3900 Wildlife Way
Cleveland, Ohio 44109
Phone number: (216) 661-6500, ext. 4508

BUILDING MATERIALS

A Piece of Cleveland
Deconstruction and demolition materials (bricks, stones, wood, etc.)
http://www.apieceofcleveland.com/
Contact: Chris Kious
Email: ckious@apieceofcleveland.com
Phone: (216) 361-9930

Habitat for Humanity ReStore
Deconstruction materials and used tools
http://www.gchfh.org/Restore/index.html
Address: 2110 W. 110th Street
Cleveland, Ohio 44102
Phone number: (216) 429-1299

PLACES TO COLLECT FOOD WASTE AND YARD WASTE TO CREATE COMPOST

Meal programs
School cafeterias
Hospitals
Food service
Local restaurants and coffee shops
Landscaping companies
Coordinate with neighbors for bagged leaf pick-up

City of Cleveland Urban Forestry Department
Woodchips
http://www.city.cleveland.oh.us/CityofCleveland/Home/Government/CityAgencies/ParksRecreationandProperties/DivisionofParkMaintenanceandProperties?_piref34_17237_34_3873_3873.tabstring=Urban Forestry
Rockefeller Greenhouse
Address: 750 East 88th Street
Cleveland, Ohio 44108
Phone: (216) 664-3104

TOOLS TO BORROW

Community Housing Solutions
http://commhousingsolutions.org/
Email: info@commhousingsolutions.org

Two Locations:

East side
12114 Larchmere Blvd.
Cleveland, OH 44120
Phone: (216) 231-5815

West side
1967 W. 45th Street
Cleveland, OH 44102
Phone: (216) 651-0077

PERMITTING RESOURCES

WATER PERMITS

Note: Call for more information – hydrant access depends on duration and type of project

City of Cleveland Department of Community Development
Contact: James Downing
Email: Jdowning@city.cleveland.oh.us
Phone number: (216) 664-4059

HYDRANT EQUIPMENT

Sutton Hardware
http://suttonhardware.com/
Address: 3848 Prospect Ave.
Cleveland, Ohio 44115
Phone: (216) 696-8340

Lakeside Supply
Address: 3000 West 117th Street
Cleveland, Ohio 44111
Phone: (216) 941-6800

FENCE, SHED, CHANGE OF USE PERMITS

City of Cleveland Department of Building and Housing
http://www.city.cleveland.oh.us/CityofCleveland/Home/Government/CityAgencies/BuildingHousing
Address: 601 Lakeside Ave. Room 510
Cleveland, Ohio 44114
Phone number: (216) 664-2282

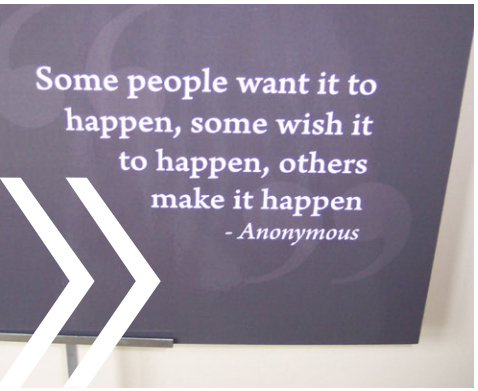
ADDITIONAL RESOURCES

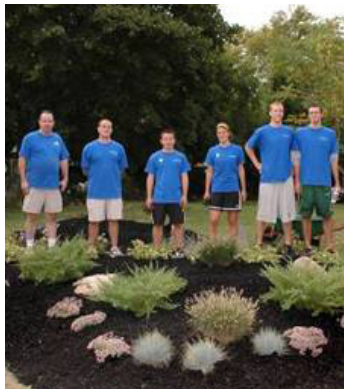
Neighborhood Progress
Re-imagining Cleveland
Connect with neighbors implementing land reuse projects and initiatives in your community.
http://www. reimaginingcleveland.org
http://www.neighborhoodprogress.org

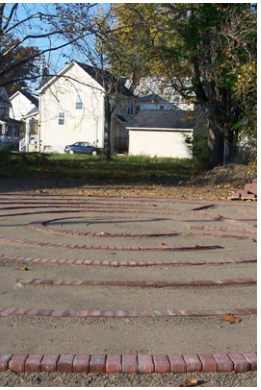
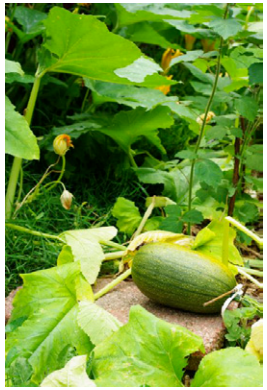
GreenCityBlueLake
An online community workspace where the people and organizations advancing sustainability in the region can tell their stories, learn from each other, and develop strategies to accelerate the progress.
http://www.gcbl.org/

"Change will not come if we wait for some other person or some other time. We are the ones we've been waiting for. We are the change that we seek."

- President Barack Obama


Some people want it to
happen, some wish it
to happen, others
make it happen
- Anonymous





10