

Land Revitalization Program Tools for Communities

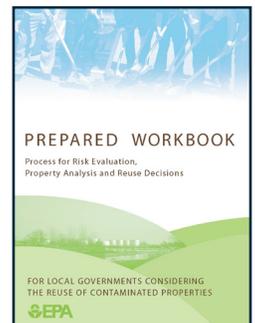


EPA's Land Revitalization Team works across EPA Regions and program offices, and in partnership with other federal agencies and the private sector to support communities in their efforts to implement sustainable redevelopment strategies. A primary goal of EPA's Land Revitalization Program is enhancing community revitalization by promoting the sustainable reuse of formerly contaminated properties. The Land Revitalization Program offers contractor assistance for small projects to support innovative, community-based land revitalization efforts with a goal to enhance the sustainability of a community's redevelopment efforts. The Land Revitalization Program's projects often align with broader Agency initiatives such as the Partnership for Sustainable Communities, Strong Cities/Strong Communities, and Making a Visible Difference in Communities. These small investments in targeted technical assistance to promising community projects often result in the development of replicable models and useful tools that can help other communities implement more sustainable redevelopment strategies that lead to more livable places.

This fact sheet highlights some of the tools that have resulted from the regional community-based projects undertaken with assistance from the Land Revitalization Program. These useful tools can be adapted for use in other communities.

The PREPARED Workbook

Using contractor support provided by the Land Revitalization Program, EPA Region 1 developed the Process for Risk Evaluation, Property Analysis and Reuse Decisions ([PREPARED](#)) Workbook to help local governments that need a framework for evaluating potential property recovery actions for brownfields. The workbook guides local decision makers through a step-by-step process for determining how to facilitate reuse of contaminated properties by considering acquisition and non-acquisition property recovery actions. While intended primarily for use by municipalities, the workbook also can be used by states, counties, tribes, and quasi-governmental entities. It also includes user-friendly worksheets to help document and guide the property transaction and redevelopment process.

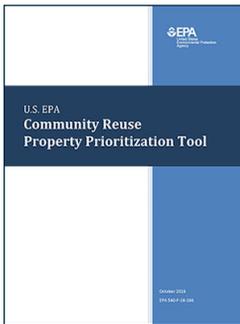


Web-based PREPARED Workbook Tool for the State of Connecticut

EPA Region 1 worked with the Connecticut Department of Energy and Environmental Protection to create a user-friendly [Web-based PREPARED Workbook](#) to help Connecticut's municipalities navigate the redevelopment process and access applicable state and EPA information. While the website is state-specific, Connecticut's experience adapting the workbook to its program is a replicable model for other states interested in tailoring and web-enabling EPA's PREPARED Workbook for use with their own voluntary cleanup programs.



The Community Reuse Property Prioritization Tool

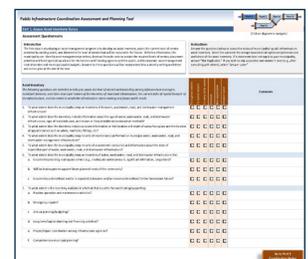


The [Community Reuse Property Prioritization Tool](#) is designed to help communities prioritize properties based on a specific reuse plan. The tool also supports communities in developing a low-level inventory that can be used to prioritize brownfields for future assessment, cleanup, and redevelopment by capturing information that will help estimate the complexity of such activities.

This tool, which includes a Handbook and an Excel Workbook, can help a community better understand property characteristics, ownership, environmental conditions, cleanup requirements, and reuse planning to make more informed decisions. The Excel Workbook has three worksheets to capture data on the current use, historical use, and future use for up to 10 brownfields and up to three parcels per brownfield. It should be noted that, while helpful in making general site prioritization decisions, the outputs of the Community Reuse Prioritization Tool *should not be used independently or as the primary reuse decision-making tool at any site.*

Public Infrastructure Coordination Assessment and Planning Tool

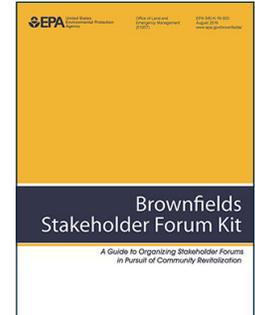
To support communities that are grappling with the combined effects of changing population (growing or shrinking), aging infrastructure, and fewer public resources available to invest in public infrastructure, including water, wastewater, stormwater, and transportation infrastructure, Region 5's Land Revitalization Team developed the [Public Infrastructure Coordination Assessment and Planning Tool](#). The tool is intended to assist communities in identifying opportunities to leverage investments across systems, by taking a more coordinated approach to infrastructure management. It builds on the principles and best practices in public infrastructure Asset Management (AM) and can be used by communities to assess progress and consider the benefits of a coordinated, cross-system, cross-department, or city-wide AM approach.



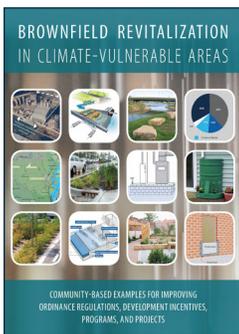
Brownfields Stakeholder Forum Kit

Stakeholder forums are an excellent venue for helping local communities address complex, place-based, community revitalization challenges. Stakeholder forums can be an effective initial step for establishing partnerships, engaging with the community, and developing strategies for implementing revitalization projects.

The [Brownfields Stakeholder Forum Kit](#) is designed to help communities design, plan and conduct forums that bring together groups of stakeholders to focus on a brownfields project. The kit walks users through a process for planning stakeholder forums that have a clear purpose, a strategically conceived agenda, and that are well-designed to solicit the participation and involvement of key stakeholders. The kit includes a list of planning activities, tips for choosing speakers and a facilitator, a model agenda, suggestions for handouts and visuals, lists of potential stakeholder groups to invite, and pointers on forum logistics, including managing registrations, room layouts, and audio visual equipment.



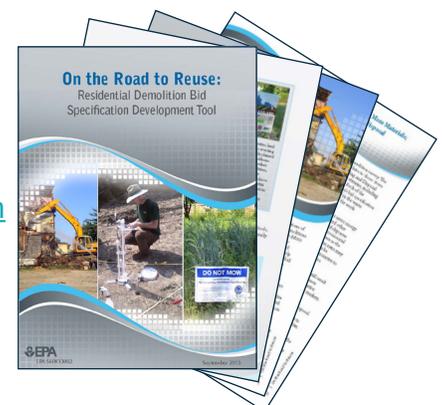
Economic Development and Climate Resilience Planning Tool



The Land Revitalization Program, EPA Region 3, and the Strong Cities/Strong Communities Initiative provided technical assistance to Chester, Pennsylvania, to evaluate real estate market conditions and collect examples of land use strategies that can promote economic development, increase green infrastructure, and reduce vulnerability to climate change. The [report](#) drafted by EPA's technical assistance team outlined nationally applicable examples of relevant regulatory standards, incentives, and guidelines for Chester to consider as it updates its zoning and subdivision regulations. The team's report, which also included examples of non-regulatory projects, programs, and approaches that may be helpful to the city, was used to develop a tool to enable other communities to use the team's findings to help inform their own efforts to balance planning goals, increase climate resiliency, and promote economic development. The team found that regulatory approaches to improving resiliency to increased creek and coastal flooding often involve tax rebates, storm water fee reductions, or grant funding to offset added development costs related to installation of site or building-based resiliency features, including porous pavers and asphalt, bio-retention, and vegetated swales. They also identified significant opportunities to reduce stream flooding risk through redesign of upstream parks, similar to projects implemented in other [communities](#).

Residential Demolition Tool

Region 5's Land Revitalization Team helped the City of Detroit, Michigan, develop sound demolition practices, prepare demolished sites for reuse, and revitalize demolished lots into "green" sites. As a result of this technical assistance to Detroit, Region 5 developed a useful tool for Detroit and other municipalities, counties, or land banks undertaking large-scale residential demolitions. [The On the Road to Reuse: Residential Demolition Bid Specification Development Tool](#) helps users anticipate environmental issues and concerns so they can factor them into the planning and procurement process. The tool also provides guidance for developing contract language for bid packages that instructs contractors on specific technical requirements to achieve improved environmental results in a demolition project.

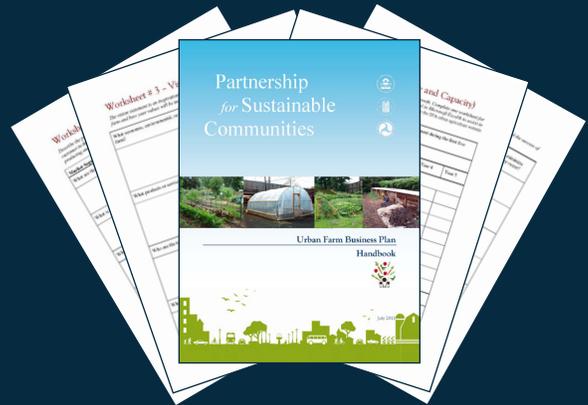


Business Planning Tool for Urban Agriculture Business

The Fernwood Growing Center is an urban farm situated on a two-acre brownfield that was vacant for more than 15 years before it was cleaned up with assistance from an EPA Brownfields revolving loan fund grant awarded to the City of Toledo, Ohio. The center encourages healthy diets and lifestyles by providing fresh, locally grown fruits and vegetables and nutrition education to the community, thereby reconnecting people with locally grown foods.

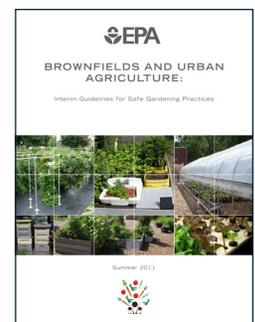
Urban farms can help strengthen local economies by creating new jobs and providing local community members with job training opportunities. EPA Region 5 worked with the Lucas County Improvement Corporation, Toledo Community Development Corporation (CDC), University of Toledo, Center for Innovative Food Technology, The Collaborative, Toledo Grows, the City of Toledo, Ohio EPA, and the U.S. Department of Housing and Urban Development to help the Toledo CDC develop a business plan for the Fernwood Growing Center. The project resulted in the development of products that will be used in Toledo, but also have wider application. The following tools may be useful to communities that are seeking alternative sustainable reuses for brownfields that can revitalize neighborhoods while improving access to fresh and healthy foods:

- [Urban Farm Business Plan Handbook](#)
- [Urban Farm Business Plan Worksheets](#)
- [Urban Farm Business Plan Financial and Planning Spreadsheets](#)



Brownfields and Urban Agriculture: Interim Guidelines for Safe Gardening Practices

[These guidelines](#) provide a process and set of recommendations for developing agricultural reuse projects on sites with an environmental history. Potential gardeners, state environmental agencies and regulators can use the process to determine how to address the risks inherent to redeveloping brownfields for agricultural reuses while being protective of human health. There is a large body of ongoing research as concern about contamination emerges and urban gardening becomes a common practice, particularly in communities with limited economic activity. This document is meant to be an interim guideline until such research can provide more definitive standards and policies for agricultural reuse on brownfields. Although the guide was developed in the Midwest, it may be used to benefit tribes and communities throughout the country wishing to use urban agriculture on brownfield sites and vacant properties.



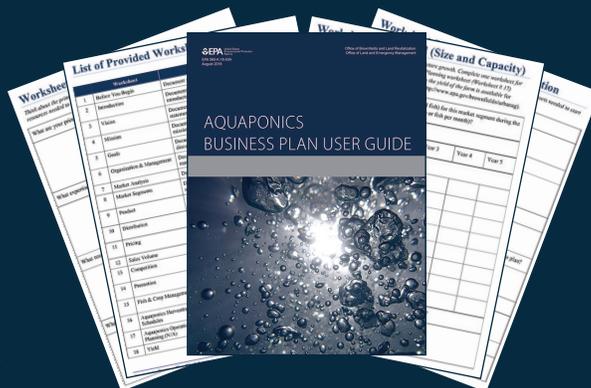
Aquaponics Business Plan—User Guide for Communities

Communities are expressing a growing interest in urban aquaponic farms as a sustainable method to provide a source of healthy, fresh, and cost effective protein and vegetables to the local community, while providing job and educational opportunities for citizens. Increased interest in urban aquaponic farms can be attributed, in part, to the ability to use brownfields and other underutilized properties and buildings in or near large population centers for aquaponics operations.

The Aquaponics Business Plan User Guide (User Guide) was developed to provide guidance for developing an operating strategy specific to an aquaponic farm. This User Guide is modeled after the original Urban Farm Business Plan Handbook but reflects the differences in production systems between cultivated agriculture and aquaponics. The User Guide provides an outline and guidance for the development of a business plan for an aquaponic farm.

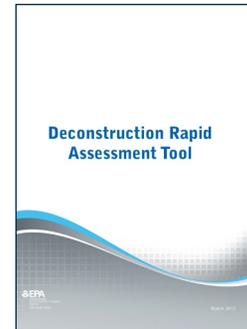
This User Guide is the result of a dynamic project partnership between EPA Region 3, Delaware State University, Kent Economic Partnership, Kent Community Gardens Collaborative and Delaware Division of Public Health.

- Aquaponics Business Plan—User Guide for Communities
<https://www.epa.gov/land-revitalization/aquaponics-business-plan-user-guide>
- Aquaponics Business Plan—User Guide
https://www.epa.gov/sites/production/files/2016-09/documents/1_aquaponics_business_plan_guide_508_081116.pdf
- Aquaponics Worksheets PDF
https://www.epa.gov/sites/production/files/2016-09/documents/2a_aquaponics_business_plan_worksheets_word_081116.pdf
- Aquaponics Worksheets (Excel)
<https://www.epa.gov/land-revitalization/aquaponics-business-plan-user-guide>

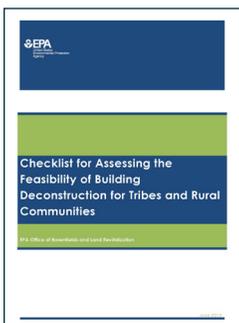


Deconstruction Rapid Assessment Tool

Region 5 also developed a [Deconstruction Rapid Assessment Tool](#) that helps contractors assess the potential value of materials that could be recycled by deconstructing a structure rather than demolishing it. The tool enables organizations to triage building stock slated for demolition by generating a data set to help identify priority structures for deconstruction and salvage. The assessment process identifies candidates for deconstruction by examining information on a building's condition and salvageable material inventory. Whether the project scope is a few structures in a neighborhood, or an entire city's blight program, a rapid assessment can help managers make critical decisions regarding the allocation of resources and time. The Land Revitalization Program also developed an *Improving Demolition Practices* fact sheet based on Region 5's work in this area (see box on page 7).

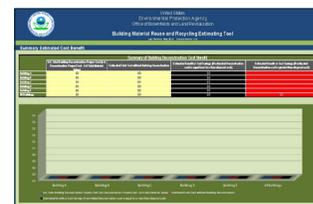


Deconstruction Tools for Tribes and Rural Communities



Region 6's Land Revitalization Team developed two interactive tools that provide tribes and rural communities with a step-by-step approach for calculating the feasibility and value of deconstructing buildings, reclaiming materials, and/or recycling for potential profit. The [Checklist for Assessing the Feasibility of Building Deconstruction for Tribes and Rural Communities](#) is a tool for assessing the technical and economic feasibility of building deconstruction, regardless of a community's size and geographic location. Used in conjunction with the [Building Material Reuse and Recycling Estimating Tool](#), this checklist will help tribes and rural communities determine potential costs and benefits of reuse, recycling, and disposal options for various types of deconstruction materials. After completion of the checklist, the

information collected (e.g., type, quantity, condition, and value of deconstruction materials; transportation and labor costs; regulatory considerations) is then entered into the Building Material Reuse and Recycling Estimating Tool to calculate the quantities and types of materials that can be reclaimed and recycled.



Learn More About Land Revitalization Community Projects and Tools

EPA's land revitalization initiatives are producing significant environmental benefits and helping to transform communities into more sustainable and livable places. For more information and examples of successful EPA land revitalization projects, see:

Fact Sheets

- [Building Healthier Communities by Increasing Access to Health Care](#)
- [Revitalization Along Historic Highways](#)
- [Urban Agriculture](#)
- [Revitalization in Auto Sector Communities](#)
- [Revitalization in Tribal Communities](#)
- [Sustainable Recovery After Natural Disasters](#)
- [Land Banking](#)
- [Green Infrastructure](#)
- [Improving Demolition Practices](#)
- [Improving Urban Soils](#)
- [Recreational Reuse: Cleveland Velodrome](#)



Land Revitalization Success Story Reports

- [Land Revitalization Success Stories \(2014\)](#)
- [Land Revitalization Success Stories \(2011\)](#)
- [Green Infrastructure: Land Revitalization Success Stories](#)



Visit the Land Revitalization Program Website

<http://www2.epa.gov/land-revitalization>

The Land Revitalization Team: Headquarters and Regional Land Revitalization Coordinators

EPA Headquarters	Patricia Overmeyer, Land Revitalization Coordinator overmeyer.patricia@epa.gov 202.566.2774
Region 1	Frank Gardner gardner.frank@epa.gov 617.918.1278
Region 2	John Struble struble.john@epa.gov 212.637.4291
Region 3	Chris Thomas thomas.christopher@epa.gov 215.814.5555
Region 4	Keriema Newman newman.keriema@epa.gov 404.562.8859
Region 5	Jim Van der Kloot vanderkloot.james@epa.gov 312.353.3161
Region 6	Karen Peycke peycke.karen@epa.gov 214.665.7273
Region 7	Brad Eaton eaton.brad@epa.gov 913.551.7265
Region 8	Stacey Eriksen eriksen.stacey@epa.gov 303.312.6692
Region 9	Noemi Emeric-Ford emerick-ford.noemi@epa.gov 213.244.1821
Region 10	(vacant)
OSWER Center for Communities, Partnerships and Assessment	Marc Thomas thomas.marc@epa.gov 202.566.0791
Office of Superfund Remediation and Technology Innovation	Melissa Friedland friedland.melissa@epa.gov 703.603.8864
Office of Resource Conservation and Recovery	Sara Rasmussen rasmussen.sara@epa.gov 703.308.8399
Office of Underground Storage Tanks	Steven McNeely mcneely.steven@epa.gov 703.603.7164