# URBAN AGRICULTURE

ong-term shifts in manufacturing industries across the country left many inner-city properties vacant and potentially contaminated. This was intensified recently by a distressed real estate market that increased the inventory of vacant city properties. These trends contribute to the creation of "urban food deserts" where low-income communities have limited access to supermarkets and the fresh foods needed to maintain a healthy diet. In response, communities across the country are turning brownfields and vacant lots into safe community gardens and urban farms.

The benefits that urban agriculture projects bring to many communities are tremendous. Urban agriculture reuses provide a local source of fresh healthy food, increase surrounding property values, reduce environmental hazards, create biologically diverse habitats, reduce stormwater runoff, create jobs, promote physical activity, increase community connections, and attract additional economic activity.

Urban agricultural projects range from small public and private community gardens to larger-scale urban farms and orchards. In addition to growing fresh produce, urban agricultural projects are producing herbs, spices, honey, and livestock. Urban agriculture also includes growing crops for animal feed, landscaping, flower gardens, oil, fragrance, dye, biofuel, and fiber.

Urban agriculture projects require healthy, uncontaminated soils. When growing food on brownfields or other potentially contaminated sites, in addition to traditional soil testing, it is critical to assess whether contamina-

## NEW ENVIRONMENTAL SOLUTIONS

EPA's land revitalization initiatives are producing significant environmental benefits and helping to transform communities into more sustainable and livable places. The strategy of encouraging market-driven redevelopment of brownfields and other contaminated sites for economic reuse is proving to be a successful approach at many sites. However, challenging real estate markets and economic realities can leave some formerly contaminated properties unused, possibly for a long time. New approaches are needed to revitalize these sites and protect human health and the environment.

EPA's Land Revitalization Team is working with communities, states, other federal agencies, academic institutions, nonprofit organizations, and the private sector to develop and test new approaches that recognize valuable reuse alternatives for formerly contaminated properties. Building green infrastructure to help manage stormwater runoff and floods, promoting safe soil management to support urban agriculture, and siting renewable energy on contaminated sites can bring environmental, ecological, and social benefits to communities. Unlocking the potential value of these underused properties often requires creativity and close collaboration with many public and private partners. These projects can help stabilize communities and spur economic development.

tion problems are likely. This involves researching past activities and testing soils for likely contaminants. Addressing contamination through cleanup or the use of raised beds and other growing techniques will ensure that produce is safe for consumption.

EPA is working with urban agriculture stakeholders, including other federal agencies, state and local governments, community-based nonprofits, and university researchers to address the challenges to reusing contaminated sites for urban agriculture. EPA delivered several webinars that describe the policies and the state of knowledge on the reuse of contaminated sites for urban agriculture projects. Also, in October 2010, EPA held a Brownfields and Urban Agriculture Reuse Midwestern Summit in Chicago to explore approaches for safely developing urban agriculture projects on contaminated sites.

EPA is working with communities throughout the U.S. on a range of projects to encourage the safe and sustainable reuse of brownfields and other formerly contaminated sites for urban agriculture. Projects range from small community gardens cultivated by neighborhood residents to self-sustaining urban farms, such as those proposed in Toledo, Ohio, and New Orleans, Louisiana.

# REVITALIZATION OF THE FERNWOOD GREEN DISTRICT IN TOLEDO, OHIO

The City of Toledo and its partners are using urban agriculture as one of the major redevelopment strategies for a newly designated future green district containing multiple brownfield properties. The city plans to reuse a two-acre, former spark plug manufacturing site as the location of the Fernwood Growing Center. The site is within a Brownfields Impact Area along the Detroit-Smead Corridor, which contains 19 brownfields and nearly 200 vacant lots. This corridor runs through one of Toledo's housing priority districts, where there is a high rate of poverty. Residents report that the closest source of fresh produce is over two miles away.

With the help of EPA funding and technical assistance from Region 5, the green district pilot project will be completed in two phases. Phase one focused on the development of a business planning tool that can be used as a framework by all communities interested in urban agriculture projects. This tool will help assess the infrastructure, tasks, relationships, and costs required to create a sustainable urban agriculture project. Phase two will evaluate opportunities for urban agriculture and other sustainable development projects that will form the foundation of a "green district." Reuse of the sites within the Detroit-Smead Corridor will spur an overall revitalization of the



Potential layout of the Fernwood Growing Center.

area, improve environmental quality, provide career opportunities for local residents, improve access to nutritious food, and provide the neighborhood with a new optimism.

### PROPOSED VIET VILLAGE URBAN FARM IN NEW ORLEANS, LOUISIANA

EPA Region 6 is working with the Mary Queen of Vietnam Community Development Corporation (MQVN CDC) transform a 20-acre brownfield into an urban farm. The proposed Viet Village Urban Farm will include community gardens, commercial agriculture, a livestock area, and a produce market, as well as community facilities everyone can use. The project will use organic and sustainable farming practices to minimize water and energy use.

EPA Region 6 is helping the MQVN CDC plan for the cleanup of site contamination and obtain a wetlands permit from the U.S. Army Corps of Engineers for 18 acres of the site. The City of New Orleans conducted Phase I and Phase II environmental site assessments at the property. Site cleanup will be conducted under Louisiana's Voluntary Cleanup Program. MQVN CDC is working with a local bank to acquire funding to cover wetland mitigation costs. Assessment and cleanup of site soils are essential to ensure that any produce grown there is safe to eat.

MQVN CDC developed a business plan to ensure the sustainability of the project, which includes selling produce to schools and a local restaurant. Their plan is to start small and expand after meeting wetlands permit requirements and addressing environmental contamination. When completed, the Viet Village Urban Farm will be a model for other communities interested in developing urban gardens and farms on brownfields or other contaminated sites.

In the event that MQVN CDC is unable to address both the wetlands permit and cleanup of brownfield property



Example of an urban agricultural site.

with limited funds, alternative brownfields will be considered for a future urban farm in New Orleans East. EPA Region 6 will work with MQVN CDC to provide resources for assessment and cleanup (if necessary) through the City of New Orleans Brownfields Program and Louisiana's Brownfields Revolving Loan Fund for alternative brownfields.

#### MORE INFORMATION:

Visit EPA's urban agriculture website at <u>http://www.epa.gov/brownfields/urbanag/</u> Visit EPA's Land Revitalization program website at <u>http://www.epa.gov/landrevitalization/</u>

> United States Environmental Protection Agency

Office of Solid Waste and Emergency Response (5105T) EPA 560-F-11-009 April 2011 www.epa.gov/brownfields/