

# Cultivating Productive Landscapes

A Vision for Community Based Urban Food Systems  
in the Millennium Reserve



A Study for the Illinois Department of Natural Resources – Coastal Management Program

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## **Executive Summary**

Urban agriculture is unique. It offers an opportunity for many things to happen at the same time, through the simple process of farming. Working the land on a long-term basis, with sustainable methods, directly impacts communities affected by historic inequities. It combines cultural survival, restitution, and opportunities heal the people and the land. Food is simple to understand, something that all people can connect with, and can use to cultivate connections with commerce, land, and ecological restoration. This, then, is the power of urban agriculture: it is a win for all.

It would seem natural that promoting urban food systems would be a priority of the Millennium Reserve as it cultivates a system of productive landscapes. Over the past decade, urban farms and community gardens have been sprouting up all around Chicago, as a means of building community, greening the urban environment, and spurring economic development. These impacts align with the mission of the Reserve: environment, economy, and community. Yet while many of Chicago's urban farms and community gardens are located within the Reserve's boundaries – and new ones are in development – the Reserve has not to this point made urban food systems one of its priorities.

In 2014, the Illinois DNR invited Growing Power to help it explore the role food systems might play in the Millennium Reserve. Growing Power and its partners convened community meetings in the Chicago Housing Authority's - Altgeld Gardens and Murray Homes developments, at the Iron Street Farm, and at its South Chicago farm at Clara D. Shafer Park (Park 503). The research also involved interviews with stakeholders in land management entities, and a preliminary survey of land in the Reserve that could be suitable for urban agriculture.

The study process generated a number of findings. There appears to be land available in the Millennium Reserve that would be suitable for food systems. And there is interest both from communities and stakeholders in land conservation in having that land used for food systems. However, landowning entities are hesitant to directly manage food systems activities. New models are emerging, however, to provide access to land for growers in a way that meets the management needs of owners. Finally, it appears that using land for food systems purposes could help advance existing Millennium Reserve priorities.

### **Several recommendations emerge from these findings:**

- The Millennium Reserve steering committee should consider making food systems programming as a priority area for future planning in the Reserve.
- The Millennium Reserve should convene a working group on food systems:
  - The Chicago Food Policy Action Council is well positioned to play a lead role in coordinating this working group, so long as it can secure a modest amount of support for staff time and meeting logistics. Rodger Cooley, a member of the CFPAC board with some 15 years of experience in urban agriculture in Chicago, could serve as a point person.



- Representatives from community organizations and agencies involved in land ownership and management should participate in the working group.
  - The working group should identify parcels of publicly owned land that can be used for urban food systems.
  - Community-based entities (small scale entrepreneurs, not for profit, sustainable agriculture and industry) should agree upon terms for land use.
  - Landholding agencies should adopt these terms of use, and employ them transparently and consistently to promote food systems as a key tangible outcome of the Reserve.
- Organizations involved in land conservation and management in the Reserve should support the development of food systems projects that coincide with their respective missions.
- Three additional recommendations emerged from the community roundtables:
  - The Reserve has an opportunity to activate the international free trade zone at the Illinois International Port District and create economic relationships with South Chicago Communities
  - IDNR and community partners should host a listening session (or sessions) with the NOAA coastal management program and other relevant IDNR programs, in order to shift the application process to be less technical, and aimed toward long-term, community-based development.
  - Funders should establish criteria and policies that a baseline number of community entities based in the Reserve get funded directly, rather than allowing the vast majority of the funding to flow to external entities that have 'capacity'.



## The Vision

Urban agriculture contributes nutritious, flavorful food to communities through year-round local food production. The ability to produce and distribute food throughout local neighborhoods is important as the demand for nutritionally dense, good-tasting food continues to grow throughout the United States. People want to know where the food they eat comes from, how it is grown, and how long it's been in transport. It is crucial that this healthy food be available to individuals and families in *all* neighborhoods, with an emphasis on low-income, underserved areas.

Urban Agriculture is defined as growing food within or nearby cities, and includes a wide variety of food producing techniques and products. Urban agriculture operates within the broader context of how connected people are to their food; how much control they have over consistent access to culturally relevant, nutritionally dense foods; and whether they have an economic stake in the food system or cooperative, inter-dependent relationships within the local food shed.

Community Food Systems expands the relevance of urban agriculture, by including the intersections of transportation, social justice and equity, housing, and education –with the goal of creating a food security web that is both socio-economically and environmentally sustainable. These kinds of community based food systems are only possible if they are a permanent part of the landscape, tied both to neighboring communities and to the bio-security and ecology of the city and region.

The Millennium Reserve has the potential to both preserve open space for wildlife and ecology and create a path for community based entrepreneurs who have limited opportunities for accessing land and capital. Urban agriculture's inclusion in the Reserve goals of economy/environment/community could advance the goal of creating a green belt of food security for Chicago and the surrounding counties. This could be done by fostering enterprises that are rooted in – and that create health and economic stability for – low-income communities of color. Such communities have historically have been excluded from access to land as a source of production and also environmentally safe and relevant recreation (due to the location of waste sites, polluting industries, and the legacy of deindustrialization). As a consequence, they have had limited opportunities to access good food; to take part in natural resource management (such as storm water use); and to develop and take advantage of pathways to economic opportunity.

Within the Reserve, enterprises could cultivate productive landscapes through:

- Seasonal and year-round vegetable production (in high-tunnel hoop houses);
- Greenhouse food production using aquaculture;
- Greenhouse nursery production (including producing native plants for planting in the Reserve);
- Fruit and nut orchards;
- Grain and hops production;
- Composting and natural fertility production;
- Sustainable energy production (solar, wind, anaerobic digestion);
- Apiary farming (beekeeping);



- Rotational livestock grazing;
- Small ruminant production;
- Foraging habitat for native foods; and
- Small scale ecological manufacturing and distribution

### **Study Process**

This vision emerged as the result of a white paper that explored the need for urban farmland and related thought, and through a series of working group sessions via the Chicago Food Policy Action Council (CFPAC) and Growing Power, Inc. After an initial presentation and discussion at CFPAC's session on Urban Farmland at the Good Food Festival in 2013, Growing Power was encouraged to write a grant to explore the place of urban agriculture in the Millennium Reserve and to support the Farmers for Chicago initiative. (Growing Power operates two of Chicago's largest urban agriculture farm projects within the Reserve.)

During the fall of 2014, CFPAC/GP convened two community discussions to discuss the potential for building upon the existing food systems in the Millennium Reserve. The first of these took place at a community center (By the Hand Club) in Altgeld Gardens, and a follow-up round table meeting at Growing Power's Iron Street Farm.

The research process also included interviews with the following people:

- Ders Anderson, Openlands
- Lenore Beyer-Clow, Openlands
- Cathy Breitenbach, Chicago Park District
- Ben Helphand, NeighborSpace
- Susan Morakalis, MWRD
- Brad Roback, Department of Planning and Development
- David St. Pierre, MWRD
- Andrew Szwak, Openlands
- Zhanna Yermakov, Chicago Park District

Research also involved a project to map and identify vacant parcels of land that might be suitable for urban agriculture in the Millennium reserve. This included use of property data from the Cook County assessor's office, maps from the USGS and EPA on infill in the Calumet Region, satellite images from Google, and in-person site visits. Preliminary results of this mapping are presented in Appendix II to this report.



## Study Findings

The basic findings of our research are that there is land available in the Millennium Reserve that would be suitable for food systems uses, and that community and land management stakeholders see agriculture as an appropriate and promising use of land. In speaking with stakeholders from the community and various agencies, it became clear that there are a number of challenges and opportunities around using land for gardens or farms.

## Challenges

Of the many acres of undeveloped land in the Reserve, not all are suitable for agriculture. This and other factors create a variety of challenges for any plan to expand community-based food systems in the Millennium Reserve.

- Some sites have been prioritized for conservation, or for industrial redevelopment, leaving a limited list of properties that could be used for food systems uses.
- Ownership and plans for future development/conservation are often far from transparent for external parties interested in fostering productive uses.
- Many sites, particularly in the Calumet region of the Reserve, would need to be remediated in some way before being used for food crops (for uses such as urban forestry, of course, it might be possible to use sites without significant remediation).
- Certain partners in the public and private sectors understand that effective food system work requires commitments to long-term use, but others still see it mainly as a temporary use.
- It can be difficult to cultivate financial investment in infrastructure that mitigates historic inequities within the region, and that moves beyond the 'pilot phase'.
- Much of the region of the Reserve has a long and deep history of environmental racism, characterized by projects developed and implemented without consultation of affected communities; this underlines the importance of community participation and ownership in the planning and operation of food systems projects in the Reserve.
- Effort is required for community stakeholders to overcome resentment and internalized oppression, and for institutional stakeholders, funders and government partners to understand the long-term impacts of racism on communities within the Reserve.

## Opportunities

In spite of these challenges, we found there to be an even broader range of opportunities. Both community stakeholders and interested agencies see the benefits of using land in the Reserve for food systems, and while agencies are disinclined to manage such uses directly, there are emerging models for land tenure and management solutions, both in Chicago and beyond.

- **Communities in the Reserve are interested in using land for food systems**
  - There is ample evidence of this in the existing examples of urban gardening and farming in the area of the Reserve (**Appendix I** details some of these projects):
    - Community gardens in Roseland and other neighborhoods;



- Roseland-Pullman Urban Agriculture Working Group;
- Gotham Green's new rooftop farm at the Method soap factory in Pullman;
- Englewood Urban Agriculture District and Green Healthy Neighborhoods community plan;
- Urban farms along the Little Calumet River, south of Altgeld Gardens;
- Growing Power urban farms at Clara D. Schafer Park, Altgeld Gardens, and Iron Street Farm; a network of emerging Farmers for Chicago on smaller scale production sites throughout Reserve.
- During the community roundtable meeting we organized at Altgeld Garden, representatives of community organizations also voiced significant interest and unmet need in both community gardens and commercial food production and distribution models.
- The community meeting and our interviews with stakeholders recommended a diversity of models and approaches:
  - Multiple growing models - farms, large allotments, and community gardens;
  - Multiple business models - entrepreneurial small business, farming incubator, social enterprise, for-profit firm, coop, etc.;
  - Multiple community engagement models - youth programs, demonstration gardens, education programs, etc.
- **Landowners and stakeholders see food systems work as fitting aspects of their mission**
  - **NeighborSpace** - could hold land in trust for community gardens, large allotment gardens, or commercial farms, but would need to create a more transparent process.
  - **Openlands** - interested in community conservation; envision farmland as a buffer for conservation lands, or between industrial and residential areas; see potential ecological benefits of farms and gardens in supporting wildlife corridors.
  - **MWRD** - eager for community engagement; has land available for potential long-term lease at 10% of market rate for private entities, or by negotiation with governmental entities; could potentially use bio solids to prepare soil; looking to tree-planting campaign in Portland as an example of how to engage community in conservation projects; could imagine tree nursery; could imagine activating buffer land to the south of the MWRD Calumet water sanitation facility along 130<sup>th</sup> Street, which could help make fresh produce accessible to the Altgeld Gardens and Golden Gate neighborhoods.
  - **Chicago Park District – Calumet region** - in process of developing wildlife park space along with hiking, zip lines, mountain bike paths that could also support urban agriculture and/or community gardens; Clara D. Shafer Park's Food and Fitness Park; wildlife corridor development along the lakefront and native habitat and forestry development; urban agriculture could also help activate Park 576, an MWRD property leased to the Chicago Park District, which is largely



inaccessible for recreational uses, but could be used by a community serving partner that is working in partnership to grow native plants and trees and other perennial edibles within the Reserve.

- **Landowners and stakeholders are disinclined to directly manage food systems activities**
  - Programming for food systems is not their specialty and they consistently stated that they were interested in learning more and connecting it to storm water management and other environmental challenges they were trying to solve.
  - They don't have dedicated funding for it, but are open to land use to support community food systems.
  - They are looking for partners to manage the land, potentially as lessees or intermediaries.
  
- **Appropriate models are emerging for land access and land tenure**
  - A role for **land trusts**
    - In cities around the U.S., land trusts have been emerging as a key tool for holding and managing access to land for urban farms and gardens (see map below). In Chicago, **NeighborSpace** has expanded to hold land for nonprofit urban farming social enterprises such as Growing Home's Honore Street farm in Englewood, and the Chicago FarmWorks urban farm in East Garfield Park. Our conversations with Ben Helphand, the executive director of NeighborSpace, suggest that he is interested in how the land trust can support access to land for urban farms and gardens in the Millennium Reserve.

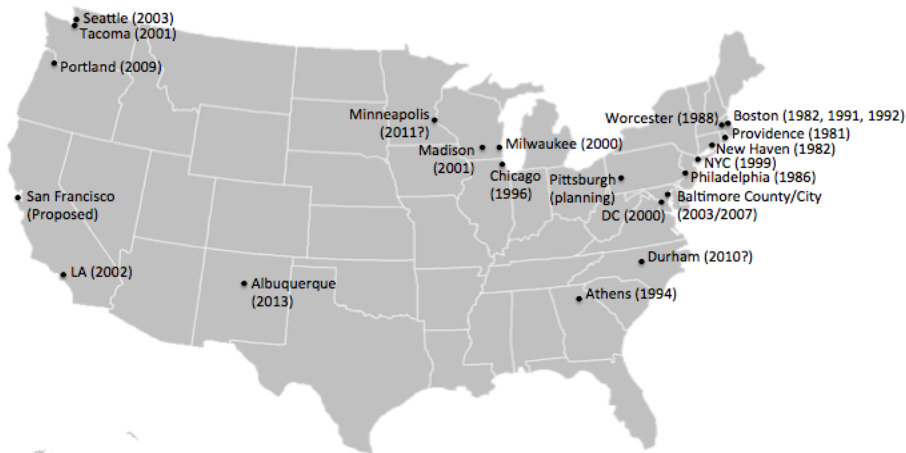


Figure 1. Cities with land trusts supporting urban farms and/or gardens (with date of founding)

- With support from the Kinship Foundation and the Chicago Community Trust, NeighborSpace and a number of partners (Growing Greater Englewood, Growing Power, Growing Home, Angelic Organics Learning





- Center, and the Chicago Botanical Garden) are currently undertaking the **Urban Pathways project** in Englewood. This project is moving toward a model for how NeighborSpace or some other entity could help for-profit entrepreneurial urban farmers gain affordable and secure access to land, in a way that shares the costs of land access and preparation. With Englewood as a pilot for the model, it could be adapted and expanded to other parts of the Millennium Reserve.
- Our interviews also suggested that **other tools** commonly used by open space land trusts to preserve agricultural land from suburban sprawl could also be useful techniques to promote productive landscapes in the Millennium Reserve. These include the use of **conservation easements** as tool to protect land, and **use-value assessment** of agricultural land, which reduces the incentives of owners of agricultural land to sell land for development.
  - A role for **public and agency land**
    - Clara D. Schafer Park (Food and Fitness) formerly known as Park 503 is public land model for both passive green space use and productive landscapes. This project has an NGO (Growing Power) as the partner operating an urban farm that supports beginning farmers, alongside a large community food-growing garden with large allotments. The 1-acre community garden alone could support 100+ households in the south Chicago community and provide donation produce for the area's food pantry operators.
    - Agricultural Leasing by Forest Preserve Districts
      - Our interviews suggested how leasing forest preserve district land for agricultural uses could have multiple benefits. These range from promoting “community conservation” and local food production, to creating ecological buffers for conservation lands and potentially a modest source of revenue. The Forest Preserve District of Lake County has been experimenting with agricultural leasing. Although the Cook County Forest Preserve District is reportedly somewhat more tentative, the success of the model in neighboring counties could recommend it as a tool for land use in the Millennium Reserve.
    - Metropolitan Water Reclamation District land:
      - Leasing of MWRD land to NeighborSpace, Chicago Park District or other sister agency within their current legislated allowances for ‘profit producing’ use. The market value of the lease is key to understanding feasibility for low-income users. This relationship would be worthwhile to follow up and refine. Income thresholds and local consumption of production could create safeguards against corporate use, etc. if this is the underlying issue.
      - Interestingly, there is historic precedent for using sanitary



district lands for urban agriculture – a hundred years ago, land next to the north side drainage canal at Foster Avenue was made available to small farmers.



Figure 2. A 1915 photograph from the *Chicago Daily News* shows land being ploughed for small farms along the north branch of the drainage canal, at West Foster Avenue.

- Innovations in other cities
  - Our research suggested that Millennium Reserve partners could also explore further land use models emerging in other cities. In Boston, for example, the city is reportedly transferring public land to the Dudley Street Neighborhood Initiative, a well-established community land trust, to be held for social enterprise urban farming coordinated by the Food Project and the Urban Farming Institute.
- **Community food systems can advance existing Millennium Reserve priorities:**
  - Two examples:
    - **Growing Power**, through partnerships with the Chicago Housing Authority and the Chicago Park District, is operating urban farms that are productive, income-generating spaces and also provide workforce/job training for at-risk youth (14-24 years of age) and under-employed adults.
    - On the other end of the spectrum, **Gotham Greens** has built a rooftop farm on the new Method soap factor in Roseland. Although it is somewhat less directed at providing job training and fresh food directly to the neighboring communities, it is also relevant to a food systems approach for the Reserve.



- Building on these examples can help advance existing priorities. Urban agriculture:
  - Has a role to play in **brownfield redevelopment**, as the U.S. Environmental Protection Agency highlighted in a 2011 report;
  - Can help develop **future generations of conservation leaders** (e.g. through youth programming, Future Farmers for America, and the Chicago Agricultural High School);
  - Offers opportunities for **outdoor recreation** with an edible landscape component. One model for this could potentially be opportunities for foraging on parkland or in forest preserves. Another, which is being launched this year by the Pie Patch urban farm in the Back of the Yards ([www.thepiepatchfarm.com](http://www.thepiepatchfarm.com)), is an urban pick-your-own farm, in which people can fill their own baskets with berries or apples.
  
- **Community food systems in the Millennium Reserve can contribute to realizing goals of other city and regional plans** (see Appendix IV for details)
  - The Chicago *Recipe for Healthy Places* food plan recommends that the city “create a system of public open spaces for large-scale food growing, job training and food-related education activities.” This is underway at a neighborhood scale in Englewood, through the Green Healthy Neighborhoods plan approved by the city plan commission last year. Working to create community food systems in the Millennium Reserve would help achieve the food plan recommendation for the entire south side of Chicago, in coordination with the needs and priorities of south suburban communities.
  - Urban food systems in the Millennium Reserve would also advance a key recommendation of **CMAP’s GOTO 2040 comprehensive plan**, by increasing access to local and sustainable sources of food in the Chicago region.
  - The **Cook County Land Bank** has contemplated how vacant land on the South Side and in south suburban communities might be put to productive use through gardens and farms.
  - And urban agriculture could also provide a type of green infrastructure improvement for mitigating the effects of storm water, a priority for the **Calumet Stormwater Collaborative**.



## Recommendations

The Illinois Department of Natural Resources could take a number of steps to support the development of community food systems in the Millennium Reserve. In doing so, it could recognize as a core principle the intersection and interdependence of social justice, bio-security and preservation, wildlife corridor access and habitat, and economic development opportunities that promote environmental sustainability and public health. These intersecting objectives could be advanced through projects to increase the supply of, and community access to, nutritionally dense foods produced according to organic standards. Although organic certification may not be required, organic agriculture operations would minimize chemical inputs, thereby mitigating further chemical runoff and supporting watershed health in the area of the Millennium Reserve.

The Millennium Reserve should develop green infrastructure to support a broad range of potential agricultural activities: native plant nurseries, edible forestry and orchards, rotational livestock grazing, beekeeping, aquaculture, and specialty crop production. These uses all require fencing, water access, equipment storage, and basic processing spaces. The investment to support these long term activities would be minimal and could be developed as part of long range planning as people become increasingly interested in reducing their food miles and in engaging with their landscape and environment.

- **The Millennium Reserve steering committee should convene a working group on food systems in the Reserve.**
  - Such a working group should include representatives of community members who live near key areas who are not currently engaged, a cross section, landowners, growers or potential growers.
  - The group should have representatives from the Chicago Park District, the Forest Preserve District, the Metropolitan Water Reclamation Department, NeighborSpace, Openlands, IDNR/Millennium Reserve, the Chicago Food Policy Action Council, Chicago Agriculture High School, faith-based organizations active in sustainable food initiatives, Advocates for Urban Agriculture, the Illinois Stewardship Alliance, and others.
  - The Chicago Food Policy Action Council is well positioned to coordinate a working group process, but would need some assistance for staff time and meeting logistics. Rodger Cooley, a member of the CFPAC board with some 15 years of experience in urban agriculture in Chicago, could serve as a point person.
  - The working group should be tasked to transparently identify appropriate parcels for development; and to explore suitable land tenure models, growing techniques, economic development priorities, and community engagement activities.
  - Working group tasks and parameters should be clearly defined by the IDNR.
- **Millennium Reserve partner agencies should support the working group**
  - By designating liaisons to participate in the working group
  - By supporting the use of land for food systems in whatever ways advance their



missions.

- Identifying and leasing appropriate parcels;
  - Developing internal policies and education to expand vision of land use for food systems;
  - Partnering with organizations, businesses, and individuals that are seeking use of land for long-term preservation of open space through productive use.
- **The Millennium Reserve steering committee should consider naming urban community food systems as a new priority area for its work.**
    - This would add focus to the work, in addition to advancing the current priorities identified above.
    - It would create a focus for developing a vision concerning how recreational and verdant space in the Reserve can be acquired and used for food production.
    - And it would help clarify how storm water and other climate change mitigation strategies can be advanced through development of urban agriculture and related environmentally sound strategies.



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