

ST. LOUIS URBAN AG GUIDE 2019



TABLE OF CONTENTS

01 Introduction: What type of garden?

05 Community Engagement

08 Selecting and Accessing Land

13 Soil

18 Water

20 Infrastructure

22 Animals

23 Selling Produce, Eggs, and Honey

25 Business Plans and Finances

26 Funding and Resources

30 Recommended Reading

New Roots Urban Farm



INTRODUCTION

Urban gardens are a growing trend in urban centers across the country. Every year sustainable and locally produced food is increasingly sought-after, and community gardening has grown along with it. In fact, previous, [studies](#) have shown that gardening increases individual's life satisfaction, vigor, psychological well-being, positive effects, sense of community, and cognitive function. Further, greening a parcel through urban agricultural practices can improve the environment, build amenities, revitalize neighborhoods, and have direct benefits to residents' food access and nutrition.

Time-tested, there is no better way to get more locally produced food than growing it yourself. The City of St. Louis has been slower to embrace urban agriculture efforts, but interest is growing throughout the city. Our city's rate of vacancy and blight is contributing to this interest by galvanizing all sectors, from city government to community residents, to adopt more innovative greenspace projects including urban farming initiatives.

The city has made some strides when it comes to supporting urban agriculture as detailed in the City of St. Louis [Sustainability Plan](#) from January 2013, the [City Climate Adaptation and Action Plan](#) from 2017, Mayor Krewson's July 2018: [Plan to Reduce Vacant Lots and Buildings](#) in the City of St. Louis, and City [Ordinance 70608](#), which allows residents to keep chickens. However, there is still more work to be done to ensure that urban agriculture is accessible for all residents, particularly those most impacted by low food access and blight.



"The City has an opportunity to be a leader in the growing urban agriculture movement because of its location, vacant land resources, strong existing land bank structure, skilled labor force, a wealth of local farmers markets, and rapidly growing community interest in urban agriculture"

-City of St. Louis Sustainability Plan

The information in this guide is intended to assist anyone looking to start an urban agriculture project in St. Louis. Because of the wealth of general urban agriculture resources available, we have chosen to focus on considerations and circumstances specific to St. Louis. More general resources are included in the Funding and Resources section at the end of this guide. We hope that this guide will not only prove useful to you, but also further support community-driven food production and innovation in St. Louis.

What type of growing project should you start?

The first decision you will have to make is what type of garden or farm you want to start. The simplest distinction between gardens and farms is that gardens produce food that is used by the gardeners for personal use, while farms produce food at a larger scale for other people's benefit and consumption.

Home Gardens

The oldest form of urban agriculture, backyard gardens have historically been an important source of supplemental and even primary nutrition in St. Louis City neighborhoods. Home gardens not only increase access to fresh foods in areas where fresh food outlets are few and far between, but they can also be a great springboard for larger, commercial projects. If you are considering starting an urban farm, we recommend turning your backyard over to food production first to gain experience with the complexities of growing food in an urban environment.

[The St. Louis Department of Public Safety](#) defines a home garden as a garden less than one acre in size that is maintained by one or more individuals who reside in a dwelling unit on the subject property who grow and harvest food or horticultural products for either personal consumption or for sale or donation.

Community Gardens

Community gardens have sprouted throughout the St. Louis region and have often proven to be very successful. In community gardens, the food is grown communally in one large garden and distributed amongst the gardeners, or each gardener is assigned an individual bed and keeps the food they grow. The structure and management of community gardens can vary widely. Most commonly, a community garden will have one or two garden leaders who manage membership, fees and other administrative details. Garden maintenance is typically collaborative, with gardeners maintaining their own beds individually, and the common areas being a shared responsibility. The laws, regulations, and permits surrounding community gardens are significantly looser than those pertaining to farms.

The St. Louis Department of Public Safety defines a community garden as "an area of land less than one acre in size that is managed and maintained by a group of individuals to grow and harvest food and/or horticultural products for personal or group consumption or for sale or donation." A community garden may be divided into separate garden plots for cultivation by one or more individuals or may be farmed collectively by members of the group. It may also include common areas maintained and used by the group such as tool storage sheds.



Maple Community Garden

Urban Farms

Urban farms are cultivated with the intent of growing food for sale or for community benefit. They include what used to be called [market gardens](#), as well as larger agricultural projects in urban areas. They are usually larger than community gardens, and because they are intended for commercial production, are subject to further regulations. A more comprehensive breakdown of these regulations will be provided below, and they include business licensing, conditional use permitting, and food safety regulations. An urban farm may or may not be the farmer's primary source of income (currently in St. Louis, they typically are not). (For more information on the different types of urban agriculture, and a definition of market gardens, see pages 4 and 22 of the study "[Seeding the City](#).”)

[The St. Louis Department of Public Safety](#) defines an urban farm as: an area, land or structure, of one or more acre that is managed and maintained by an individual, group, or organization where homegrown products are produced to be sold or donated. An urban farm includes but is not limited to outdoor growing operations, indoor growing operations, vertical farms, aquaponics, aquaculture, hydroponics, and rooftop farms.



[Gateway Greening City Seeds Farm](#)

COMMUNITY ENGAGEMENT

Maintaining a strong relationship with your community is essential for any type of urban agriculture operation, whether a community garden or urban farm. Consistent and strong community relationships will help you build strong partnerships and trust, find resources, contribute to the longevity of your site, and ensure that your actions are truly benefiting those around you.

For community gardens, outreach is necessary since you will need to gather enough people to fill the garden and sustain its maintenance. This can be one of the most challenging aspects of starting a community garden. Community gardens require a lot of work, even once they are established. The more local residents you can get involved and committed, the more likely it is that your garden will be successful. For more information on community garden outreach and guidelines for starting a garden, refer to MU Extension's [Community Gardening Toolkit](#).

Community outreach is equally essential for urban farms, although unfortunately more often overlooked. Trust and buy-in through equitable community engagement and input enables a farm to not only have a better

MCE at GROW- St. Louis Science Center



chance of long-term survival, but that it is also aligned with the actual needs and wants of the community.

Community outreach should always be conducted **prior to and during** your project. Good community outreach should involve building relationships with members of the local neighborhood association, local community centers (such as a church or school), residents and city officials at local ward meetings, or hosting community events yourself. No matter what form your outreach takes, it is key to make sure that it is meaningful, equitable, and is focused around the local community. For more information and guidance on meaningful community engagement, refer to [Cornell University's Small Farms Guide](#) and additional resources at the end of this guide.

Understanding the desires, needs, and historical context of the surrounding community that you are working with is also crucial, particularly in the City of St. Louis, which has a long history of racial inequality and segregation. **To truly serve a community, you must understand the systems that shape it, as well as your own place in those systems.** For more information on racial inequity in St. Louis, we recommend the report, [Segregation in St. Louis: Dismantling the Divide](#).

Why is equity so important in urban agriculture?

Urban agriculture can be a tool for community building, economic empowerment, and food security, but it can only truly affect change when it acknowledges the multitude of factors that contribute to the community's needs in the first place. This approach is part of what's known as **food justice**: the idea that everyone deserves access to healthy, affordable, culturally appropriate food. By working for equity, urban agriculturalists can ensure that their positive impact goes beyond the fruits and vegetables they grow and that they are not contributing to unintended negative consequences like gentrification in their community. Also, since food equity is also a racial equity issue, it is essential to understand the **intersectionality** of income, race, and food security. To learn more about food justice, refer to **this article**

Gentrification

One of the unintended consequences that can result from urban agriculture is **gentrification**. [Research by the Brookings Institute](#) defines gentrification as “the process by which higher income households displace significant numbers of lower income residents of a neighborhood, thus changing the essential character and flavor” or the social fabric of the neighborhood.

Some of the outcomes of urban agriculture can be beautification and increased property values. Two factors that can attract developers and inflate the cost of rent, as development can change the look of a neighborhood in a way that existing residents do not want and increased rental costs can unintentionally force long-time residents out. It is important to keep these possibilities in mind when planning your urban agriculture project.

For more information about gentrification and urban agriculture, refer to the following resources:

- [Gentrification Explainer Video](#), Urban Displacement Project - a UCLA and UC Berkeley collaboration
- [Ensuring Equitable Growth](#), U.S. Department of Housing and Urban Development
- [Evolution or gentrification: Do urban farms lead to higher rents?](#), Grist
- [Urban Farms Wrestle with Gentrification and Displacement](#), Civil Eats
- [Green spaces may breathe new life into north St. Louis but residents need to be on board](#), St. Louis Public Radio



GENTRIFICATION

SELECTING & ACCESSING LAND

Site Selection

There are many important questions you should ask when considering a site for urban agriculture. Some of the most important questions should include:

- **Do you live in the community that surrounds the site?** Ideally, the person looking to start a garden or farm should live and/or work in community they want to grow.
- **Do you have support from neighbors both on the block and in the neighborhood as a whole?** Even if you live or work in the community, it is essential to get support from nearby residents and those from the greater neighborhood.
- **Who is benefiting from this operation?** Whenever possible, the operation should also hire people from the community, not outsiders.
- **Is the food you grow being sold or donated within your community?**

For more information about the importance of these questions, please refer to the previous section on community engagement.

Additional Considerations:

- **Does the site get enough sunlight to support the plants you want to grow?**
- **How big is the site?** If you want to start a community garden, can it accommodate all the people interested in participating? Remember that it is important to ensure community support and input to secure long term success of your site! If you want to start an urban farm, can it produce enough to support your goals?
- **Do you have enough workers or community volunteers to keep your garden or farm running smoothly and productively?**
- **Is the site visible from the street?** Visible sites are usually safer and may attract more neighborhood support.

- **Is there adequate parking space near the site for gardeners and farm workers or event customers if you sell on-site?**
- **Who currently owns the site?** How difficult will it be to gain ownership/access to the land?
- **What is the site's history?** Depending on its prior usage, there may be soil contamination (more on this in the next section).

Accessing Land

Community Gardens

Once you have identified a site, you must secure the legal right to use it. For **community gardeners**, the simplest approach is to find private property and obtain the permission of the landowner. Another approach available to community gardeners is to apply for the [Land Reutilization Authority \(LRA\) Garden Lease Program](#) which allows you to lease a vacant parcel for up to five years for a total amount of five dollars at the rate of one dollar per year. Currently, although the program enables lessee's to apply to purchase the land after the 5-year lease requirement, there are no guarantees that the lessee will be able to remain on the land beyond the lease nor is the lessee protected from the parcel being sold for development for the duration of the lease, receiving only a 60-day notice.

If your community garden becomes well-established with committed support that can show it will maintain a strong project for years to come, you may be eligible to join [Gateway Greening's community garden network](#) and then apply to [Gateway Greening's Land Trust](#) to ensure that the garden is protected from future development. The Gateway Greening Land Trust, Inc. conserves citizen-created agriculture projects to remain community managed, and protected for future generations in St. Louis, Missouri.

Urban Farms

[Accessing land for urban farms](#) can be trickier, as they often require more space than a community garden. Similarly to community gardens, the simplest approach is to partner with a local landowner with private vacant land they are willing to lend, lease, or sell to a local grower. The [STL Growers & Landowners Facebook Group](#), a project of the [STLFPC](#), is designed to connect growers, landowners, and anybody else looking to collaborate on land

access and urban, suburban, and rural agriculture projects in the St. Louis Foodshed (150 mile radius from St. Louis Metropolitan region). Along with this platform, the [St. Louis Farmland Interest Map](#) allows local landowners and growers to visually see where and from whom, there is interest to grow food. This map is populated from survey results from the [STL Farmland Interest Survey](#) for growers looking for land and the [STL Landowners Survey](#) for landowners with land to grow food on in the region. Learn more [here](#). While you can go the route of leasing through the LRA [Garden Lease Program](#) and eventually try to purchase the land after the 5 years requirement, or obtaining permission to use a site, it is beneficial to have long-term access to the land so that you can invest in infrastructure. If you are interested in converting vacant land, you can also look into purchasing land from the LRA's inventory.

The Land Reutilization Authority

The Land Reutilization Authority (LRA) owns over 11,200 parcels of vacant land and buildings in the City of St. Louis for purchase, lease, or community projects. The LRA receives title to all tax delinquent properties not sold at the Sheriff's sale as well as through donations. The **SLDC Real Estate Department** maintains, markets, and sells these properties and performs land assemblage for future development. Their goal is to sell vacant land for its creative and productive reuse.

Purchasing Land from the LRA

If you are interested in [purchasing land owned by the LRA](#), you can search the LRA's inventory [here](#). It is important to note that getting support from your [local Alderperson](#) is critical as they can be very helpful and knowledgeable when dealing with local politics, whether it's at the neighborhood-or city-level, and if the parcel you are interested in is being sought after for development. Also, the LRA is known to prioritize projects with strong aldermanic support. It is generally understood that LRA seeks to sell the properties in their inventory for purposes that generate the highest possible tax revenue, and for what they deem the most productive and creative use. These uses are typically the development of homes and businesses, and LRA strives to sell their most desirable parcels for these types of development. Therefore, it may be best to look for parcels in the LRA inventory that are not well suited for homes or businesses, such as non-corner lots, unusually-shaped lots with slopes, those that have been in LRA inventory for more than ten years, and have less than 39 feet frontage. Also, be prepared to fulfill all the [application materials](#) to purchase the land including a sustainable long-term plan for the project you intend to implement on the land.

You may also consider the [LRA Mow-to-Own](#) program which offers the opportunity to acquire land by maintaining a vacant property. This program does have a major barrier in that the person maintaining the lot must already own property, so renters do not qualify. The applicant must maintain the property for twenty-four months, keeping it free of debris and the grass cut no higher than seven inches.

Sherrif's Sale or Back-Tax Sales

Also, LRA land can become available through [auction](#) during back-tax sales or Sheriff sales, which are held five times a year and the land is sold without any liens attached. However, these sales can be highly technical and complicated, so they stress consulting an attorney before bidding on any parcel of property. Also, consider that there are some title companies that will not ensure a title that was owned by a Sheriff's claim. Learn more about tax sales [here](#).

Conditional Use Permits

You should also keep in mind that for an urban farm, you may have to obtain a conditional use permit from the City's Board of Public Service (or from the relevant municipal authority if your site is not in the City of St. Louis). Conditional use permits are required if the site on which you will establish your farm is a residential-zoned plot. Other types of zoning districts may or may not require a conditional use permit for urban farms; to learn the [zoning district](#) of your site and verify the permit requirement, you may contact the [Administrative Assistant](#) of the City's Zoning Section.

Land Protection

Land protection can be an important consideration for invested growing operations. By removing the rights to develop on farmland through a conservation easement or restriction, land can be preserved for agriculture [use](#). Although [conservation easements](#) are less likely to be used in urban areas where the parcels tend to be small, they have been used successfully. To learn more about models for land tenure for urban community gardens and farms, [click here](#).

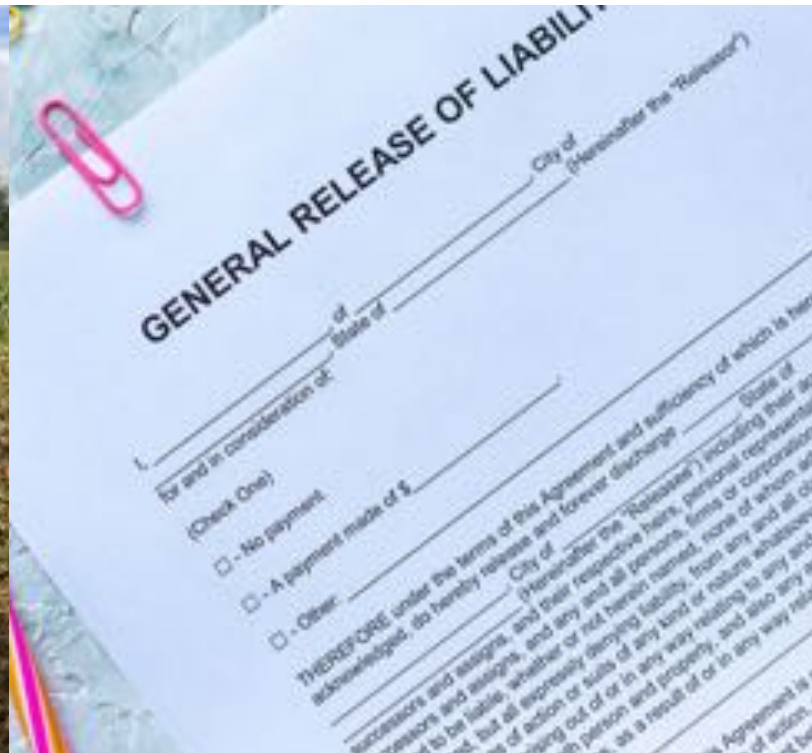


Insurance

Note that LRA now requires [general liability insurance](#) for agriculture projects on LRA-owned and leased property that is not adjacent to the gardener's or farmer's residence. For community gardens, liability insurance can be very expensive if it is sought individually. Therefore, the best approach may be to request a larger organization that already has liability coverage to sponsor the garden. For instance, Gateway Greening offers a low-cost [pooled liability insurance program](#) to community gardens [in their network](#). Other options might include local community land trusts like the aforementioned [Gateway Greening Land Trust](#), neighborhood associations, churches, or other institutions rooted in the community that already have liability insurance and would be supportive of your project..

Urban farms will require general liability insurance and perhaps product liability insurance as well. If your farm is a nonprofit venture, you may obtain an insurance policy through companies that work exclusively with nonprofit organizations, such as First Nonprofit Insurance Company. If the farm is on the same parcel as your place of residence, it may be covered by homeowners' insurance (but you should verify this with your insurance provider). Additionally, membership in the [Missouri Farmers' Union](#) entails a \$1,000 liability insurance policy. Generally, urban farms may check with companies offering agricultural insurance policies.

New Roots Urban Farm



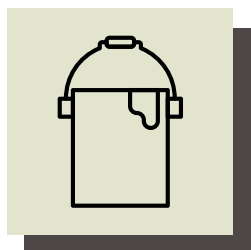
SOIL

If you are planning to grow food directly in the soil present on your site, it is extremely important that you first research the history of the land's use to assess if there could be any trace of possible toxic contaminants. Because these substances can be highly toxic to humans, young or old, it is important to ensure that crops grown on urban sites do not absorb them. Unfortunately for residents and urban growers alike, the consequences of past and current industry in the St. Louis region, can be found in much of the city's soil today.

Industry has been an important part of St. Louis' history since the 1800s. After the civil war, shipping and manufacturing expanded dramatically, due in part to the city's central location in the country and access to rail and water transportation. Sites that were previously home to factories, gas stations, smelters, and houses built before 1978 have a high chance of being contaminated by lead, petroleum, or other heavy metals. Unfortunately, up to 89% of homes in the City of St. Louis were built before 1980 and are therefore at risk for soil contamination unless they have been tested and/or remediated and known to be [safe](#). Additionally, up until it closed in 2013, Missouri had the largest active primary lead smelter in the United States (Herculaneum) and the largest secondary lead smelter in the [world](#).

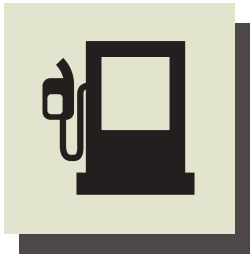
See the infographics below to learn more about the most common contaminants found in the region and what you can do to avoid contamination in your food:

Common Contaminants



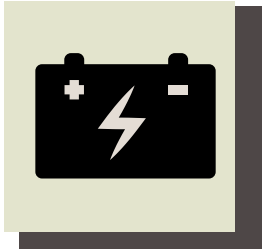
Lead

This is the most common contaminant found in St. Louis soil. Particles may be left over from old paint, pipes, gasoline, or pesticides. It is not uncommon in St. Louis for houses with lead paint to be demolished and buried in the soil. Although the risk of lead poisoning through urban agriculture is generally fairly low, you should take precautions. If the concentration is over 300 ppb (parts per billion), you should not use the soil to grow.



Petroleum

If your site used to contain a gas station, gasoline storage, or is located near a high-traffic area, there is a good chance that there is petroleum in the soil. Petroleum contains toxic chemicals such as PAHs, benzene, toluene, xylene, and ethyl benzene. Phytotechnology (the use of plants and bacteria to clean up contaminants) has been shown to effectively treat this contaminant.



Other Heavy Metals

Sewage treatment, pesticides, and industrial activities can leave behind harmful heavy metals such as arsenic, nickel, cadmium, and chromium. These substances are highly toxic when ingested, but phytotechnology can be used to effectively remove them from the soil.

What You Can Do

Build Raised Beds

To avoid contact with contaminated soil completely, you can build raised beds and fill them with clean soil. Heavy metals such as lead do not move around in the soil, so your plants will not be in any danger. This approach is a short-term solution, since it does not do anything to remediate the soil, so the contaminants will continue exist and potentially cause problems in the future.

For more information on raised beds, refer to [Gateway Greening's Raised Bed Guide](#).

Add Soil Amendments

Adding compost dilutes the concentration of toxic substances, and bind to metals, making them less bioavailable. To learn more check out [EPA's Soil Remediation Guide](#) to learn more about types of soil amendments and [this article](#) explaining the process. For more information on compost, refer to [MCE's Compost Guide](#).

Another alternative treatment is biochar which is the by-product of incomplete burning of biomass. Research is still being conducted by around the world but it has already proven promising soil benefits and has gained increasing momentum in the past few years. To learn more, [click here](#).

ON YOUR OWN

Replace Soil

If your soil is badly contaminated, you might have to remove it and replace it with clean soil. This can be expensive, but may be the safest option since none of the original soil or contaminants will remain. For more information on soil removal, refer to the EPA's [Citizen Guide to Excavation of Contaminated Soil](#).

Phytotechnology

Some substances, such as petroleum products and arsenic, can be removed from the soil using various phytotechnologies. This process can be slow but is less intrusive and often less expensive than other remediation processes. For more information on phytotechnology, refer to the [EPA's Phytotechnologies for Site Cleanup factsheet](#).

Test multiple spots on your site. Some areas may be more or less contaminated. This could allow you to plant certain things in different areas. For example, in a highly contaminated areas you can plant non edible producing agriculture. To learn more check out this [Guide for Growing on Land which may be contaminated](#) by The Grow on Your Own Working Group.

If you are determined to grow food in existing soil on previously [vacant land](#) and on a large scale (as opposed to a small residential garden), you will want to seriously consider testing your soil and if needed, remediating it. Due to the increasing awareness of soil toxicity as not only a barrier for redevelopment and land use but also it's detriment to our environment and public health, most especially in urban neighborhoods, the [Environmental Protection Agency](#) (EPA) developed a [Brownfields & Land Revitalization Program](#) in 1995. A brownfield is defined as “a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant” and it's estimated more than [450,000 exist in the U.S.](#) Brownfields often exist in disinvested neighborhoods and areas with blight, deteriorated infrastructure, or other challenges. For more information about brownfield redevelopment, see the [EPA's Anatomy of Brownfield Redevelopment Guide](#).

Unfortunately, to this date, definitive advisory standards and practices for agricultural redevelopment do not exist in many parts of the country. Neither the [EPA](#) nor [USDA](#) have standards that regulate the quality of soil as a growing medium. Additionally, the processes for testing and remediating brownfields can be time consuming, costly, and funding opportunities are highly competitive.

For additional information on urban agriculture and soil toxicity, as well as an overview of the remediation process and best management practices, refer to the [EPA's guide: Brownfields and Urban Agriculture: Interim Guidelines for Safe Gardening Practices](#)

Soil Remediation

Step 1- Soil Testing: If you think that your site could be contaminated, the first step is to get it **tested**. There are a few ways to do this in St. Louis:

[MU Extension Soil Testing](#) - open to anyone

MU Extension offers some soil testing, such as heavy metals, for a fee (up to \$75 per sample). This is not as comprehensive as an environmental site assessment but may be a good place to start if you suspect the presence of a specific contaminant.

[The Agency for Toxic Substances and Disease Registry](#) offers outreach events called **soilSHOPS** which promotes health education to help people learn if their soil is contaminated with lead by providing free immediate soil testing, and how to reduce exposures to contaminated soil and produce.

MO Department of Natural Resources (DNR) [Brownfield Assessment Program](#) - open to individuals and nonprofits

This program is funded by the EPA and provides an environmental site assessment at no cost to the applicant. This assessment includes two phases: Phase 1 consists of background research and Phase 2 consists of additional testing if problems are raised during Phase 1. It does not include any funds for remediation. You do not need to own the property, but you do need to have plans to own it and be able to provide legal permission for DNR to enter it.

Step 2- Remediation: If contaminants are found in your soil, the next step is remediation.

DNR's Brownfields Voluntary Cleanup Program (BVCP)- If the Phase 2 assessment from the EPA Site-Specific Assessment Program shows that there is contamination on the site, the next step is remediation. This program provides oversight of the remediation process and issues a certification when it is complete, but does not cover any costs. There are a few options for funding.

Remediation Funding Resources:

Brownfield Remediation Program (MO Department of Economic Development)- open to individuals and for-profits, as long as they will create jobs. This program is designed to incentivize cleanup of contaminated sites with development in mind. 100% of costs are covered, but reimbursement comes in the form of tax credits, not a grant. The land must be occupied by a business after it is cleaned up, and the business must either create 10 jobs or retain 25. It is important to note that you must submit a cost-benefit analysis of your plan, and the program will only fund it if there is a net economic gain (job creation is a major factor in this).

EPA Brownfields Cleanup Grant- open to nonprofits and governments

This grant provides up to \$500,000 over three years in order to cover the costs of site remediation. 20% of the cost must be shared by the applicant, but it can be in the form of money, labor, materials, or services. The organization may also request a waiver if they are experiencing economic hardship. The applicant must own the property.

For more resources on in-home lead testing and remediation for St. Louis residents, refer to page 179 (SP-65 Lead based paint Hazards) in the **City of St. Louis 2015-2019 Consolidated Plan & Annual Action Plan**.



Seeds of Hope Farm

WATER

Water access is a crucial aspect of urban agriculture and may take a bit of searching. Your approach for finding water will also likely be different for a community garden versus an urban farm.

Community Gardens

If the site you have chosen to install a community garden does not already have a water supply, check with neighbors or nearby organizations. Churches, community centers, or local businesses often allow community gardens to tap in and use their water. If you have started a community garden you can apply to [Gateway Greening's water access program](#). This program is open to all community gardens throughout the city, including gardens not in the Gateway Greening network. Once enrolled in the program the city will waive the water bill to your community garden.

The city also allows community gardens to use fire hydrants if the proper permits are filed. To apply for the permits, you will need to write a letter as directed by the City of St. Louis Water Division on their [hydrant use permits page](#). Your local Alderperson can help you file for these permits and have the deposit and fees waived, so there is no upfront cost to borrowing a hydrant key and adaptor for the season. Once you have completed the proper permits, the St. Louis Water Division will issue the necessary equipment and you will be able to access water from a fire hydrant near your garden. Contact the [City of St. Louis Water Division](#) for more information.

If you are willing to invest more in the infrastructure of your garden, you can install a waterline from the main to your garden. This requires a permit from the City of St. Louis Water Division, and the hiring of a contractor to dig the line and install the tap. This is a considerably more expensive option, but it can ensure that your site has reliable water access for the future. If you do not own your site, however, this may not be a worthwhile investment. For more information on tap installations, refer to the [City of St. Louis Water Division](#).



Urban Farms

While obtaining a permit to use a fire hydrant is an option, it will probably not adequately serve the watering needs of an urban farm. A farm project will most likely need to install a waterline and meter, and will be required to pay the metered rate. You will need a contractor in order to tap into a water main.

The rules and regulations regarding water tap installations are different for large and small tap installations. This refers to the size of the water main that exists on the property. You may contact the City of [St. Louis Water Division](#) to find out the size of the main at your property and for more information. Click on the links below to see the rules applicable to the different sized mains:

- [Large \(over 6 inches at the main\)](#)
- [Small \(water tap installations, being smaller than 6 inches\)](#)

Additionally, an urban farm may need an irrigation system. More information on this can be found in the **Infrastructure** section of this guide.

Project Clear

Because water access can be expensive, it is a good strategy to use rainwater collection systems, such as [rain barrels](#). Rain barrels provide free water for your garden and decrease the amount of stormwater runoff that enters the sewer system. The Metropolitan Sewer District (MSD) has a program called [Project Clear](#) that provides grant reimbursements for rainscaping and green infrastructure projects (landscaping that captures rainwater runoff). Traditional vegetable gardens are not eligible for grant money, but infrastructure such as rain barrels and cisterns are. Many edible [native plants](#) are also eligible for funding, such as the pawpaw tree. [Custom Foodscaping](#), one of the [approved contractors](#) for the program, specializes in creating edible landscaping.

Even if a project does not include food-producing plants, rainscaping infrastructure could be integrated within a farming ecosystem and provide significant benefits by attracting pollinators and improving soil and water quality, for example.

Brightside Rain Barrels



INFRASTRUCTURE

Depending on the purpose of your agriculture project and your production goals, you may need different types of infrastructure. Some examples include:

- **Raised beds** are important if you are concerned about possible soil contamination. They can also help make your garden more accessible for those with disabilities. For more information on how to make your garden accessible, refer to [The Definitive Guide to Making Your Garden Accessible](#).
- **Fencing**- A building permit is required for installing a fence regardless of zoning district. In zones A-E (residential zones) fences may be up to 4' high in the front of the lot, and up to 6' high in the back. In zones F-L (non-residential and commercial zones), fences may be 6' high around the entire lot.
- **Hoop Houses (aka High Tunnels)** and other structures for growing season extension

Urban Buds



- **Irrigation-** for large-scale operations, you will need an irrigation system in order to keep your crops healthy. [Drip irrigation systems](#) are often used for urban agriculture and do an excellent job of conserving water. For more information, refer to [Colorado State University's fact sheet](#).
- **Hand-washing and wash station-** It is typically best practice to have a designated hand washing area on any growing operation site. As for a wash station, although it is not a food safety precaution to have one, they can come in handy when needing to wash off root vegetables, for example.
- **Compost bins** provide a natural source of nutrients for your plants and are a safe and low-cost way of recycling organic waste such as food scraps and grass clippings. Gateway Greening provides [information on composting](#). It is important that you maintain your compost bin so that it does not smell or attract pests, and it is a good idea to keep it away from your neighbor's property.
- **Toolshed** - A toolshed is useful for storing all of your needed equipment on site. It is important to securely lock your shed and keep items such as seeds and feed off the ground and out of reach of rodents.
- **Storage and processing space** (for commercial urban farms)

As mentioned above, a commercial urban farm may require a conditional use permit depending on its zoning district. Additionally, zoning also affects the rules and regulations surrounding infrastructure projects. Any building, like a shed or storage area, that will be built on the land is considered an “accessory building.” The restrictions on accessory buildings are based on the size of the building and the zoning district. For clarification, you may refer to MCE’s **Guide to Greenhouses in St. Louis** or contact **the City of St. Louis Building Division**. You may also look through **the City's zoning code**

It is worth contacting the City of St. Louis Building Division if you plan on building an accessory building of any sort. If the building is over 120 square feet, it will require a building permit. All the information regarding what projects need permits, fees, and other building regulations can be found on the **Building Division's website**

ANIMALS

Chickens are some of the most common farm animals in urban areas. They can be raised for their fertile manure or eggs. In St. Louis, you may own up to 8 total fowl on a residential zoned parcel, and **none** of which may be a rooster. In 2017, the St. Louis Board of Alderman passed Board Bill 52 ([see City Ordinance 70608](#)), which amends, repeals, and enacts several ordinances pertaining to the keeping of fowl in the City of St. Louis to better enable residents to keep fowl and clarifies related regulations and requirements. For more information about keeping chickens, please visit the [Keeping Chickens in St. Louis FAQ](#).



[Fresh Pasture Farm](#)

Beekeeping also holds many benefits for the urban gardener. Bees not only make honey, but they also produce wax and accumulate pollen, which can be used in a wide range of products from candles to cosmetics. In St. Louis City, residents may have up to five beehives ([See City Code 15.140](#)), which is adequate to sustain commercial production. If you are planning on having a beehive on your garden or farm, you will need to install a fence to protect both the bees and potential trespassers who may be allergic. Additionally, if you are starting a community garden, be sure to discuss as a group how to handle situations with potentially allergic visitors. If you are new to beekeeping, the [Eastern Missouri Beekeepers Association](#) and the more local [St. Louis Beekeepers](#) are very helpful resources.

SELLING PRODUCE, EGGS, & HONEY

In response to increasing interest and demand for sustainable and urban agriculture as evidenced by the results of [MCE's City-Wide 2016 Urban Agriculture Survey](#), the City of St. Louis Department of Public Safety has released a [policy memo](#) defining and reviewing urban agriculture practices in the City of St. Louis. This memo clarifies regulations surrounding the sale of produce, eggs, and honey from urban agriculture.

As per the memo, **all home gardens and community gardens are permitted in every zoning district** and urban farms are conditional uses in every district, so long as such gardens and farms adhere to the following restrictions and limitations:

1. The sale of raw, unprocessed produce, to include eggs and honey, from home or community gardens or urban farms is permitted without license or taxation so long as they are sold from the same premises from which they were grown or harvested
2. Sales may take place from May through November between 7 a.m. and sundown, up to 3 days per week and 30 days per year
3. The sale area cannot exceed 50 square feet, any canopy must not exceed 10' by 10', and any signage must be professionally made and no larger than 4 square feet
4. The garden cannot use farming equipment with an engine greater than 30 horsepower, motorized equipment cannot be used between 8 p.m. and 8 a.m., and the garden cannot be a nuisance to neighbors



Food Processing

Commercial urban agriculture projects are subject to further regulations if the food harvested is processed for sale. **Food processing** is the transformation of crops into [value added products](#) like jams, pickles, baked goods, etc. It includes any process that changes raw foodstuffs into a variety of different prepared foods.

There is a [Cottage Food Law](#) in Missouri, meaning that certain value-added foods produced in a home kitchen, such as breads and jams, can be sold directly to the consumer without a permit. For more information about cottage food laws, refer to [The Missouri Department of Health and Senior Services' "Frequently Asked Questions."](#) Non-cottage processed foods, such as those requiring refrigeration, require a permit and are subject to health inspections. The Missouri Department of Health and Senior Services has [a brochure](#) summarizing the requirements applicable to food processing operations.



Fair Shares CCSA

BUSINESS PLANS & FINANCING

If you want to start an urban farm, it is essential that you create a business plan to help you figure out your goals, needs, and possible setbacks. The EPA has published a comprehensive guide to urban agriculture business plans, which can be found [here](#).

Unless you have all of the money that you need upfront, you will probably need a loan in order to get your operation started. One option for this is through the [USDA's Farm Service Agency \(FSA\)](#). They offer a variety of loans, including ownership, operating, and microloans, as well as a special program for women and minority farmers.

In order to apply for these loans, you will need to register with the FSA. You will need to make an appointment with your [local FSA office](#). When you go to the appointment, make sure that you have the following information:

- Name
- Address
- Phone Number
- Email Address
- SSN/TIN
- Entity Organization Documentation
- Survey Plat or deed for owned land
- Leases for leased land if available
- Information for affiliated owner/operators
- Information about the crops you intend to produce

For more information about farm loan programs, refer to the USDA [guide](#) or contact your local FSA office.

Financing may also be available from a local institution, such as a bank. If your farm has a community focus, you may be able to receive support from a Community Development Financial Institution (CDFI). In St. Louis, groups such as [Justine Petersen](#), [Gateway](#), and the [International Institute of St. Louis](#) provide these services.



FUNDING & RESOURCES

The USDA has put together an excellent guide to federal funding and programs for urban agriculture. These range from assistance with business planning to infrastructure, and can be found [here](#).

In addition to these national-scale programs, below are some resources specific to the St. Louis region, arranged by category:

Technical Assistance

University of Missouri - Extension

The University of Missouri has [Extension offices](#) in every county with the mission of supporting gardeners and farmers. They have programs, classes, information, as well as other resources, including soil testing. The University of Missouri Extension has developed a [comprehensive toolkit](#) for new and existing community gardens. The closest Extension office is in Kirkwood.

Lincoln University

The [Innovative Small Farmers' Outreach Programs \(ISFOP\)](#), a Cooperative Extension program, works with Missouri's small farmers by providing growers with technical and educational assistance through farm visits, workshops and conferences at little or no cost to the residents of Missouri. Their main office is on the campus of Lincoln University in Jefferson City and their outreach centers are located in Kansas City, St. Louis, and Southeast Missouri. For a list of useful topics and links, [click here](#).

Missouri Beginning Farmers

A good resource for gardeners throughout the state of Missouri is the [Beginning Farmers website](#). It is set up by the University of Missouri Extension Office to help farmers get started and be as successful as possible.

Missouri Botanical Garden

The Missouri Botanical Garden offers a lot of valuable help to home gardeners, including information on [vegetable gardening](#) and sustainable gardening. In addition to the fact sheets, visual guides, and other advice posted on the [Gardening Help web page](#), the Missouri Botanical Garden offers a number of gardening classes through the Kemper Center for Home Gardening.

Infrastructure

Gateway Greening

[Gateway Greening](#) provides a variety of programs and services to urban gardeners with the goal of creating a safe, healthy, and sustainable urban environment. Gateway Greening's programs range from assistance in setting up community and youth gardens, educational workshops, access to volunteer groups, material expansions of current gardens, fruit and nut trees, and much more!

Brightside St. Louis

Brightside St. Louis' mission is to create a cleaner, greener, more environmentally-friendly St. Louis. Brightside offers a number of services and resources for urban gardeners, such as information on rain catching and using native plants, a [demonstration garden](#), and a [neighborhood greening program](#) that provides plants and tools to approved community supported projects.

Metropolitan Sewer District

[MSD's Project Clear](#) program provides *reimbursement* grants for gardens that provide rainscaping that helps prevent rainwater runoff from running into the sewer drains. These grants can potentially be used to fund infrastructure that captures rain, such as cisterns and certain landscaping.

Land Access

STL Growers & Landowners Facebook Group, Interest Surveys, and Google Map

The [STL Growers & Landowners Facebook Group](#), moderated by the St. Louis Food Policy Coalition, is designed to connect urban growers, landowners, and anybody else looking to collaborate on land access and urban agriculture projects in the St. Louis foodshed (150 miles around St. Louis). Once approved, members can view where others are looking for or have land and reach out to other members. Along with this platform, the [St. Louis Farmland Interest Map](#) allows local landowners and growers to visually see where and from whom there is

interest to grow food. This map is populated from survey results from the [STL Farmland Interest Survey](#) for growers looking for land and the [STL Landowners Survey](#) for landowners with land to grow food on in the region.

Land Reutilization Authority (LRA)

[St. Louis Development Corporation \(SLDC\)](#) facilitates real estate development throughout the City of St. Louis. It is the goal of SLDC to bring all City property into productive and effective use using a variety of tools and resources. SLDC, through the LRA, manages, maintains, markets, and sells agency-owned vacant and abandoned building and property. Use the [land bank search tool](#) and find real estate owned by LRA that is available for sale.

Gateway Greening Land Trust, Inc.

The [Gateway Greening Land Trust](#) conserves citizen-created agriculture projects to remain community managed, and protected for future generations in St. Louis, Missouri.

Business & Marketing

St. Louis City Business Assistance Center

Housed in the St. Louis City government, [Business Assistance Center](#) provides assistance in licensing and permitting new businesses in the City. The BAC provides prospective business owners with information on various requirements, and helps them process their applications.

Missouri Farm to School

The Farm to School program aims to promote the use of locally grown produce in the cafeterias of schools and other institutions in order to strengthen the connections between communities, local producers, and healthy and nutritious food. Participation in the Farm to School program can be an important financial benefit to growers. The [Missouri Farm to School website](#) has very helpful information for farmers and vendors, including a list of steps to get involved and other resources. The National Farm to School Network also has a webpage for [Missouri resources and policies](#).

Known & Grown STL

[Known & Grown STL](#), run by the Missouri Coalition for the Environment, focuses on supporting a thriving, local, equitable, food system within the St. Louis foodshed and exists to help farmers spread the word about their practices, their products, and the principles that ground their food. Participating farms must adhere to Good Stewardship farm practices.

Policy & Activism

Missouri Coalition for the Environment is a leading convenor of stakeholders and residents on food policy concerns in the City of St. Louis. Read below about our two collaborative efforts.

St. Louis Food Policy Coalition

The [St. Louis Food Policy Coalition](#) (STLFPC) brings together numerous organizations and individuals working throughout the St. Louis region to address our food system needs, from food access to sustainable agriculture and community and economic development. The STLFPC works to shape public policy and promote a thriving local food system that supports the health, community, environment, and economy of the Greater St. Louis area. STLFPC is led by [Missouri Coalition for the Environment](#), Missouri's independent, citizens' environmental organization for clean water, clean air, clean energy, and a healthy environment.

Food Equity Advisory Board (FEAB)

The [Food Equity Advisory Board](#) (FEAB) is an engaged group of community champions who advocate on behalf of their peers to help promote a thriving, local food system that supports the wants and needs of the overall community — its health, environment, and economy. A community champion is involved, passionate, and connected with the region they serve and the fight for food justice. FEAB works to ensure every community member has a voice for positive, concrete change. It serves as a resource to connect community members with information and individuals that empower them to take action. FEAB works in partnership with the St. Louis Food Policy Coalition (STLFPC) to ensure the Coalition's goals and projects are aligned with the true needs of the communities they serve and that those communities are being heard by businesses and organizations throughout the city.



RECOMMENDED READING

Gardening & Farming

- The Essential Urban Farmer, by Novella Carpenter and Willow Rosenthal
- MU Extension's [Community Gardening Toolkit](#)
- [Market Gardening Start Up Guide](#) by City Farmer

Soil & Water

- [Brownfields and Urban Agriculture: Interim Guidelines for Safe Gardening Practices](#)
- MCE's [Soil Toxicity Infographic](#)
- For information brownfields redevelopment, see the [EPA's Anatomy of Brownfield Redevelopment Guide](#)

Business Planning

- [EPA Partnership for Sustainable Communities](#) -[Urban Farm Business Plan Handbook](#)

Community Engagement

- [Cornell's Small Farms Guide](#)
- [Core Principles for Public Engagement](#), National Coalition for Dialogue & Deliberation (NCDD)

Race, Equity, & Urban Land Access

- [Farming While Black: Soul Fire Farm's Practical Guide to Liberation on the Land](#), by Leah Penniman
- [Farmland Access in Urban Settings](#) by Land for Good
- [Segregation in St. Louis: Dismantling the Divide](#), a report from For the Sake of All
- [Food Studies: Who's doing the judging in the food justice movement](#) by Grist.org
- [Secure Land for Urban Agriculture](#), Equity Trust
- [Evolution or gentrification: Do urban farms lead to higher rents?](#), Grist
- [Urban Farms Wrestly with Gentrification and Displacement](#), Civil Eats
- [Green spaces may breathe new life into north St. Louis but residents need to be on board](#), St. Louis Public Radio

Gentrification and Urban Agriculture

- [Gentrification Explainer Video, Urban Displacement Project](#) - a UCLA and UC Berkeley collaboration
- [Ensuring Equitable Growth](#), U.S. Department of Housing and Urban Development
- [Evolution or gentrification: Do urban farms lead to higher rents?](#), Grist
- [Urban Farms Wrestle with Gentrification and Displacement](#), Civil Eats
- [Green spaces may breathe new life into north St. Louis but residents need to be on board](#), St. Louis Public Radio



The original toolkit was edited by Delfina Grinspan with the oversight of Melissa Vatterott, Food and Farm Coordinator at the Missouri Coalition for the Environment (MCE) and Director of the St. Louis Food Policy Coalition. Special thanks to Gateway Greening for drafting the first version of this toolkit, with the help of their AmeriCorps VISTA, Scott Pedomonte. In addition, special thanks to Hannah Reinhart, Garden Program Director at Gateway Greening, for working with MCE to finalize this toolkit. Lastly, we are grateful to Miranda Duschack, Small Farm Specialist at Lincoln University Cooperative Extension, for her assistance and technical expertise to ensure this toolkit is most useful to prospective urban farmers.

The guide was updated in 2017 by Velma Gentzsch. This updated 2019 version was edited by Jo Hill and Gabriella Simoneit with oversight from Emmaline Giles, Food & Farm VISTA and Melissa Vatterott, Food & Farm Director at MCE.