

Water Access for Urban Agriculture Projects - Issue Briefing COVID-19 Response

Prepared by Advocates for Urban Agriculture, Openlands, and Neighborspace

In recent years, the City of Chicago has recognized the positive contributions of urban agriculture, including job creation, healthy food access, green space beautification, and environmental benefits. As a result of the City's support of urban farms and gardens, Chicago is quickly becoming an urban agriculture capital across the country and world. In recent weeks, food supply chains have been heavily disrupted by the COVID-19 pandemic, highlighting the growing importance of urban farms and gardens as essential infrastructure that strengthen the local food system. **To keep urban agriculture and the local food system thriving in Chicago, affordable water access is critical.**

Community gardens and urban farms continue to face a series of financial and legal barriers preventing them from accessing the water needed to grow and process food for local communities. Because the majority of the City's gardens and farms are located on the South and West sides of Chicago, **these barriers disproportionately affect Black and Brown communities, who experience higher rates of food insecurity and consequential health disparities. Restricting access to water inherently restricts access to healthy, affordable food options. This type of health inequity exacerbates underlying chronic conditions and therefore leads to higher rates of COVID-19 related deaths in these communities.**

The barriers to water access have been building for several years, but the issue has become particularly acute this year. Some of the major barriers include:

- **Permanent Water Access:** Installing permanent water access through a water line or Buffalo box is very expensive, costing upwards of \$30,000-\$40,000 for installation. Many urban farms have short-term leases on their land and generate a modest income (\$10,000/year), making it too cost prohibitive to invest in permanent infrastructure. Due to the cost prohibitive nature of installing permanent water access, most farms and gardens access water through a City of Chicago hydrant. Two hydrant permits are currently available from the Department of Water Management (DWM):
 - **The community garden permit** is \$106.73/season for gardens 3,000 ft² and under (\$45.91/season for each additional 3,000 ft² or under). Recently, community gardens have been told by DWM that eligible organizations must be 501(c)3 nonprofit and must not sell any produce grown using hydrant water, directly contradicting the [City's own language](#), which permits community gardens to make "accessory or subordinate" (incidental) sales. Additionally some larger community gardens have been told they must be under 10,000 ft², which contradicts the city's zoning parameters. Finally, recent interpretations of the community garden permit and subsequent inspections by DWM have created confusion, causing some gardens to lose access to hydrant water unless they pay the temporary 'festival' rate.
 - **The temporary 'festival' permit** is the current requirement for urban farms, providing hydrant water at a rate of \$83.78/day for each side of the hydrant. The temporary 'festival' rate at \$83.78/day is too costly and placing an unreasonable financial burden on urban farm businesses, who need daily water for irrigation and post-harvest handling throughout the growing season.
- **RPZ Units:** RPZ (Reduced Pressure Zone) units are newly required by DWM as a best practice to prevent backflow from contaminating the water supply. While gardens and farms recognize the importance of preventing backflow contamination, the costs associated with installation and certification of RPZ's make it highly difficult for growing operations to afford these units.

Due to these [new and highly restrictive policies](#) imposed by the Department of Water Management, the costs for activating hydrants have become untenable, leaving gardens and farms with no affordable options for water access. The chart below highlights annual estimated costs imposed on community gardens and urban farms drafting water from a hydrant:

	<u>Community Gardens</u>	<u>Urban Farms</u>
Permit Costs	\$106.73/season when under 3,000 sq. ft \$45.91/season for each additional 3,000 square feet	Festival Rate: 83.78/day for each side of the hydrant 40 weeks @ 4 days each week: \$13,404.80
Initial RPZ installation	\$1700	\$1700
Follow up RPZ Testing	\$600 (\$300 x 2)	\$600 (\$300 x 2)
Incorporating as a non-profit organization	\$275 (if income is under \$50K)	Not required
Hydrant fitting and key (no longer provided by DWM)	\$300	\$300
Removing a custodial cap	\$938.03 (Where applicable)	\$938.03 (Where applicable)
Average Total	\$2981.73 - \$3919.76 (under 3,000 sq. ft garden)	\$16,004.80 - \$16,942.83

As a coalition of organizations representing gardens and farms throughout Chicago, our goal is to work with the City to ensure that **immediate action is taken to provide these essential organizations with affordable access to water for the 2020 growing season.**

We also want to work with the City to create long-term policy solutions that reduce the cost of and increase access to water for farms and gardens, ensuring that local food producers can continue to provide sustainably grown food for their communities at a time when there is a dire need for locally sourced produce and beyond. **We propose the following solutions to ensure water access via hydrants is affordable in 2020 and beyond, allowing urban agriculture and healthy food access for Chicago residents to continue to grow.**

- Create a flat permit rate for urban farms (applied to for-profit businesses) for affordable and season-long access to hydrants, similar to the [Cleveland model](#). The permit rates can be tiered based on the size of cultivation space at the farm. The permit should include an exemption for sewer rates and tax, since urban farms retain water, mitigate runoff and reduce the load on surrounding sewers.
- Apply the existing nonprofit water exemption to hydrant use for nonprofit farm operations.
- Keep community garden hydrant permit rates as is, but align permit language with zoning ordinance that allows for incidental sales at community gardens.
- Do not require Community Gardens to be incorporated as nonprofits to obtain water access.
- Allow water to be used for both irrigating and washing produce.

- Streamline and clearly communicate guidelines and costs associated with hydrant use; communicate where growers can obtain necessary equipment, such as a cap, key, and RPZ.
- Enable DWM to supply RPZ units, hydrant fittings and keys and work with plumbers to administer testing, significantly reducing the cost of installing and certifying RPZ units.
- Require growing operations to have RPZ units inspected and recertified only once a year, before the beginning of the growing season.
- Allow various types of water-saving irrigation techniques to be used when drafting hydrant water.
- Apply rules equitably to all organizations.

For a more detailed briefing of recent water access issues at Chicago farms and gardens, see Appendix A below. For 2019 data concerning water usage by Chicago farms and gardens, see Appendix B.

Appendix A: Water Access Issues at Chicago Farms and Gardens

- Windy City Harvest (WCH), a program of the Chicago Botanic Garden, a nonprofit organization, had their community garden permit revoked in Fall 2017 at two farm sites, and were forced to pay the temporary 'festival' hydrant rate of \$83.78/day, amounting to over \$20,000 in fees. In addition, they were instructed by a Department of Water Management (DWM) inspector in April 2019 to have their RPZ connections tested by a certified plumber every six months, which cost \$2500/test, or face a \$1000 fine. WCH employs more than 100 Chicago residents per year, on 11 sustainable vegetable production farms, and harvests more than 120,000 pounds of produce per year. These farms are run in partnership with health care institutions, City Colleges, Chicago Park District, Neighborspace and corporate partners. These workforce development farms result in food system job placement for youth, city college adults, and reentry populations. Half of the harvest is distributed through low income market channels, and the remaining through a Chicago wholesale business supplying institutions.
- Windy City Harvest currently hosts six incubator farm businesses (five owned by BIPOC Farmers) on one farm site, where they are paying the festival rate for water access. The cost of water associated with the festival rate makes it financially unfeasible for incubator farm businesses to transition to their own land and successfully cover the cost of water. The average farmer in the United States runs a farm as a means of supplemental income. The same is true for urban farmers.
- Gardeneers, a program within Chicago Public Schools designed to give students in food insecure communities equal access to healthy fruits and vegetables, has been denied permits at multiple sites in Englewood and North Lawndale. New rules released by the Department of Water Management drive their costs up 500% from previous years in order to irrigate these student gardens.
- City Farm, a nonprofit organization, had their water shut off during peak growing season in August 2017 by DWM, due to a leak caused by maintenance performed by the Chicago Fire Department. City Farm was instructed by DWM and Dept. of Planning and Development staff that they needed the temporary permit to access the hydrant, which they could not afford. In 2018, they lost \$10,000 in sales revenue from the previous year as a result of no water access. Due to declining harvest and sales, City Farm was forced to reorganize and sacrifice over 70% of their land under cultivation to a community garden model in order to get access to water.
- Cooperation Operation, a non-profit community garden on public land, held a valid community garden hydrant permit, obtained in December 2018 for the 2019 season (March-November). In April 2019, a DWM Plumbing Inspector threatened a \$1500 fine or 20 days in jail via voicemail to the manager if the community gardeners used a hydrant source for irrigating crops. When garden managers contacted the Chief Plumbing Inspector, they found no grounds for the threat and maintained their valid permit. They were denied a community garden permit for 2020.
- Just Roots Chicago, a nonprofit growing operation, was denied a permit in March 2020. They were told over the phone that their application was denied because it did not include the certified RPZ or their 501c3 documentation. When they inquired about why those requirements

are not expressly listed in the application, they were told by a DWM representative that the application is “a work in progress.”

- Farmers are hesitating to start or maintain their urban farm businesses in the city of Chicago due to water access and other factors. At least 7 farmers have communicated to Openlands and Advocates for Urban Agriculture that they are looking to start or move their business outside of Chicago to more friendlier business environments.
- An additional 9 community gardens have contacted AUA for technical assistance with water permitting issues in 2020.

The following farms asked to be kept anonymous because of concern of being targeted by DWM and losing their business:

- Farm #1, a long running non-profit urban farm, community garden, and education center, has been forced to switch to a donation model at their farm stand as a result of DWM inspector visits. This change in their long-standing market has caused confusion for customers and staff. The farm program is unable to pay the temporary ‘festival’ rate. They are researching quotes to install a water line, and may need to focus their private fundraising to pay for installation. The farm leases their land, which is why they have not invested in permanent water infrastructure in the past. This farm annually trains and employs 50 youth, 4 full time staff, grows 5,000 lbs of produce per year, and organizes 400 community volunteers.
- Farm #2 cannot afford the temporary permit, so they have been using alternate means. This farm has stated a desire to be compliant, and that they are concerned about their tenuous water access, but that they would go out of business if forced to pay the temporary permit rate.
- Farm #3 switched to an alternate water source due to multiple reports from colleagues about permits being denied. This farm has also stated a desire to be compliant, but that they would go out of business if forced to pay the temporary permit rate. They were denied a second year in a row and now are incapable of producing the same volume of food while their market channels are losing other suppliers due to the breakdown of food distribution during the pandemic.
- Farm #4 , a neighborhood-based non-profit farm, is actively responding to the need for emergency food in their neighborhood during the COVID-19 pandemic. They have been denied a hydrant permit and are unsure how they will be able to continue to feed their neighbors without it. They have witnessed plumbing inspectors driving around to check if they are using the hydrant.

Appendix B: Water Access Issues at Chicago Farms and Gardens

In the Spring of 2019, AUA conducted a widespread survey of community gardens and urban farms across Chicago to gain knowledge on the specific usage of water at their sites for the purpose of irrigating crops. The survey was conducted in response to several farms losing access to water and the broad recognition by the urban agriculture community that an alternative hydrant permit is needed for continued production of local fruits and vegetables. The following data was collected from that survey:

- 71% of respondents use less than 1000 gallons of water per week.
 - 29% of those use less than 500 gallons of water per week.
- 84% actively incorporate water conservation methods at their growing sites.
- 62% of survey respondents use drip irrigation.
 - The current Community Garden permit only allows sprinklers which are much less efficient at irrigating crops.
- 58% of respondents are working on $\frac{1}{8}$ acre (less than 5,000 square feet) or less.
- In 2018, a very productive farm operating on 3,000 square feet of growing space, within a 2 city lot parcel, used 91,000 gallons of water throughout the whole year. Their total water charge for that year was \$831.72