



Water Access:

The City of Cleveland Opens Access to Affordable Water

The Problem

The Cleveland Division of Water has provided affordable water access for community gardens in the Summer Sprout program for years. These projects have had the option to purchase a seasonal permit at a flat, affordable rate to use water from fire hydrants for irrigation. With the increase in vacant lots in Cleveland and Cuyahoga County, more individuals and community groups reuse vacant parcels for gardens, urban farms, pocket parks, orchards and the like. But as many emerging projects were not part of a city program like Summer Sprout, they were ineligible to receive the same affordable water access.

The Summer Sprout program is funded by Community Development Block Grant dollars from the City of Cleveland and administered by The Ohio State University Extension. Participants in this program have had access to hydrants for irrigation through unmetered permits offered at a flat rate of \$39.00 plus two metric cubic feet (MCF) for the growing season from May through October.

In 2010, community garden and greening projects not part of Summer Sprout and that did not generate income from sales were eligible to apply for a seasonal, unmetered hydrant permit. The group or individual would purchase a permit for \$39.00 and was then charged one MCF per week for use. This was based on a rate the Division of Water used for soil stabilization. Community gardens and greening projects not in the Summer Sprout Program were then charged for consuming approximately 22 MCF's for a 22-week season, which eventually amounted to a \$600 charge.

Table 1. Comparison of Former Rates and Estimates of Usage

Program	Type of Permit	Charged usage based on former policy, 2010	Cost based on former policy, 2010
Summer Sprout Community Gardens	Unmetered	2 MCF's per season	\$78.48 per season
Community Gardening and Greening Projects	Unmetered	22 MCF's per season	\$600.00 per season

Furthermore, market gardens and urban farms producing fruits, vegetables and herbs for sale at local markets were previously not eligible to purchase an unmetered hydrant permit for irrigation. These projects did have the option, however, of establishing a permanent, metered water line at the cost of \$1,200 to \$3,000 and paying metered rates for water. But since many sites did not have long-term leases or secure access to their land, an investment in water infrastructure was difficult to justify.

Water Usage

According to vegetable crop specialists at Ohio Agricultural Research and Development Center in Wooster, fruit and vegetable crops require approximately one inch of water per week for optimal growth. Using conservative estimates for average rainfall in Cleveland (about 3.3 inches per month in summer), roughly half of the crops' irrigation needs will be met by rainwater.

Additional water conservation measures could reduce irrigation needs even further. Growers and gardeners using drip irrigation decrease the amount of water they use by 50% by delivering water directly to the soil and plants' roots. Mulching around plants with straw, leaves, or landscape cloth can also reduce water needs 10 to 20% by reducing the amount of water lost through evaporation.

Furthermore, incorporating rain barrels to capture rainwater can save additional water, and many gardening and greening projects are already using these techniques as water conservation measures.

Consequently, water usage estimates based on the size of a lot should be considered when determining unmetered water rates. This chart shows estimated water needs for agricultural projects based on lot size.

Table 2. Estimated Water Needs for Agricultural Projects

Size of Parcel	Estimates Per Season		Former 2010 Policy	
	Water Usage	Cost	Water Usage	Cost
4,500 square feet (avg. residential lot)	3.2 MCF	\$105.38	22 MCF	\$600
11,000 square feet (¼ acre)	9.0 MCF	\$266.78	22 MCF	\$600
43,560 square feet (1 acre or approx. 10 lots)	36.2 MCF	\$993.08	22 MCF	\$600

*Cost per season estimates based on \$39.00 permit fee plus 2010 rates of the 1st MCF at \$12.58 and additional MCF's at \$26.90 each for a 22-week season.

The Solution

In 2009, the Cleveland-Cuyahoga County Food Policy Coalition (FPC), Councilman Joe Cimperman, the Department of Community Development and the Office of Sustainability worked together with the Division of Water to initiate a verbal agreement outlining access to new affordable unmetered water hydrant rates for gardening and greening project not part of a city-run program. This team then joined with officials from City Planning, Public Utilities and Mayor Jackson's Office to draft an official Memo of Understanding (MOU). In January 2011, the City of Cleveland's Department of Public Utilities and Department of Community Development signed the MOU outlining a new policy for affordable water hydrant rates for city-approved urban agriculture projects not operating under a city program.

The policy states that before May 1st of each year the Department of Community Development will submit a list of city-supported urban agriculture sites through the Summer Sprout and Reimagining Cleveland programs. This list may also include projects independent of city programs determined to be environmentally safe and compliant with city zoning codes. For these projects, the sponsor must either own the site or have permission to use it from the appropriate authority; test the soil for heavy metals including lead; be in compliance with city zoning codes; and not have access to water on site or via an adjacent property. Project sponsors are required to submit a questionnaire with proof that the project meets the criteria in order to be included on the approved project list for a reduced rate hydrant permit.

Approved projects then qualify for the following affordable permit rates for the growing season:

- For small sites less than two acres, the rate consists of a \$39 permit fee and the established Division of Water residential rate for 2 MCF of water. In 2011, this total equaled \$92.80.
- For sites greater than or equal to two acres, the rate consists of a \$39 permit fee and the established Division of Water residential rate for 4 MCF of water. In 2011, this equaled \$146.60.

These rates apply to each hydrant used and are effective from May through October during the growing season. All permits must be renewed yearly, but large sites are only entitled to receive a hydrant permit for up to five years. They are expected to establish metered connections within that time.

With the new policy in place, the City of Cleveland ensures that local growers have access to affordable water rates that are in line with the approximate amount of water they will use. With these efforts, the city as well as community stakeholders continue to contribute to the success of Cleveland's urban agriculture, the innovative reuse of abandoned and vacant properties, and the future sustainability of the city.