

Invasive Plant Species in Northeast Ohio



PURPLE LOOSESTRIFE

MULTIFLORA ROSE

AUTUMN OLIVE

TREE-OF-HEAVEN

KUDZU



The History:

A tributary to the Cuyahoga River running through Kennedy Park, Kelsey Creek has been degraded from bank erosion and downcutting. A major cause of this degradation was the removal of a downstream dam in 2009. This removal had left the creek and surrounding areas hazardous and unappealing. Biological communities and ecological services in Kelsey Creek had been subsequently limited, and the condition of the creek threatened gas and sanitary sewer utilities running parallel to and underneath the creek.

The Restoration:

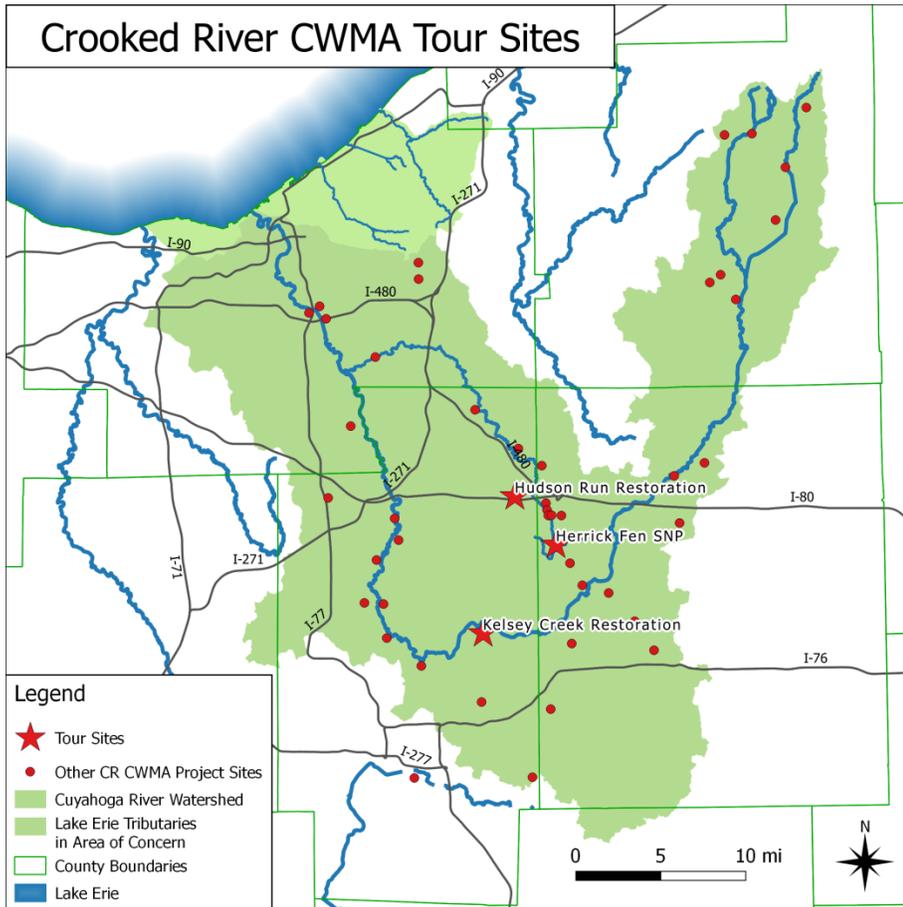
In 2013, the City of Cuyahoga Falls hired Biohabitats to restore 1,000 linear feet of Kelsey Creek. Raising the channel invert re-established floodplain connection. Minor adjustments were made to protect the sewer lines and adjacent ball fields. Floodplain benches were excavated, and eroding banks were graded to a stable angle. Both sides of the channel were planted with native riparian vegetation. Mowing limits were established to protect the benefits created by the natural forest buffer including slowing overland flow, processing nutrients and sediment from the channel, and providing shading and woody debris to the channel. This project was funded using an Ohio EPA Surface Water Improvement Fund Section 319 Grant. Future plans for the site include adding an arboretum into the park and using the stream as an education piece for the arboretum and adjacent school. The City was also awarded another 319 grant to restore an additional 750 linear feet of Kelsey Creek just upstream of the Phase I project reach.

Invasive Plant Control Techniques and Resources Used at Kelsey Creek:

- Hand pull smaller shrubs.
- Larger shrubs cut close to the ground and applied herbicide immediately to the cut surface of the stump. Herbicide used: 25-50% aquatic-safe glyphosate-based herbicide with tracker dye.
- Foliar sprayed non-woody plants (and any small shrubs intermixed with non-woody plants).
- Herbicide used: 1.5-3% aquatic-safe glyphosate-based herbicide, with aquatic-safe surfactant (spreader/sticker) and tracker dye. Total of 193oz of concentrated glyphosate-based herbicide used.
- Time: Over the course of three days (two days in 2014 and one day in 2016), between three and six staff spent 6 hours on site for a total of 28 person-hours.
- Equipment: Backpack sprayers, folding hand saws, hand pruners, loppers.

Species Controlled at Kelsey Creek:

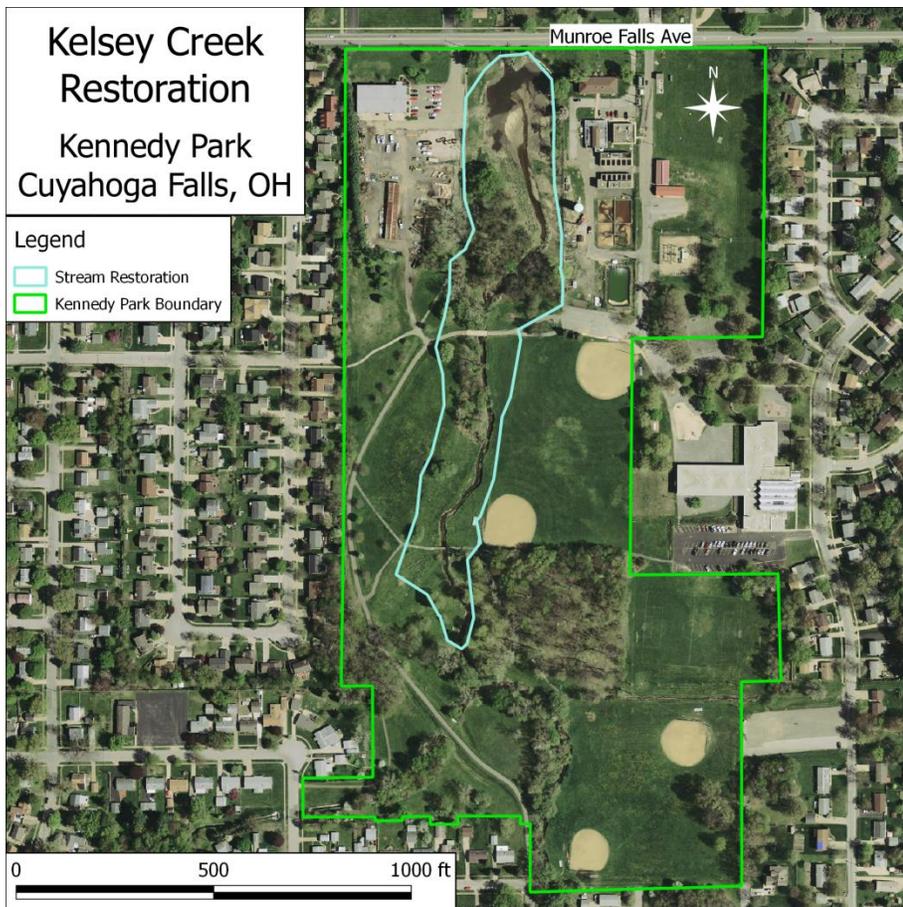
| Common Name | Scientific Name | Common Name | Scientific Name |
|---------------------------------|-----------------------------|----------------------|-----------------------------|
| Winged Euonymus, Burningbush | <i>Euonymus alata</i> | Common reed, "Phrag" | <i>Phragmites australis</i> |
| Common privet | <i>Ligustrum vulgare</i> | Japanese knotweed | <i>Polygonum cuspidatum</i> |
| Asian bush honeysuckles | <i>Lonicera spp.</i> | Multiflora rose | <i>Rosa multiflora</i> |
| Reed Canarygrass | <i>Phalaris arundinacea</i> | Invasive cattails | <i>Typha spp.</i> |



About CR CRMA:

The Crooked River Cooperative Weed Management Area (CR CWMA) is a collaboration of major land stewards and other landowners in the Cuyahoga River watershed of the Lake Erie basin, all motivated by conservation of land and biological diversity in Northeast Ohio.

The purpose of CWMA is to share knowledge, staff, equipment, and material across jurisdictional boundaries for invasive species detection and management. Each CWMA is organized around geography and one or more species. The CWMA is based on a Memorandum of Understanding (MOU) among the partners.



In the Cuyahoga Watershed, several agencies have hosted seasonal crews working with land managers across the watershed. We share some large and small equipment, and we have a mobile tool cache of equipment and supplies for crews or volunteer projects.

Participation in the Crooked River CWMA takes many forms. There are two types of signatories to our Memorandum of Understanding, depending on how deeply involved in land management a participating agency or landowner is. We also have a Steering Committee to assist with work plans, community projects, and outreach.