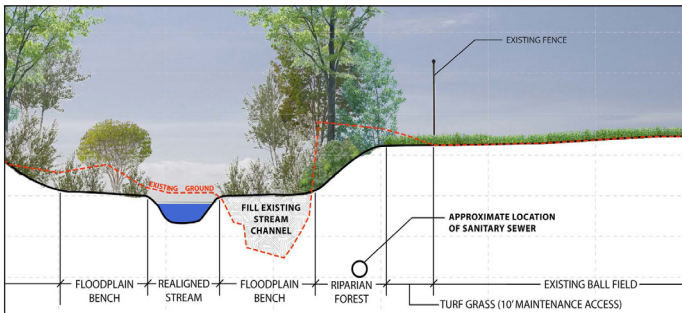


Kelsey Creek Restoration Concept

Summit County, Ohio



from top: Initial conditions; Cross section of restoration concept plan

The City of Cuyahoga Falls called upon Biohabitats to develop a concept to restore approximately 1,000 linear feet of degraded Kelsey Creek. The tributary to the Cuyahoga River, which flows through Kennedy Park, has experienced significant bank erosion and channel downcutting, primarily due to the removal of a downstream

dam in 2009. These conditions were not only hazardous to park visitors and aesthetically unappealing, but they limited the stream's biological communities and ecological services provided by the stream. This downcutting also exposed gas lines and presented threats to a sanitary sewer line that runs both parallel to and under the stream channel.

Restoring stability, function and beauty to Kelsey Creek enhances local ecology as well as a popular park's reputation as a welcoming, comfortable and engaging place.

Biohabitats developed a stream restoration concept that will be incorporated into plans for a future arboretum in the park. The City has used the concept and information from the memorandum to garner public support and pursue additional design and construction funding. Ultimately, the stream can become an environmental education centerpiece for the future arboretum as well as an adjacent school.

Biohabitats' concept rehabilitates the stream by slightly raising the channel invert to reconnect the channel to existing floodplain benches. It also involves minor adjustments to protect the sewer line and adjacent ball fields, excavation of floodplain benches where feasible, and grading

some eroding banks to a stable angle. The concept establishes native riparian vegetation on both stream banks and limits mowing to take advantage of the benefits provided by a natural forest buffer to slow overland flow, process nutrients and sediment from the channel, and eventually provide shading and woody debris to the channel.

Based on the concept, the City of Cuyahoga Falls received an Ohio Environmental Protection Agency (EPA) Surface Water Improvement Fund Section 319 Grant to implement the Kelsey Creek restoration and Biohabitats was awarded the contract to design and construct the project.

SERVICES

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800.220.0919
www.biohabitats.com

