
City of Akron

Ohio Canal Interceptor and Bank Stabilization: Little Cuyahoga

Acron, Ohio



A whole-systems approach will restore stability and function to a degraded urban stream while also revitalizing the local ecology and community.

SERVICES

Inventory & Assessments
Design
Permitting
Management

After suffering from more than 200 years of human modifications to its hydrology and taking a pounding from increased stormwater runoff from its surrounding urban landscape, the Little Cuyahoga River along a stretch of the Ohio & Erie Canal Towpath Trail had suffered a cyclical pattern of channel degradation and bank erosion. Evidence of the damage was abundant: a seven-foot drop caused by a perched, concrete-encased sewer crossing; undermined rip rap, and vertical eroding banks measuring as high as 10 feet.

To help the City of Akron address the degraded river and proposed Ohio Canal Interceptor Tunnel (OCIT) outfall impacts, Biohabitats developed a restoration/compensatory mitigation plan that would not only achieve specific goals such as bank stabilization and safe conveyance of 100-year flows, but also improve river ecology. The design, which focused on restoring fish passage, through the removal of a concrete encased sewer line which crossed the river, and maximizing the benefits of bioengineering, also restores aquatic and riparian habitat, improves water quality, and allows the Little Cuyahoga River riparian zone to better function as a wildlife corridor. The design also enhances the towpath user experience by creating a “green” corridor of native vegetation where there was once only rip rap.

Biohabitats shepherded the project from the initial geomorphic assessment through design development and permitting strategy.