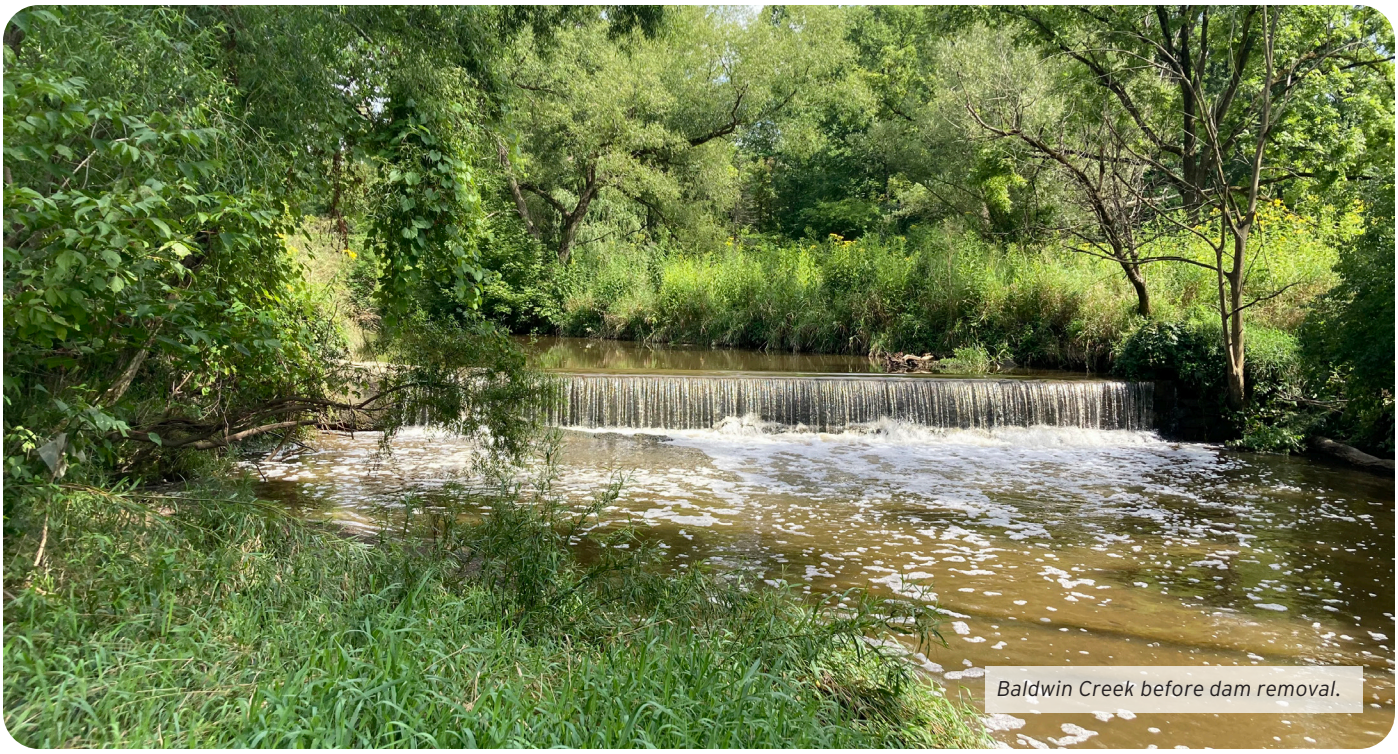
Cleveland Metroparks

Baldwin Creek Dam Removal and Restoration

Strongsville, Ohio



Baldwin Creek before dam removal.

Dam removal and floodplain restoration sets a trajectory of healing for a degraded stream system.

SERVICES

Conservation Planning
Construction
Design-build
Ecological Restoration
Water Strategies

The Mill Stream Run Reservation is the second largest jewel in Cleveland Metroparks' "emerald necklace" of public parks. Its waterways once powered mills that fueled the region's industrial history, but many of them were degraded by it. This includes Baldwin Creek, which flows through a portion of the Reservation.

A low-head dam prevented the natural flow of water and sediment, blocked fish passage, and caused channel incision and floodplain disconnection downstream. Bordered by formerly agricultural land and an abandoned horse ranch/residential development, the creek was also degraded by historic land use practices. With funding from the Ohio EPA's Water Resource Restoration Sponsor Program, and in partnership with the Northeast Ohio Regional Sewer District, Cleveland Metroparks sought to remove the dam and restore the degraded stream. For help, they turned to a design-build team led by Biohabitats.

Biohabitats led the design, permitting, and construction of a nature-based solution to restore hydrology and sediment transport, improve fish passage, re-colonize benthic macroinvertebrates, and enhance habitat and ecosystem function along the stream and its floodplain. In addition to removing the dam, a partial headwall, and impervious surface in the floodplain, the design "resets" riparian corridors through bank stabilization, in-stream habitat restoration, selective grading, floodplain connection and restoration, and revegetation.