

HALEY'S DITCH RESTORATION

Akron, Ohio



Client
Lockheed Martin
Corporation

Key Services Provided

- Subgrade Modification following Remediation
- Design-Build Stream and Wetland Restoration
- Floodplain Expansion / Wetland Construction
- Native Seeding / Landscaping
- Monitoring

Project Duration
Sept. 2009 - June 2010

Total Design Fee
\$700,000

Construction Cost
\$1,400,000

Total Project Cost
\$2,100,000

Key Staff

EnviroScience - Prime
Joel Bingham
Jeff Niehaus
Michael Liptak

GPD Group
Matt Lascola

RiverReach
Construction
Shannon Carneal
Greg Guello

EnviroScience, Inc., partnering with GPD Group and RiverReach Construction, designed and restored over 2,000 linear feet of stream and 1.2 acres of wetlands in seven separate areas as part of the restoration of Haley's Ditch, a tributary of the Little Cuyahoga River in Akron, Ohio. Restoration of this area commenced following a voluntary site remediation that removed PCB contaminated soil from the area. The RiverWorks team inherited a site that was in a remediated subgrade condition distinguished by 25 x 25ft grids of varying depths of excavation. Project objectives included post-remediation sub-grading, natural stream channel design and construction, floodplain expansion, and constructing several wetland connections.

Design for the reach was based on morphological surveying data that were collected on a reference stream with similar gradient and drainage area. Hydrologic analysis and modeling was conducted, and channel alignment was maintained regularly on site using Total Station surveying equipment. Stream bed materials were chosen based on hydrologic analysis and included locally imported sand, cobble, and boulders. Native seed mixes were used in floodplain, wetland, and upland areas, and over 1,000 native trees and shrubs were planted. Erosion fabric was installed along the stream banks and along slopes between upland and floodplain areas, and additional live cuttings were installed to provide stream bank stabilization. Woody debris was used in various capacities, functioning as bank stability, grade control, and biological habitat in the stream channel, floodplain, and wetlands. The site is performing very well; it is structurally and functionally stable and provides a diversity of increased aquatic and terrestrial habitat.