

## Reading Floodplain Bench – Phase I

### FAST FACTS

#### LOCATION:

Haffey Field  
Riesenberg Ave.,  
Reading, OH 45215

#### PROJECT PARTNERS:

City of Reading  
Mill Creek Alliance  
Environmental Remediation  
Contractor  
Cardno  
Ohio EPA and US EPA

#### PROJECT DIMENSIONS:

520'  
1.1 Acres

#### PROJECTED COST:

\$387,000

#### TIME FRAME: 2019-2020

#### PROJECT FEATURES:

Streambank stabilization  
Invasive Vegetation  
removal and replacement

#### CONTACT US:

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The Reading Floodplain Bench – Phase I project is 1.1-acres of environmental restoration located along the mainstem of the Mill Creek immediately north of Haffey Field public recreational area in the City of Reading. The project is one of several floodplain enhancement project in various stages of development in Reading and the adjacent municipalities.

Due to years of development in the floodplain, the Mill Creek is an incised stream, where the Mill Creek's high-energy floodwaters generally have sharply cut a narrow stream channel between steep streambanks. Along this stretch in Reading, the streambanks are as high as 12 feet. In addition, bush honeysuckle (*Lonicera spp.*), a shallow-rooted and invasive plant, which is the dominant vegetation at the site, does not hold the streambank in place. Hamilton County calculated that the streambank is eroding at a rate of one foot per year and releasing 281 tons of sediment pollution in to the Mill Creek each year. The increase in turbid lowers water quality to the detriment of aquatic plants and animals, and recreational use of the Mill Creek.

The project excavates and recontours the current one-stage stream channel to a two-stage channel. By creating a stable floodplain bench, a second area to contain water during high rain events, the City of Reading will improve water quality and flood control.



Construction Plan

**PROJECT GOALS:**

- Improve flood control
- Improve water quality
- Stabilize streambank
- Improve riparian habitat
- Improve stream views

The work on the streambank included site preparation with physical and chemical removal of shallow-rooted honeysuckle. The steep and unstable slopes were excavated to a shallow and stable 3:1 slope with a 50-foot wide terrace near the top of the floodplain. Once excess fill was removed, rock toe, erosion control fabric, and live willow stakes were installed at the high-water level. The combination of heavy rock and deep-rooted plants bioengineer a stabilize streambank. Finally, dense replanting with a hardy native seed mix further ensure a better functioning ecological habitat and more physically stable streambank to be enjoyed by Reading residents.

**PROJECT PARTNERS**



**Mill Creek  
Alliance**



BEFORE - Steep unstable streambanks with dense vegetation



AFTER - Streambank stabilized, open and accessible to public, connected to floodplain, and planted with hardy native floodplain plants

**Mill Creek  
Alliance**