

In-Progress Project Summary: Stearns Woods Restoration in Wyoming

Anticipated Completion: 2017

The Mill Creek Watershed Council of Communities (MCWCC) and City of Wyoming have been working diligently to advance environmental initiatives identified in the Wyoming Master Plan. A recent example is the successful collaboration between the MCWCC and the City to secure \$200,000 in Clean Ohio Green Space Conservation Program grant funding to remove invasive plants and restore native vegetation along the West Fork Mill Creek riparian corridor. Completed in 2014, the project also leaves this section of the stream corridor ready for extension of Wyoming's Greenway Trail. There is now an opportunity for similar collaboration at Stearns Woods to remove ecologically harmful invasive vegetation, replant the site with native trees and shrubs, remove an eroding dam, and stabilize and restore 400 feet of Cilley Creek.

Using a combination of two grants, the Clean Ohio Green Space Conservation Program funds and an Ohio EPA Section 319 grant, the project is fully funded with minimal investment from the City to deliver multiple ecological and economic benefits. Local match for the grant amount will also be provided through volunteer planting events.

The invasive plants which dominate the Stearns Woods understory (such as Amur and Japanese honeysuckle, winter creeper, and English ivy) were originally imported from



The existing dam in Cilley Creek causes severe erosion in the streambed and could release stored sediment should the dam fail

overseas, introduced as ornamental plants, and have few, if any, natural predators in North America. As a result, these invasive plants spread rapidly, with grave consequences; displacing native plants, decreasing biodiversity, interfering with the regenerative growth of beneficial trees and shrubs, altering hydrology, decreasing soil stability, and increasing erosion. The aesthetic, habitat, and ecological value of Wyoming's public spaces are compromised by the presence of invasive vegetation.

The presence of invasive plants has likely contributed to the condition of Cilley Creek, flowing through Stearns Woods Preserve. However, a more pressing issue has been

identified along the stream; the degraded condition of an old dam. The drop over the dam creates higher energy flows in the stream, causing significant bank erosion on both City and private property. Crumbling concrete and potential flanking of the structure along the south bank would result in increased streambank erosion upstream of the structure, as well. An estimated 5,000 to 6,000 cubic feet of sediment, presently stored behind the dam, could be released as a result of a dam breach.

Construction activities are scheduled to be completed between the spring of 2017 and fall of 2017. Invasive species removal, requiring cutting and chipping of woody vegetation, and heavy stream restoration construction, requiring use of excavators and other heavy construction equipment, will be required. If you are planning to visit Stearns Woods, especially in the late fall of 2017, please be vigilant and observe any posted safety signs!



The restored West Fork Mill Creek corridor in Wyoming demonstrates what a healthy, native understory will look like at Stearns Woods

The restoration plan for Cilley Creek and Stearns Woods features revitalized forest and aquatic habitat benefitting Wyoming residents, the City of Wyoming, and the overall health of the Mill Creek Watershed. The proposed restoration of the stream provides stable, vegetated banks and rock riffles to protect infrastructure, decreased erosion, and decreased sediment pollution. A reforested Stearns Woods will feature native understory shrubs and allow the native trees to propagate, providing a regenerating forest requiring less maintenance in the future.

Native flowers will be able to reestablish and thrive once the dense honeysuckle is removed, providing seasonal blooms across the forest floor and producing roots that will hold soil in place and decrease erosion. A healthy native plant population will be able to better provide food and shelter for local animals and birds. Upon completion, the Stearns Woods and Cilley Creek restorations will provide a valuable green space for the City of Wyoming for years to come.

Volunteer work and engagement are major components of this restoration initiative. The MCWCC and City will be coordinating volunteer planting and invasive species removal days between May and November of 2017.





