

Chagrin River Watershed Stormwater Retrofits and Monitoring

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The Chagrin River Watershed Partners, (CRWP) has worked with a diverse group of partners to incorporate stormwater retrofits at multiple sites in the Chagrin River watershed. The fieldtrip will highlight sites that have been monitored by CRWP in cooperation with our Member communities, USGS, Northeast Ohio Regional Sewer District, Ohio EPA, and North Carolina State University (NCSU).

This tour will highlight the stormwater monitoring approach on several sites that have been retrofit with low impact development stormwater practices including:

1. Two sites in Orange Village: One retrofit completed in 2007 incorporated bioretention swales into the road right of way on a residential street. A second retrofit project is being constructed in 2013 and includes porous pavements. <http://www.crwp.org/index.php/projects/stormwater-retrofit-projects-completed/102-orange-village-drainage-improvement-project-sterncrest-road>
2. Cleveland Metroparks South Chagrin Reservation: Lunch and visit to Sulphur Springs stream restoration project. The flow and temperature of this coldwater stream were measured before and after stream restoration to determine possible reintroduction of Ohio Brook Trout to this stream. <http://www.crwp.org/index.php/projects/restoration-projects-current/sulphur-springs-restoration-and-assessment-project>
3. Mayfield Heights City Hall retrofit using a combination of porous concrete, tree box filters, and bioretention. City Engineer, URS, completed flow monitoring at this site. <http://www.crwp.org/index.php/projects/stormwater-retrofit-projects-completed/99-city-of-mayfield-heights-green-infrastructure-demonstration-and-showcase-project>
4. Willoughby Hills Community Center parking lot retrofit with pervious pavers. CRWP and NCSU will discuss monitoring equipment and approach. <http://www.crwp.org/index.php/projects/research-projects/nerrs-science-collaborative>

Overall, this fieldtrip will demonstrate how a watershed organization and local communities can work together to improve water quality and address local flooding concerns. Further this field trip will highlight how monitoring of stormwater performance can promote innovative stormwater practices and inform local and statewide stormwater programs.

