

MANAGING FLOODING, POLLUTION, & EROSION: EVALUATING STORMWATER SOLUTIONS IN OHIO

Stormwater Collaborative Group Project Update September 2012

Monitoring of Local Stormwater BMPs

Chagrin River Watershed Partners (CRWP) is working to finalize a contract with North Carolina State University (NCSU) to conduct monitoring work associated with this project. CRWP and NCSU will also work with Biohabitats to complete the monitoring components. We have developed guidance that clearly defines how our team will interact with entities receiving funds for design of stormwater BMPs in conjunction with this project.

Here are the updates on specific site-based work:

- Perkins Site - NCSU provided feedback suggesting alterations to the Perkins Township BMP design to facilitate monitoring. Some adjustments were made and construction of pervious concrete and the swale is underway.
- Old Woman Creek Site - Erie Soil and Water Conservation District (SWCD) convened a kick off meeting to discuss the planned porous asphalt installation for Old Woman Creek National Estuarine Research Reserve (NERR). Although the site assessment revealed extremely low infiltration rates, the team decided to move forward with the initial plan of pervious asphalt installation. The team believes this site can demonstrate how pervious pavement can provide storage to help meet peak discharge requirements and establish thresholds for functionality on compacted tight soils.
- Willoughby Hills Site - The City of Willoughby Hills has completed their grant agreement with Ohio EPA to install pervious pavers and a bioretention cell at the Willoughby Hills Community Center & Library funded through Ohio EPA's statewide Surface Water Improvement Fund (SWIF) grant program. Contracts



Swale BMP installation at Perkins Township facility

between the City and CRWP are being developed for site design and monitoring. The project kick-off meeting is tentatively scheduled for early October.

In addition,

- The ODNR Division of Soil and Water Resources (DSWR) is currently addressing NCSU's comments on the fact sheet "Considerations for Making Stormwater BMPs Monitoring Capable," and the final version will be available soon.
- USEPA has announced that it will fund Ohio's - Cuyahoga County SWIF projects. Contracts are now in review for all sites.
- ODNR – DSWR has conducted single-ring infiltrometer tests and soil investigation to inform plans for a potential bioretention system at the site of the City of Sandusky's Warren Street brownfield redevelopment project.

Monitoring Sites

BMP Type	Project Location	Status
Pervious Concrete and Swale	Perkins Township Facility	Under Construction
Pervious Pavers & Bioretention	Orange Village Service Facility	Funded, Contract in development
Pervious Pavers & Bioretention	Willoughby Hills Community Center	Funded, Contract in development
Porous Asphalt	Old Woman Creek NERR	Funded, Pre-award meeting held, contract in process
Pervious Pavers	Pepper Pike City Hall	Funded, Contract in development
Bioretention and possible WQ Swale	Holden Arboretum	Technical assistance

For more info on this project, please contact Amy Brennan at abrennan@crwp.org or (440) 975-3870 or Heather Elmer heather.elmer@dnr.state.oh.us or (419) 433-4601





Top: Perkins pervious concrete construction. Side: Alex Etchill describing Perkins Twp facility post-construction stormwater design.



Administration Building where stormwater BMPs are currently under construction.

A project overview is included in a publication that will be distributed along with presentations for Coastal States Organization conference attendees, staffers from Congresswoman Marcy Kaptur's office, Assistant Administrator for NOAA's National Ocean Service David Kennedy, and delegates to the international Ecosummit Conference at Old Woman Creek NERR the weeks of September 24th and October 1st.

Modeling

CRWP and the consultant conducting modeling work associated with this project have decided that for several reasons it doesn't make sense to continue working together. CRWP is undertaking a process to identify a new entity to complete the modeling work, and we will tell you more about this process at the October CLG meeting. Initial work was completed on analyzing the historic climate data needed to run models for both project focus areas, the Chagrin River Watershed and Erie County (Sandusky and Huron, Ohio area). Climate data sets developed include continuous and design event data sets based on the historic data record,

including analysis of typical, dry and wet years. Additional research was completed on the availability of evapotranspiration data.

Training and Outreach

Erie SWCD partnered with CRWP and Old Woman Creek NERR to offer a local stormwater codes workshop for Erie County communities in August. Follow up technical assistance will be provided by Kirby Date, Community Planning Program Manager at the Maxine Goodman Levin College of Urban Affairs at Cleveland State University. CRWP has worked with Solon on the update of erosion and sediment control and stormwater codes and with Mentor on updates to their off street parking code.

Erie SWCD is partnering with Old Woman Creek NERR, ODNR Division of Soil and Water and others to offer a construction site BMP training in Sandusky on October 11th that will include a site visit to the Perkins Township

Collaborative Learning Group (CLG) Meetings

The next CLG meetings are scheduled as follows. Please mark your calendars. Note also that the 2013 meetings will likely be fewer in number than those in 2012 (3 instead of 4) but slightly longer in duration, maybe lasting into the middle of the afternoon.

- October 18, 2012 –Old Woman Creek NERR in Huron. Site visit and short tour of the Reserve followed by regular meeting with presentation on stormwater monitoring from North Carolina State University and Biohabitats.
- April 24, 2013
- July 17, 2013
- September 18, 2013



Erie County Stormwater Codes Workshop

For more info on this project, please contact Amy Brennan at abrennan@crwp.org or (440) 975-3870 or Heather Elmer heather.elmer@dnr.state.oh.us or (419) 433-4601



NATIONAL ESTUARINE RESEARCH RESERVE SYSTEM SCIENCE COLLABORATIVE

