

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

## Stormwater Collaborative Group Project Update June 2012

### Monitoring of Local Stormwater BMPs

Chagrin River Watershed Partners released a request for qualifications to conduct monitoring work in early May. Of seven proposals, the Project Team has selected the University of New Hampshire Stormwater Center, North Carolina State University, and Cardo JF New for interviews. Interviews and final selection will take place in late June.

Most BMPs investigated in early spring 2012 have been eliminated because they are not easily monitorable or have design or construction concerns, with the exception of the Perkins Township Highway Department. Alex Etchill of John Hancock Associates completed the design work for this project with technical assistance from Jay Dorsey (ODNR).

We are developing a fact sheet containing guidance on stormwater monitoring in Ohio. Ohio EPA may distribute the fact sheet to SWIF recipients and it will be shared with projects that receive design assistance through this grant.

### Stormwater BMP Design Assistance

The Project Team received and reviewed 5 proposals. Four projects will receive funding and participate in the collaborative group beginning in October 2012 and one will receive technical assistance.

### Soil Infiltration Testing and Investigation

Jay Dorsey and Neil Martin (USDA – NRCS) conducted single-ring infiltrometer tests and soil investigations at the Perkins Township Highway Department and Old Woman Creek NERR to determine infiltration rates at proposed BMP locations. Based on test results at the Perkins site, Dorsey recommends using an infiltration rate of 0.05 in/hr for design purposes. Infiltration rates at Old Woman Creek NERR site were very low. A report and recommendations for this site are still pending.

### Modeling

Gibson Chen, Ph.D, P.E. and President of Avetin Engineering Ltd has been contracted as the modeler for this project. Chen's experience includes flow meter installation and data collection, flow data QA/QC and statistical analysis, hydrological and hydraulic models, sewer system planning and design, stormwater management,



*Jay Dorsey, ODNR, conducting infiltration test at potential monitoring site.*

and wastewater improvements. Chen has been a SWMM user since 1995, has developed numerous models in Ohio, and has used PCSWMM for several projects. His first task is developing representative historic climate data model inputs for the Chagrin and Erie County watersheds.

### Communications and Outreach

We have determined that the collaboration training is not a good fit for our project. The workshop is instead being offered for watershed coordinators on July 18-19th. Contact Heather Elmer (Old Woman Creek NERR) at (419) 433-4601 if you know someone who might be interested in attending.

Heather Elmer distributed the project fact sheet at the Ohio Stormwater Conference in early June and will present a project overview to the Firelands Coastal Tributary watershed council at the end of this month.

The Project Team is starting to plan activities related to development of local and state stormwater policies. Crystal Dymond and Heather Elmer are planning a codes and ordinances workshop for Erie County communities.

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

| Submitted By                 | BMP Type                                | Project Location                | Watershed | Soils | Status               |
|------------------------------|---|---------------------------------|-----------|-------|----------------------|
| Hovancsek & Associates, Inc. | Pervious Pavers & Bioretention          | Orange Village Service Facility | Chagrin   | C     | Funded, Pending SWIF |
| CT Consultants               | Pervious Pavers & Bioretention          | Willoughby Hills Community Ctr  | Chagrin   | C/D   | Funded, Pending SWIF |
| Erie SWCD                    | Porous Asphalt                          | OWC NERR                        | Old Woman | D     | Funded               |
| Chagrin Valley Engineering   | Pervious Pavers, Bioretention, WQ swale | Pepper Pike City Hall           | Chagrin   | C/D   | Funded, Pending SWIF |
| Holden Arboretum             | Bioretention                            | Holden Arboretum                | Chagrin   | C/D   | Tech. Asst.          |

