Program

Tuesday, March 12, 2019

11:00am Trade Show Set Up

12:00pm Registration / Trade Show / Refreshments / Lunch on Own

12:45pm-1:35pm Introduction and Welcome Opening Session Modernizing Summit County Engineers' Process for Storm Water Management Facility (SWMF) Inspections and Documentation* Sheila Rayman, P.E., Senior Environmental Engineer, EnviroScience Inc.

Gene E. Arters, P.E., Senior Project Engineer, CT Consultants, Inc.

Summit County Engineer's Office

Modernizing Summit County Engineers' (SCE) process for storm water management facility (SWMF) inspections and documentation. EnviroScience and CT Consultants enhanced the process by incorporating mobile data collection technology with interactive field entry, developing a common reporting database, providing inspection tasks through a web map portal, and supplying database for incorporation into GIS system for record keeping and public viewing.

1:35pm-2:25pm Easy-to-Get, Easy-to-Use Tools for Hydro Engineers*

Michael J. Mastroluca, P.E., CPSWQ, Senior Hydraulic Engineer, LJB, Inc.

There are many free Hydrology, Hydraulic and Storm Water models available from Public Domain sources or people that have developed Opensource Software. This presentation will be a divided into two sections, discussion of the models and walking through a detention pond case study. The detention pond case study will show the audience how to evaluate a common detention pond design example using a combination of a Microsoft Office Spreadsheet developed by the Natural Resource Conservation Service (NRCS) and a Hydrologic and Hydraulic Computer Model developed by the Army Corps of Engineers (ACOE) Hydraulic Engineering Center (HEC) identified as the Hydrologic Modeling System (HMS) Computer model. The design example was originally evaluated using TP-40 rainfall values. The second part of the presentation will discuss in detail how to evaluate a detention pond using a combination of a Microsoft Office Spreadsheet and HEC-HMS.

2:25pm-3:00pm Trade Show Refreshment Break

3:00pm-3:30pm **Water Quality Results in Drainage Ditches and Watercourses*** Doug Reinhart, P.E., P.S., Auglaize County Engineer

3:30pm-4:00pm Case Study Green Infrastructure Presentation* Craig Cawrse, FASLA, Principal Landscape Architect, CT Consultants, Inc.

A case study of an office building site in Ohio that uses LID green infrastructure as innovative storm water control measures. The site has been monitored by USGS for (11) years to track performance of the storm water measures to address quality and quantity (rate) of storm water impact.

Sessions indicated with an asterisk () have been recommended for CPD credit for a maximum of **7.0 CPD hours**. Please note that the final determination of what qualifies for CPD credit ultimately lies between the license holder and the State Board of Registration for Professional Engineers & Surveyors.

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4:00pm-4:30pm Putting it All Together on a Real World Site: Lessons Learned*

Robert Bailey, PE, LEED AP BD+C, Senior Civil Engineer, DGL Consulting Engineers

Bob Bailey will review the NPDES requirements for redevelopment sites and apply it to a real world project. Highlights include developing a water quality basin to treat the required water quality volume and discuss options for incorporating flood control into the design.

4:30pm-6:00pm **Trade Show Reception** *Visit our exhibitors and network with your counterparts. Refreshments will be served.*

Wednesday, March 13, 2019

7:30am Continental Breakfast

8:30am-9:20am **2019 Update of Ohio Storm Water Permit for Phase II Communities*** John Mathews, Storm Water Program Manager, Ohio EPA

Ohio's storm water permit for small and medium size communities will be renewed by September 2019. Hear about potential changes coming in the renewed permit. Additionally this presentation will provide lessons from audits of local programs.

9:20am-9:50am Let the River do the Work*

Ron Wine, Co-Owner, Channel Maintenance Systems Chad Dixon, City Engineer, City of Springboro

The City of Springboro has recently undertaken an innovative, cost-saving and environmentally sound approach for erosion control and riverbank restoration on the Clear Creek tributary of the Great Miami River to protect public land. The basic dynamics of the stream channel have been altered to protect and build riverbank in problem erosion areas impacting significant endangered public investment on the City-owned golf course, park and adjacent County road.

10:00am-10:50am Let's All Calm Down About Climate Change* Jon Prier, Environmental Hydraulic Engineer, ODOT Office of Hydraulic

Engineering

Climate change is real, but climate modeling results are not as bad as the news indicates. Engineers should take a rational, common-sense approach to considering unknowns in any design. This presentation will address unknowns in NOAA climate reports and drainage design plus accidental (and intentional) misleading statements from climate reports.

11:00am-11:50am StreamStats Update*

Greg Koltun, Hydrologist, U.S. Geological Survey

StreamStats is a Web-based application developed by the U.S. Geological Survey that can be used to estimate a variety of streamflow statistics for locations on unregulated streams. An overview of the Ohio StreamStats applications will be given along with information on impending updates.

11:50amClosing Remarks / AdjournNeil Tunison, PE, PS, Warren County Engineer, Committee Co-ChairJim Gills, PE, PS, Lake County Engineer, Committee Co-Chair

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