IAFSM Stormwater Management Committee

2-Day EPA SWMM Modeling Seminar

This two-day seminar will prepare participants to set up and run EPA-SWMM models with a combination of lectures and hands-on examples taught by David Sample, Ph.D., P.E., and Bob Carr, P.E. David is an Associate Professor of Biological Systems Engineering at Virgina Tech, his research focuses upon improving the performance of urban stormwater systems through modeling and monitoring. Bob is a self-employed consultant with over 35 years of experience in hydrologic/hydraulic modeling, specializing in combined sewer systems and dual drainage, including 1D/2D analyses. Participants will learn the concepts of EPA SWMM modeling with a focus on modeling various types of green infrastructure.

When: August 17-18, 2017
NIU Naperville
1120 East Diehl Road
Naperville, Illinois 60563-9347

Registration fee: **One Day** (Government Employees) - **$300**
One Day (Non-government Employees) - **$350**
Two Days (Government Employees) - **$550**
Two Days (Non-government Employees) - **$600**
(Registration includes breakfast & lunch)

Register online: https://www.123signup.com/event?id=hgxqk

Registration Deadline: August 4, 2017

Instructors: **David J. Sample, Ph.D., P.E.**
Bob Carr, P.E.

CEC's: 12 CECs

Description: The workshop covers 2 days; attendees may sign up for either or both days. Day 1 covers an introduction to EPA□SWMM, its use in modeling urban watersheds and designing green infrastructure-based BMPs. Day 2 covers intermediate topics in using SWMM such as advanced detention pond design, water quality modeling, combined sewer modeling, and modeling of dual drainage systems.

No prior EPA SWMM experience is required; however, participants should have a technical background. Each participant will need to bring a laptop with EPA SWMM installed

For more details on the course please see the attached agenda. Should you have any questions to regarding this course (agenda, hotel options, meals, etc.), please contact Shauna Urlacher at (630) 729-6160 or via e-mail at surlacher@v3co.com.

Workshop Agenda
Day 1-Introduction to EPA SWMM

Item #	Description	Time	Instructor
	Registration	7:45 am-8:00 am	
1	Opening Session/ Pre-evaluation	8:00 am- 8:15 am	Sample
2	Stormwater Modeling a) Intro to hydrologic modeling b) Intro to EPA SWMM Interface	8:15 am- 8:45 am	Sample
3	Modeling Methods a) Design Storms b) Continuous Simulation c) Flooding and inlet capacity analysis	8:45 am-9:15 am	Sample
4	Example 1.1: Existing conditions modeling	9:15 am-10:15 am	Sample
BREAK		10:15 am-10:30 am	
5	Hydraulic Storage	10:30 am-11:00 am	Sample
6	Example 1.2: Using EPA SWMM for design of retention storage and constructed wetlands	11:00 am-12:00 pm	Alamdari
LUNCH		12:00 pm-1:00 pm	
7	SWMM LID interface	1:00 pm-1:30 pm	Sample
8	Example 1.3: Bio-retention	1:30 pm-2:15 pm	Alamdari
9	Example 1.4: Permeable pavement	2:15 pm-3:00 pm	Alamdari
BREAK		3:00 pm-3:15 pm	
10	Example 1.5: Infiltration basins	3:15 pm-4:00 pm	Sample
11	GIS integration	4:00 pm-4:30 pm	Sample
12	Workshop wrap up/summary and workshop post-evaluation	4:30 pm-5:00 pm	Sample

Workshop Agenda
Day 2-Intermediate Training in EPA SWMM

Item #	Description	Time	Instructor
	Registration	7:45 am-8:00 am	
1	Opening Session/ Pre-evaluation	8:00 am- 8:15 am	Sample
2	Advanced Detention design a) Splitters, overflow weirs restrictor, etc. b) User defined stage-storage-discharge curve c) Tailwater considerations	8:15 am- 8:45 am	Sample
3	Example 2.1: Adv. Detention Design	8:45 am-9:30 am	Sample
4	Water quality simulation in EPA SWMM	9:30 am-10:00 am	Alamdari
BREAK		10:00 am-10:15 am	Alamdari
5	Example 2.2: Water quality	10:15 am-11:00 pm	
6	Calibration of EPA SWMM models with monitoring data	11:00 am-11:30 am	Alamdari
7	Dual Drainage	11:30 am-12:00 pm	Carr
LUNCH		12:00 pm-1:00 pm	
8	Example 2.3: Dual Drainage	1:00 pm-1:45 pm	Carr
9	Generating wet weather flows	1:45 pm-2:15 pm	Carr
10	CSO modeling	2:15 pm-3:00pm	Carr
BREAK		3:00 pm-3:15 pm	
11	Example: 2.4 CSO modeling	3:15pm-4:00 pm	Carr
12	Comparing EPA SWMM / PCSWMM / XP-SWMM	4:00 pm-4:30 pm	Sample/Carr
13	Workshop wrap up, post evaluation	4:30 pm-5:00 pm	Sample