

Stormwater Planning & Design Using EPA SWMM 5.0

- When:** December 11 & 12, 2008 from 8:30 a.m. to 5:00 p.m.
(Please arrive at 8:00 to 8:15 a.m. on the first day to register and install computer files)
- Where:** City of Aurora Municipal Building,
15151 E. Alameda Parkway, Aurora.
- Cost:** \$595.00 (includes class notes and software)
- CEU's:** You will be eligible to receive 1.6 CEU's or 16 PDH's for this course

What Will You Learn?

- Overview of *Snyder*, *NRCS (SCS)*, *CUHP*, and *Kinematic Wave (KW)* methods for storm water modeling.
- Accuracy and consistency in stormwater modeling; how to do effective modeling without loss of accuracy.
- Selection of width parameter and Manning's *n* for *SWMM5*.
- Calibrating *SWMM5* and why this model needs to be calibrated.
- How to model urban conveyance/storage/diversion/pumps.
- Event-based watershed model and input and output analyses.
- Analyzing minimized directly connected impervious area (*MDCIA*) methodology using *SWMM5*.
- Continuous simulation model and frequency analysis.
- Water volume budget and monthly statistical analyses for long-term detention basin operation.
- Wetland sustainability and threshold analysis during drought season.
- Long-term overflow risk and runoff volume capture analyses for water quality basin operation
- Review of dynamic wave (*DW*) model option and its applications under backwater effects.
- Numerical tests and stability criteria for *DW* simulations.
- *KW* and *DW* watershed models using design storms and continuous simulation
- *KW* and *DW* storm sewer models using design storms and continuous simulation

Much of the above will be done by working on problems in a workshop format.

Prerequisites

Working knowledge of how to use *SWMM* and *CUHP* at a very basic level. This class is intended to introduce the student to intermediate and some advanced uses of *SWMM 5.0*.

Lead Instructor:

Lead: Dr. James C.Y Guo, PE, PhD; University of Colorado at Denver
Department of Civil Engineering

Assistant.: Ben Urbonas, PE, D.WRE; Urban Drainage & Flood Control District

Both have extensive experience in using earlier and current version of EPA *SWMM* and *CUHP* models in planning, system analysis and design projects.

Computers - bring your own. Some will be provided.

The size of the classroom will be limited to provide more direct contact with the instructors. To assure a space, fill out the enrollment form and send it to the address on the form as early as possible.

For more information, call 720-873-0172, or e-mail at enrollment@urbanwatersheds.org.