

Stormwater Mgt. Training

Registration deadline: one week prior to class date.
\$250/person/class. \$300/person/class after deadline

Name _____

Business Name _____

Mailing Address _____

City _____ County _____

State _____ Zip _____

Daytime Phone Number _____

E-mail _____

Yes / NO (Please circle one) Cornell Coop. Extension is granted permission to use and/or publish my photograph or image (including audio, film, digital image or any other media) for educational programs, websites or promotion of Extension programs.

Return form and fee to:
Cornell Cooperative Extension Orange County
18 Seward Ave., Ste. 300, Middletown, NY 10940-1919
Attn: Stormwater Mgt. Training

Please indicate number of people who will be attending

___ When it Rains ___ The New Blue II
___ All in a Row ___ Maintenance and the New MS4 Permit
___ Constructed Wetlands for Stormwater Management

Classes at \$ _____ per class = \$ _____
All 5 classes - save 10% if paid by February 14, 2017
_____ at \$1,125.00/person = \$ _____

NO REFUNDS - if you cannot attend, send someone in your place.

Make checks payable to: Cornell Coop. Extension OC
___ MasterCard ___ Visa ___ Disc. ___ Exp. Date (mo./yr) _____

Credit Card Number _____

Signature _____



2017 Stormwater Management Training Series

For those professionals involved in stormwater management, keeping up with the latest trends and standards can be a challenging task. New techniques, standards, and regulations are evolving as research, experience, policies and performance data change.

This series of stormwater training is designed to provide private and public sector engineers, architects, administrators, planners and consultants with up-to-date techniques for understanding, evaluating, designing and reviewing stormwater management plans and practices. The program emphasizes the standards in New York State, based on NYS-DEC's August 2010 *Stormwater Design Manual*, the NYS-DEC *Erosion and Sediment Control Manual*, FEMA flood standards, and related permits, and also examines national standards and future trends.

All classes are 8:30 AM – 4:30 PM at Cornell Cooperative Extension Orange County
18 Seward Ave., Suite 300, Middletown, NY 10940.

Online Registration for All Classes Available at cceeorangecounty.org

All training emphasize applications to real-world conditions, and involve hands-on, group and individual exercises. NOTE: Registration with payment is required. Deadline for registration is ONE WEEK prior to each course. Cost (which includes lunch and materials) is \$250 per person, per course, if registered by deadline; \$300 per person, per course after deadline. **Discount of 10% when registering with payment for all five training courses by February 14, 2017!** No refunds - if you cannot attend send someone in your place.

PDH's, LU's, and CEU's have been requested for each course. Code Enforcement Officer credits may be available for some courses. Questions? Contact Rose Baglia at rsb22@cornell.edu or 845-344-1234. To register contact Jill DeBlock at 845-344-1234 or jld863@cornell.edu.

FEBRUARY 21, 2017

When it Rains- Stormwater Hydrology

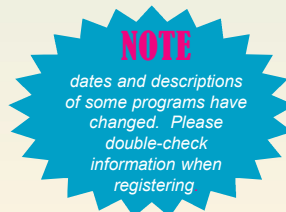
Predicting the volume and rate of runoff from rain events is an essential skill for stormwater engineers. This class will examine in detail all of the factors that influence runoff: precipitation, soils, ground cover, drainage area and time of concentration. Using TR-55 technology, and the latest soil and precipitation data, participants will compute runoff for various pre- and post-development conditions by hand, and then by using a computer model. Determining detention storage volumes and modeling of reservoirs and outlet structures will also be addressed.



MARCH 21, 2017

Maintenance and the New MS4 Permit

In this class, NYS DEC Personnel will Highlight proposed modifications to the recently released draft MS4 General Permit, as well as discuss the much needed draft maintenance chapter of the Stormwater Management Design Manual.



April 19, 2017

All in a Row-Stormwater Design for Linear Projects

Linear projects, such as highways and utilities, present unique challenges for managing stormwater due to their length and space restrictions for installing BMPs. This class, co-taught with Ellen Hahn-Kubek of NYS-DOT, will review the stormwater management techniques and practices that are most suitable for application in these conditions. Class exercises will include preparation of E&SC plans, hydrology analysis, and the design of post construction practices on various linear type projects, including streetscaping retrofits. Applicability of the construction general permit requirements for linear projects will also be reviewed.



MAY 25, 2017 **Constructed Wetlands for Stormwater Management**

Wetlands may be one of the most ecologically diverse eco-systems on earth. Not only do they support a wide variety of flora and fauna, they also function extremely well as natural stormwater management systems. It is no wonder that constructed wetlands are employed as stormwater management practices. However, creating a functional and viable wetland is not easy. This class, co-taught with Tim Toland, RLA, will review the critical elements and important design considerations of constructed wetlands, including the proper selection and installation of plant materials. Class exercises will include locating, sizing, and developing stormwater wetland planting plans for specific project sites.

JUNE 21, 2017

The New Blue II- Stormwater E&SC and the New Design Manual

Back by popular demand, Don Lake returns to share in more detail the familiar and new E&SC practices for Runoff Management, Soil Stabilization, and Sediment Control that are defined in the 2016 edition of the Blue Book that he has authored. Class exercises will include site assessment and planning for various types of development sites, as well as the development of E&SC plans and construction sequences. A virtual site construction inspection will also be a part of the class, as will design examples for some of the more complex practices.

These training are offered through New York Regional Stormwater Training Centers

The New York Regional Stormwater Training Centers are a Statewide Partnership between Cornell Cooperative Extension Orange and Saratoga Counties, the Central New York Regional Planning & Development Board, and Monroe County SWCD. Our goal is to provide the best technical training to all stormwater professionals working in New York State.

"Phase II" is part of the U.S. Federal Clean Water Act that regulates small municipalities and all construction sites of one acre or more through a national permit system to manage stormwater runoff from urbanized areas.

The Regional Training Centers are dedicated to providing stormwater professionals working in New York with the best possible information, education, and training to help better manage stormwater runoff and keep all of our waters clean.

Other Regional Training Center information:

Saratoga County Intermunicipal Stormwater Management Program
www.saratogastormwater.org

Central New York Regional Planning & Development Stormwater Training Program
www.cnyrpd.org/stormwater

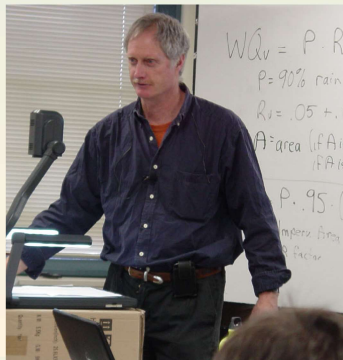
Monroe County Soil & Water Conservation District
www.monroecountyswcd.org

Principal Instructor:

John Dunkle, P.E., CPESC, CMS4S

John is a graduate of SUNY ESF and Syracuse University, and has been practicing civil engineering since 1981. Working with both private developers and municipalities on site planning and development projects, John has prepared and reviewed SWPPPs, provided guidance for MS4s, participated with NYS-DEC in the development of the current stormwater regulations, and conducted stormwater training for contractors, developers, engineers, and municipal officials.

He is also a Visiting Instructor at SUNY ESF, teaching a graduate level stormwater management class. John conducted stormwater trainings across New York State with Don Lake for over 6 years. He is a Certified Professional in Erosion & Sediment Control (CPESC) instructor. John is the Planning Board Chairman in the Town of Nelson, Madison County.



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2017 Stormwater Management Training Series

Regional Stormwater Training Series held in Orange County, NY



Cornell University
Cooperative Extension
Orange County

845-344-1234 cceorangecounty.org