

The New York State Stormwater Regional Training Centers

featuring John Dunkle PE, CPESC, CMS4  
Lead Instructor and Curriculum Coordinator

~Eastern New York~

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

The Regional Training Centers are dedicated to providing stormwater professionals with the best possible information, Education, and Training to help better manage storm water runoff and keep all of our waters clean.

For more information about the Eastern NY SW RTC:  
Call: (518) 885 8995 x224  
or visit us on the web anytime at:  
[www.saratogastormwater.org](http://www.saratogastormwater.org)

The Eastern NY SW RTC is located at:  
Saratoga Cornell Cooperative Extension  
50 West High Street  
Ballston Spa, NY 12020

Eastern NY SW RTC~ Saratoga County  
[www.saratogastormwater.org](http://www.saratogastormwater.org)

Central NY SW RTC~ Onondaga County  
<http://www.cnvrpdb.org/stormwater/?2018-Stormwater-Training-Series-185>

Southeastern NY SW RTC~ Orange County  
<http://cceorangecounty.org/ag-environment/stormwater-management-training>

Western NY SWRTC~ Monroe County  
[www.monroecountyswcd.org](http://www.monroecountyswcd.org)



Sign In for all courses begins at 8 AM; All courses are scheduled for 8:30 AM to 4:30 PM

**Make checks or purchase orders payable to: "Saratoga CCE"**

**Please Register Me for the Following:**  
(includes all course materials, refreshments, and lunch)

<b>SWPPP PREPARATION AND REVIEW</b> Wednesday January 23rd, 2019	—\$225
<b>WET POND DESIGN</b> Wednesday February 20th, 2019	—\$225
<b>FLOODPLAINS AND WATERSHED HYDRAULICS</b> Wednesday March 20th, 2019	—\$225
<b>STORMWATER AND THE MULTI-SECTOR PERMIT</b> Thursday April 18th, 2019	—\$225
<b>TOTAL REGISTRATION FEES</b>	<b>\$</b>
<b>\$100 Discount for Registering for all courses, One-time Fee: \$800.00 (just check the box)</b>	

**MAIL TO:**  
Eastern SW RTC  
ATTN: Blue Neils  
50 West High Street  
Ballston Spa, NY  
12020

**FAX TO:**  
518-885-9078  
with credit card  
information

adding " YourName"  
to the file-name and  
**EMAIL TO:**  
brn5@cornell.edu

OR

OR  
Save the registration

**Payment:**  Check  Voucher  Credit Card  At the Door

**Name:** \_\_\_\_\_

**Company or Organization:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**City:** \_\_\_\_\_

**State:** \_\_\_\_\_ **Zip:** \_\_\_\_\_

**Telephone:** (\_\_\_\_) \_\_\_\_\_

**Fax:** (\_\_\_\_) \_\_\_\_\_

**Email:** \_\_\_\_\_

**Credit Card Registration ~ Sorry we can't accept AMEX or Discover**  
 VISA  Master Card

**Card#:** \_\_\_\_\_ **Expires:** \_\_\_\_\_

**Name on Card:** \_\_\_\_\_

**PLEASE NOTE** that it is the policy of the Eastern NY SW RTC not to refund "no show" registrants. Cancellations must be made at least 24 hours prior to the course date and will be charged a \$25 fee. Substitutions and transfers are acceptable up to the day of any course.

**If paying by credit card we strongly encourage you to protect your information.**

Double-check the email recipient-list and/or fax number before sending us your registration. Payment information is not kept on file.



**John Dunkle, PE, CPESC, CMS4S~ Lead Instructor**

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 SWPPP's, provided guidance for MS4's, participated with DEC in the development of the current Stormwater regulations, and conducted stormwater trainings for contractors, developers, engineers, and municipal officials.

He is also a Visiting Instructor at SUNY ESF, teaching a graduate level Stormwater Management class, and has been conducting stormwater trainings across NY State with Don Lake for over 6 years. He is a certified CPESC instructor.

John is the Planning Board Chairman in the Town of Nelson, Madison County.

**1. SWPPP Preparation and Review; 01-23-2019 ~ 7.0 PDH** available for this course.

Preparing, reviewing and implementing a Stormwater Pollution Prevention Plan (SWPPP) is essential to construction stormwater planning, compliance with Minimum Control Measures 4, 5, and 6 of the MS4 General Stormwater Permit, and with the Multi-Sector General Permit (MSGP). This class will review all of the required elements of partial and full SWPPP's, including site planning, E & SC, hydrology, good housekeeping, post construction management and maintenance. Preparation and review checklists and class examples of residential, commercial, MS4, and MSGP SWPPP's will be provided. Representatives from NYSDEC Central Office will participate in the class, providing an opportunity for participants to interact directly with the regulatory agency on issues relating to the Construction Permit and the NYS Stormwater Management Design Manual.

**2. Wet Pond Design; 02-20-2019 ~ 7.0 PDH** available for this course.

Stormwater Ponds have proven to be one of the most popular stormwater management practices employed by designers with good reason: ponds are one of the few practices that provide both water quality and quantity treatment. This class will examine the various components of a wet pond system, and review the numerous design elements needed to for the proper operation of ponds. Working with a specific pond site, we will begin by establishing the tributary drainage areas and associated hydrology. We will then determine the various pond storage volumes and complete the design of an outlet structure to manage the flows. The pond design will follow the uniform sizing criteria in the NYS Stormwater Management Design Manual. Hydrology will be computed using TR-55 methods. Maintenance requirements for ponds will also be discussed.

**3. Floodplains and Watershed Hydraulics; 03-20-2019 ~ 7.0 PDH** available for this course

As climate change continues to influence flooding conditions, it is important to be able to adequately model and predict flood plains and floodways. The HEC-RAS computer program is a powerful tool developed by the USACE to model river, stream and reservoir hydraulics, and is used by FEMA to create the community Flood Insurance Rate Maps (FIRM's). This workshop will provide a hands-on introduction to using the HEC-RAS modeling techniques to generate hydraulic profiles and to analyze and map flood plains and floodways using actual site conditions.

Specific discussion and exercise topics will include:

- Floodplain and hydraulics terminology
- Intro to the HEC-RAS model
- HEC-RAS input and output data
- Generation of a hydraulic profile of a simple stream
- Modeling bridges and culverts
- Establishing floodplains and floodways

**4. Stormwater and the Multi-Sector Permit; 04-18-2019 ~ 7.0 PDH** available for this course

NYSDEC's Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activities has recently been updated. The first time offering of this course will cover all the basic requirements and regulations of the current MSGP, and highlight the where changes were made to the previous version of the permit. The class, which will be co-presented with NYSDEC and Andy Sansone of Monroe County, will review the specific MSGP sectors, SWPPP preparation, and BMP's. The preparation of the necessary forms to obtain and support MSGP permit coverage (NOI, ACR, and others) will be presented, and the relationship between the MSGP and the MS4 permit will be explained. Specific sector, site, and BMP design examples and problems will be provided.