



Western New York STORMWATER Management Training Series Fall 2011—Spring 2012



Stormwater Coalition of
Monroe County

Classes are held from 8:30 a.m. – 4:30 p.m.
Registration is from 8:00 a.m. – 8:30 a.m.

Monroe County Soil & Water
Conservation District

Soils and Hydrology for Green Infrastructure – A working knowledge of soils and hydrology are essential skills for anyone involved in the planning, design, or review of Green infrastructure practices. In the first section of this workshop we will review the many classifications and characteristics of natural and man-altered soils that influence runoff, infiltration, storage, filtration, and vegetative growth. Techniques for soil restoration will also be explored. Secondly, the hydrology of Green infrastructure practices will be examined, especially impervious disconnection, and its effect on Runoff Curve Number (RCN) and Time of Concentration (TC). Techniques for computing and evaluating small and large storm hydrology incorporating runoff reduction will be applied to various development scenarios. Topics include soil characteristics/classification, using the soil survey, compaction impacts, soil restoration techniques, infiltration testing, soil amendments for GI practices, basics of TR55 Hydrology, impervious disconnection, hydrology modeling for source control/GI practices, and small storm hydrology.

Applied Green Infrastructure– Integrating Green Infrastructure techniques for stormwater management has changed the paradigm from an “end-of pipe” treatment approach, to one encompassing source control. Using the techniques and standards outlined in the 2010 NYDEC Stormwater Design Manual, this workshop will explore in detail the process of selecting and designing effective GI practices, and review the method for computing the associated runoff reduction. Designed as an in-depth follow-up to last’s years introduction to GI, this training will emphasize applications to numerous development conditions, and discuss some of the nuances of these stormwater management techniques. Topics include an overview of the GI approach, GI practices, practice selection, computing runoff reduction, design principles for GI practices, maintenance requirements for GI practices, and roundtable with private sector/municipal/regulatory perspectives on implementing GI.

Stormwater Ponds and Wetlands– Stormwater ponds, and to a lesser extent stormwater wetlands, are the most widely used and accepted stormwater management practices. Properly designed and managed ponds and wetlands mitigate peak runoff and effectively remove pollutants from stormwater, while creating an aesthetically attractive and environmentally diverse feature for development sites. This course will cover all attributes of pond and wetland design, hydrology, and hydraulics, plant selection and maintenance requirements. Topics include characteristics, effectiveness and limitations, design elements, hydrology/hydraulics, innovations, vegetation/planning, and maintenance.

Stormwater Management for Linear Projects–Linear development projects such as highways and pipelines present unique challenges for stormwater management. This class will provide the techniques and practices most applicable for achieving erosion and sediment control, peak flow mitigation pollutant removal and runoff reduction on these confined site conditions. Topics include linear projects and the stormwater permit, erosion and sediment control specifics for linear projects, applicable SM practices, NYDOT design criteria for stormwater management, hydrology/hydraulics, achieving runoff reduction, retrofits, and maintenance.

SWPPP Preparation and Review – The Stormwater Pollution Prevention Plan (SWPPP), is the cornerstone of any development project’s strategy for managing stormwater, and demonstrating compliance with the most current SPDES General Permit Permit. The SWPPP document and the related NOI are the essential communication tool between designers and regulators. The objective of this class is to give those charged with preparing and reviewing SWPPP’s effective techniques for documenting and checking the essential elements of a Plan, which includes erosion and sediment control, post construction management, runoff reduction and maintenance. Guidance for the development and review of design alternatives that may deviate from the standards will also be provided. Topics include the NY Stormwater permits, critical elements for stormwater management for SWPPP’s, SWPPP outlines/checklists, preparation/review challenges, preparation of the NOI, and roundtable with private sector/municipal/regulatory perspectives on the SWPPP process.