Workshop on Urban Ecosystem Recovery in Northern Virginia – Sustainable Site Development and Urban Stream Restoration

Offered by Wetland Studies and Solutions, Inc., Gainesville, VA

Summary:
This workshop will provide attendees with practical knowledge of urban ecosystem planning and restoration that begins with site design and closes with riparian recovery.

Workshop Background:
Traditional site design moves water away from the site as quickly as possible, which lowers the groundwater table, impacts on- and off-site streams, and reduces viable urban habitat. Sustainable site design incorporates groundwater recharge where possible, reduces downstream degradation, and provides food and shelter for a wide variety of urban wildlife. In previously-developed areas, however, no amount of site design will restore the degraded streams to health. Stream restoration, therefore, is also an important component of restoring urban ecosystem quality. The Northern Virginia Stream Restoration Bank (NVSRB) is one of the largest stream restoration projects on the East Coast. NVSRB is currently in the middle of repairing 14 miles of degraded streams in Reston, Virginia, using a holistic, science-based approach.

Workshop Objective:
This workshop will acquaint participants with stormwater management design that also maintains wildlife habitat and ecological function. The workshop will discuss bioretention, green roofs, swales, and rainwater harvesting, considering siting, landscaping, maintenance, public education, and economics. If there is time, the workshop will also introduce local regulations helping to encourage sustainable site design throughout the region.

After the break, the workshop will discuss the science of natural channel design in an urban setting; the incorporation of historic and current rainfall and flow data, stable reference reach data, and state-of-the-art computer programming; and the challenges faced when performing extensive native habitat restoration in an urban area.

Intended Audience:
This session will be most informative to practitioners of urban development and restoration; regulatory officials and those who review site plans; and those with an interest in stepping beyond theory to the practical application of ecosystem restoration.

Session Organizer:
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ADVANCE REGISTRATION REQUIRED:
The number of participants will be limited to 60. Participants will be enrolled in the order in which their registration is received, but no later than June 1st. Note: The standard workshop fee will be required for participants to support a continental breakfast, break, audio visual equipment and room set up by NCER conference organizers.