FY04 VPR Discretionary Research and Outreach Scholarship Support
Final Report

Project Title: Stormwater Technology Demonstrations and Seminars

Principal Investigator(s):
Dr. Thomas Ballestero, Department of Civil Engineering, University of New Hampshire
Dr. Robert Roseen, Department of Civil Engineering, University of New Hampshire

Accomplishments

The Center for Stormwater Technology Evaluation and Verification (CSTEV) hosted a series of workshops entitled STORMWATER BMP TECHNOLOGY DEMONSTRATIONS. The workshops were targeted for persons charged with developing and implementing stormwater management plans (as now required by federal law), including: elected officials/town administrators, municipal engineers, consultants, land planners, state regulators, and natural resource managers. The workshop covered the performance and suitability associated with different stormwater unit processes. The workshop format was a tour of the UNH field facility at the West End Parking Lot followed by a working lunch. The workshops were run at no charge to the attendees as a result of the VPR Discretionary Research and Outreach Scholarship Support funding.

The grant funding enabled: six, no-cost workshops; the purchase of workshop materials; and construction, printing, laminating, and installation of educational signs for each of the 13 treatment devices at the UNH West End parking lot. Workshop participants received a certificate of attendance and an evaluation form meant for us to improve our future efforts.

Attendance

The workshops were well attended by a total of 112 participants. Participants included officials/town administrators, municipal and consulting engineers, land planners, natural resource managers from UNH Facilities, UNH Environmental Health and Safety, UNH Technology Transfer Center, representatives of Departments of Public Works, NH DOT, NH DES, MA DEP, EPA - New England, and Massachusetts Coastal Zone Management. The response was so positive that the initial proposal of three workshops was expanded to a total of six workshops, with more planned for the spring of 2005. The last three workshops had waiting lists. The additional workshops included a Regulator Only workshop offered to NH DES to provide an atmosphere conducive to open dialogue with just state regulators. Another workshop for the Seacoast Stormwater Coalition was also conducted. There are requests for three additional workshops in the coming spring.

Workshop Overview

The workshop content included an informal two-hour detailed site tour during which time the stormwater devices were introduced. The site tour was followed by an hour and a half working lunch where the participants were: given a historical perspective on stormwater issues, introduced
to current regulations and demands associated with *Stormwater Management Plans*, and exposed
to device and contaminant specific performance data.

The workshop format was designed to enable participants to get a combination of field-based
experiential learning followed by an open-format, content-rich presentation focused on water
quality. The many strengths of the site tour for the participants were for them to witness 15
different types of stormwater management strategies, all normalized and sized to treat the same
stormwater volume. This normalization enables a side-by-side comparison of four factors for all
devices: 1) system performance (water quality and storm flow), 2) space requirements (square
footage), 3) cost (installation and materials), and 4) maintenance and operation issues. These four
factors are the criteria by which a stormwater professional will base their selection of a
stormwater management strategy. The working lunch was a presentation on stormwater
management issues, concerns for cold climate performance, and discussions of the wide ranging
performance data. The water quality data included a range of contaminants (sediment, nutrients,
metals, hydrocarbons, and/or microorganisms).

The stormwater facility is open to the public for both guided and self-guided tours. We welcome
the University community and VPR staff to tour the facility. Workshops will resume in the spring
of 2005.