

<p><b>Center for Stormwater Technology Evaluation &amp; Verification</b></p>				
	<p>The Center for Stormwater Technology Evaluation and Verification (CSTEV) is an independent field facility that provides a controlled setting for testing stormwater management devices and technologies. CSTEV is funded by the Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET). At the field research facility, each system's performance can be directly evaluated and compared to other systems. The concentration of BMPs in a single location also makes the facility ideal for providing technology demonstrations and workshops for those developing and implementing stormwater management plans.</p> <p>The impetus for the CSTEV is the recent Clean Water Act Phase II rulings. Under these new rules, EPA requires local governments to develop stormwater programs that address six main elements. In response to this charge, the Phase I and II entities have developed or are now developing plans and actions to deal with stormwater. Many of these plans and actions involve some structural measure to remedy the environmental impact of stormwater. Numerous institutions and vendors have developed designs to achieve desirable water quality and storm volume reduction. Although many of these devices are invented or developed based in sound theory, few undergo the rigors of independent scientific testing. Results of a three-year study of ten seacoast New Hampshire sites showed that stormwater technologies failed for at least one water quality parameter two-thirds of the time.</p>			
<p><b>Mission</b></p>	<p>CSTEV is dedicated to the protection of water resources through effective stormwater management. The CSTEV mission is (i) the cooperative testing of stormwater control measures accomplished by partnering with governmental and private entities, (ii) the dissemination of test results to those entities required to meet stricter stormwater discharge requirements, and (iii) demonstration of stormwater technologies shown to be effective through CSTEV testing.</p>			
<p><b>Partnering with Government &amp; Industry</b></p>	<p>The CSTEV program involves university researchers, municipalities, regulators, and device manufacturers. Industry participation has already occurred in selection of manufactured BMPs, and will be further addressed with a Technical Advisory Board (TAB). The additional participation of state/federal/municipal agencies and academia with industry will be formalized through convening of a five-member TAB. to provide advice and expertise. Manufacturers have donated several devices to be tested in the support towards meeting CSTEV objectives. Regulatory agency personnel and entities that must comply with stormwater regulations will be given opportunities to comment on the facility and the methods of testing. The beneficiaries of this research will be the vendors and manufacturers, regulatory agencies, and the thousands of entities required to come into compliance with the Phase I and II rules of the Clean Water Act.</p>			
<p><b>Field Facility &amp; Stormwater Control Technologies</b></p>	<p>The core CSTEV field facility is located at two sites adjoining the West Edge parking lot on the UNH Durham campus. The types of stormwater controls at the site include: subsurface treatment wetlands, infiltration devices, filtration devices, detention ponds, manhole retrofit devices, a tree box, and a porous asphalt pavement parking lot. The contributing drainage area, approximately nine acres and almost completely impervious, generates stormwater flows typical of many developed urban and suburban subcatchments. A previous three-year study on the site provided substantial data on the existing conditions of runoff quality and quantity. Additional planning is underway for field research projects of non-structural BMPs, such as street vacuuming, that the facility is able to evaluate.</p>			
<p><b>Project Timeline</b></p>	<p>Facility planning and development were completed September 2003. Following development of the monitoring strategy and protocols, and installation of monitoring equipment, full site operation began August 2004.</p> <p>Several strategies will be employed for technology dissemination including onsite technology demonstrations and short courses, a CSTEV website, publication in refereed journals and through CICEET, and presentations at regional and national forums.</p>			
<p><b>Funding Source</b></p>	<p>Funding for the CSTEV program has been provided by the <a href="#">Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET)</a> and the <a href="#">National Oceanic and Atmospheric Administration (NOAA)</a>. CSTEV is part of the Environmental Research Group (ERG) at the University of New Hampshire (UNH) in Durham, New Hampshire.</p>			
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