











The UNH Stormwater Center studies stormwater-related water quality and quantity issues. One unique feature is the field facility to evaluate and verify the performance of stormwater management devices and technologies. Fifteen different management systems are currently undergoing side-by-side comparison testing under strictly controlled conditions.



This on-campus evaluation facility enables the Center to offer technology demonstrations and workshops, and also specialized training opportunities. In addition to the primary field facility, the Center has other sites available to study approaches that need more space or present unique conditions.





Under new Clean Water Act Phase II rules, the Environmental Protection Agency requires local governments to develop stormwater programs. In response, many organizations have or are now developing plans and actions to achieve desirable water quality and storm volume reduction. Although many of the stormwater management devices are based on sound theory, there is no requirement that they undergo independent, third-party scientific testing. Perhaps as a result, a three-year study of nine seacoast sites in New Hampshire showed that traditional stormwater technologies failed in reducing at least one water quality parameter two-thirds of the time.

Mission

The UNH Stormwater Center is *dedicated to the protection of water resources through effective stormwater management.* (i) the function of the center is 2 parts: (i) Research and development of stormwater treatment systems, (ii) To provide resources to stormwater communities currently involved in design and implementation of Phase II requirements.

Outreach, Education & Partnering

Outreach efforts include routine Stormwater Technology Demonstration Workshops, hosting annual meeting for professional associations, government agencies, and others.

Educational activities include publication of an Annual Data Report on stormwater system performance, presentations at regional and national venues, website resources, Innovative Stormwater Management Database for the region, and publication in refereed journals.

The Stormwater Center partnering involves a range of participants. Our Technical Advisory Board provides advice and expertise, and includes academics, state and federal regulators, local government officials, and industry representatives.

Field Facility & Stormwater Control Technologies

The Center is comprised of two sites on the UNH Durham campus: the *Primary Field Facility* and a *Porous Asphalt Parking Lot Testing Facility*. In summer of 2007 a third facility will be built that is a *Pervious Concrete Parking Lot*.

Stormwater controls currently being tested include: subsurface treatment wetlands, infiltration devices, filtration devices, detention ponds, manufactured devices, a tree box, inlet inserts, and a porous asphalt pavement parking lot. The contributing drainage area is almost completely impervious and generates stormwater flows typical of many developed urban and suburban subcatchments.

Project Timeline

Full site operation began in August 2004. Two full years of monitoring were completed in Fall 2006. Planning is underway for construction of a *Pervious Concrete Test Facility* for the summer of 2007 in collaboration industry associations..

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