UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

University of North Carolina Stormwater Master Plan

Chapel Hill, North Carolina

UNC

UNC

By pursuing advanced and innovative stormwater management strategies, the University is able to address NPDES permitting while reducing nutrient loads to a regionally important lake.

Biohabitats is providing a range of stormwater services to help the University of North Carolina at Chapel Hill meet and exceed its National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater permit requirements.

Biohabitats conducted desktop and field investigations to thoroughly review and analyze the campus' existing stormwater infrastructure, with a goal of identifying retrofit opportunities that will improve water quality. Biohabitats also created a nutrient accounting system to track the benefits of the implementation and to understand the requirements that could be required by the total maximum daily load (TMDL) limits. From an initial inventory of over 40 candidate sites, Biohabitats developed about 25 retrofit concepts that included narrative descriptions, a quantification of the reduction in pollutant load, considerations of engineering and construction feasibility, and opinions of probable cost at the planning level.

UNC is now preparing to increase their implementation of restoration strategies across campus to address impacted areas and meet the new and impending regulatory requirements that protect the quality of a downstream source of water supply. Under the second phase of work, Biohabitats is supporting this effort by advancing a smaller subset of priority retrofits to the 30% design phase.

Through the development of the stormwater master plan, the University was able to demonstrate its leadership and commitment towards implementing sustainable stormwater management solutions that address a range of impacts associated with high density, intensively used spaces. The implemented retrofits will serve as regional model in meeting NPDES requirements.

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