



Dreams of Wilmington Stormwater Improvement Project

FUNDING SOURCE & AMOUNT

EPA 319 Grant
\$332,178 funded, including match
\$148,066 in-kind match from City
of Wilmington

TIMEFRAME

Awarded 2014
June 2014 - December 2016

GRANT ADMINISTRATOR

NC State University (WRRRI & BAE)

IN-KIND PARTNERS

City of Wilmington, NC
DREAMS
NC Coastal Federation
NC Cooperative Extension
New Hanover County
New Hanover High School

SUMMARY / DESCRIPTION

The Water Resources Research Institute (WRRRI) and Department of Biological and Agricultural Engineering (BAE), both at NC State University, coordinated a partnership with DREAMS and the City of Wilmington to reduce stormwater running off the DREAMS parking lot into Burnt Mill Creek. The new parking lot includes permeable pavement and bioretention (also called a rain garden) for reducing stormwater runoff and associated pollution.

A US Environmental Protection Agency grant provided funding that was matched with \$133,000 of cost-sharing funds from the City of Wilmington, NC State University, and DREAMS. Educational partners included the NC Coastal Federation, NC Cooperative Extension, and New Hanover County. The partnership engaged the youth at DREAMS during the design phase and throughout the process to educate them about watersheds, stormwater pollution, and best management practices (BMPs).

Students participated in hands-on educational activities and multidisciplinary art projects inspired by the stormwater retrofit project that encouraged them to build a stronger connection with the environment in which they live. In March 2015, middle and high school students from DREAMS participated in a field trip "From your creek to the coast" to see how stormwater impacts their community, and downstream wildlife. Stops on the trip included planting flowers in Gregory Elementary School's rain garden and seining (dragging a net in the water) for fish at the coast with NC Coastal Federation.

In 2017, the DREAMS Project received an "Outstanding Stewardship" award from the Lower Cape Fear Stewardship Development Coalition.

GRANT GOAL(S)

- Coordinate a partnership project to reduce stormwater running off the DREAMS site into Burnt Mill Creek by retrofitting the existing parking lot with permeable pavement and a large bioretention area.
- Foster a strong connection between students and their immediate environment. To increase understanding of stormwater and associated environmental issues and provide opportunities for students to create an artistic body of work that reflects their deepened interest in and concern for our natural world.
- Implement high priority parking lot stormwater retrofits at New Hanover High School.



Before



After



Before



After





