



NERRS Science Collaborative Grant – Reducing Coastal Stormwater Pollution

FUNDING SOURCE & AMOUNT

National Estuarine Research Reserve (NERRS) Grant - \$349,518

TIMEFRAME

2013

GRANT ADMINISTRATOR

North Carolina Coastal Federation

IN-KIND PARTNERS

NC National Estuarine Research Reserve

NCDENR

City of Wilmington, NC

UNCW

Withers & Ravenal

SUMMARY / DESCRIPTION

A collaborative team consisting of the North Carolina National Estuarine Research Reserve (NCNERR), NC Dept of Environment and Natural Resources, the North Carolina Coastal Federation, Town of Wrightsville Beach, and the University of North Carolina Wilmington (UNCW) and Withers and Ravenal received a grant to reduce polluted stormwater runoff that enters the state's Masonboro Sound. Masonboro Sound has experienced an increase in stormwater runoff since it was designated as Outstanding Resource Waters in 1989, a trend that has significantly degraded its water quality and the health of its aquatic habitats.

The team worked to improve and demonstrate effective stormwater management techniques for use by a range stakeholders including developers, realtors, homeowners, state agency staff, and local government.

GRANT GOAL(S)

- Create and implement a plan for effective team collaboration among local, state, and federal regulators, as well as stakeholders from academia, development professionals, and homeowners.
- Install stormwater reduction efforts (BMPs) in Wrightsville Beach and a targeted neighborhood in Wilmington (Raintree Subdivision).
- Work with residents in a Wilmington neighborhood to help homeowners disconnect impervious areas.
- Enable project partners to field test several BMPs to ensure they are effective in reducing the volume of polluted stormwater reaching the Masonboro Sound estuary.
- Share project results with the public nerrs.noaa.gov/ScienceCollaborative.aspx

SPECIFIC PROJECT DELIVERABLES

- Wrightsville Beach retrofitted parking lots.
- Installed pervious pavement sections on residential driveways and in the road right-of-way in the Raintree Neighborhood.
- The city turned a stormwater ditch in the Raintree Neighborhood into a wetland to reduce flooding and runoff in the Raintree neighborhood in Wilmington. The wetland treats approximately 2,628 cubic feet of stormwater runoff that makes it way into Hewletts Creek, and eventually Masonboro Sound, annually.