

# External Education Program

Help Reduce Water Pollution Along NC Highways

# DOT's NPDES Permit at Part ||.F.2



DOT Partnerships

Management Measure d in the NPDES permit requires DOT to develop educational partnerships with

other agencies to promote and distribute public education materials. Here's a sampling of DOT's partners:

## Program Objectives

Objectives established by DOT's Permit at Part II.F.2

- Develop and implement a program to educate the public about the importance of stormwater quality, including chemical application, illicit connections and illegal dumping, etc.
- Develop diverse educational materials to engage and educate the public from different social, economic and age groups.
- Public involvement in DOT stormwater quality programs.

### Public Education Website

In March 2005 DOT launched its public education website. Developed to meet the NPDES requirement at Management Measure c, the website informs the public about DOT's role in managing and reducing stormwater pollutants from roadways and industrial facilities. The website presents the permit and a description of all 12 programs covered by the permit. Specific requirements of the permit are listed at the website, which also describes why DOT is required to have a stormwater permit and lists DOT's contacts.

The What's New section is updated regularly to showcase new projects in the Highway Stormwater Program. Perhaps the most useful section for the general public is Frequently Asked Questions. This section defines stormwater and explains how stormwater affects the public and the environment.

The section devoted to kids, which meets partial compliance for Management Measure b, features stormwater flash cards, photographs, and links to additional stormwater activities.

The How Do I Get Involved? section has links to information about how the traveling public can dispose of their waste and sanitary wastewater at dumping stations (Management Measure b).

The Stormwater Awareness section has a link to the popular brochure entitled "Pollution: What's Our Connection?" (see cover this page) that encourages pollution prevention awareness (Management Measure b). Developed jointly with the N.C. Department of Environment and Natural Resources (DENR), the brochure is widely distributed.

For more information, visit the website: www.ncdot.org/programs/environment/stormwater/

- Cape Fear Council of Governments
- City of Greensboro
- Institute for Transportation Research and Education (ITRE)
- NC Coastal Federation
- NC Department of Corrections
- NC Department of Environment and Natural Resources (DENR)
- North Carolina Keep America
  Beautiful
- North Carolina State University
- North Carolina Zoo
- Town of Kure Beach
- Town of Nags Head





Pets of all sizes frequent the Pet Waste Station at Warsaw Rest Area

#### Pet Waste Stations

DOT has installed Pet Waste Stations at rest areas along many of North Carolina's highways. The stations educate pet owners on the impacts of pet waste in stormwater, such as a potential source of disease and parasites to receiving streams, especially in shellfish and swimming areas. The stations provide bags to encourage pet owners to pick up and properly dispose of their pet's waste, thereby keeping pet waste out of the stormwater.

In addition to educating the public, the pet waste stations are retrofit best management practices (BMPs) which address specific pollutants of concern as required in the Retrofit Program under Part II.B.2 of DOT's permit. A total of 130 Pet Waste Stations have been installed at 60 Rest Areas and Welcome Centers throughout North Carolina. The project is now complete.



Educational signage at Warsaw Rest Area on I-40

### Stormwater Flash

At the Warsaw Rest Area off I-40 in Duplin County, DOT is using a structural BMP retrofit as another public education opportunity. The Stormwater Flash, an educational display situated near a bioretention basin, describes what a bioretention basin is, how it is constructed, and how it works. Photos of plants commonly used in a bioretention basin help the public identify plants growing in the Warsaw basin. Bioretention basins are constructed to treat stormwater that flows off paved areas. The runoff is filtered by the soil media, where various physical, chemical, and biological treatment occurs. Water is detained and released slowly into the soil. As a bonus, bioretention basins are attractive and provide habitat for wildlife. Similar public education displays are also installed at the Dune Infiltration System at Kure Beach and the bioretention basin at the North Carolina Zoo.

#### Teachers Benefit from Stormwater Material

Stormwater Flash Cards were such a hit at the 2004 NC State Fair that teachers have been clamoring for them since then. Originally developed by DOT and printed for distribution at the State Fair, the flash cards have been reprinted and are now sent in response to requests from teachers throughout North Carolina. The cards feature questions and answers to teach schoolchildren about stormwater.

The popular brochure entitled "Pollution...What's Our Connection?" explains how people can improve stormwater quality by making educated choices in their daily lives. Developed through a partnership between DENR's Office of Environmental Education and DOT, the brochure is also available to teachers. Teachers can also use the resources available in the Stormwater Kids section at DOT's public education website (see article on page 1).

# For more information about DOT's Education Program, CONTACT

Bob Holman, PhD ROADSIDE ENMRONMENTAL UNIT 919 861-3779 or Matt Lauffer, PE HYDRAULICS UNIT 919 250-4100

## Adopt-A-Highway

Adopt-A-Highway volunteers are encouraged to report illicit discharges and illegal dumping they encounter as they pick up highway litter (Management Measure e). Reporting information is included in the brochure "Help Reduce Water Pollution Along NC Highways" distributed to all volunteers (see cover on page 1).