



Clean Water Management Trust Fund Grant (CWMTF) October 2008 - October 2009

Burnt Mill Creek is listed as impaired for aquatic life and secondary recreation on the state's 303(d) list from impacts of urban stormwater runoff, including toxic impacts from polycyclic aromatic hydrocarbons (PAHs).

Polycyclic aromatic hydrocarbons (PAHs) are a group of over 100 different chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco or charbroiled meat. Some PAHs are manufactured. PAHs are found in coal tar, crude oil, parking lot sealcoats, fireplace smoke, wildfires, and roofing tar, but a few are used in medicines or to make dyes, plastics, and pesticides.*

A group of stakeholders has been working together to plan and implement watershed improvements since 2001 and is seeking to act on rapidly gaining momentum in the Burnt Mill Creek community from recent stormwater management improvements.

The following project partners are collaborating on the CWMTF grant project:

- Watershed Education for Communities and Officials (WECO)
- NCSU Dept. Agricultural and Resource Economics
- NCSU Dept. Biological and Agricultural Engineering (BAE)
- NC State University
- City of Wilmington Stormwater Services
- Cape Fear River Watch, Inc.

The project team received \$58,610 from the Clean Water Management Trust Fund, which is supplemented by cost sharing from project partners, for a total project cost of \$76,803. The following activities are components of this grant which aim to reduce pollution loads in Burnt Mill Creek:

- 1) Target landowners through outreach and involvement to identify and design BMP retro-fits of large parking lots and/or private roads where pollutant loading impacts are significant
- 2) Conduct a study of local parking lot management practices to estimate the impact of coal-tar based parking lot sealant on PAH loading. Coal-tar based sealants are one of two types of commonly used sealants (sealcoats) and are a potentially important contributor to watershed toxicity.
- 3) If the results of the parking lot sealant study find that there is a negative impact to stream water quality, the project will develop a plan to address the impacts of using coal-tar based parking lot sealants, including creating and distributing educational materials.

References:

*US Department of Health & Human Services
Agency for Toxic Substances and Disease Registry ToxFAQs