

Planning for Reducing Stormwater Runoff & Toxicity in the Burnt Mill Creek Watershed

FUNDING SOURCE & AMOUNT

Clean Water Management Trust Fund Grant (CWMTF)

\$58,610 funded, with match

\$3,114 in-kind match from City of Wilmington

TIMEFRAME

Awarded 2008

October 2008 – October 2009

1 year grant

GRANT ADMINISTRATOR

Watershed Education for Communities & Officials (WECO)

IN-KIND PARTNERS

City of Wilmington, NC

NCSU Dept. Biological and Agricultural Engineering (BAE)

NCSU Dept. Agricultural and Resource Economics

SUMMARY / DESCRIPTION

In 2008, Burnt Mill Creek was 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.

GRANT GOAL(S)

- 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
- 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.
- 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.