



WATERSHED EDUCATION FOR COMMUNITIES AND OFFICIALS

BURNT MILL & SMITH CREEKS
WATERSHED GROUP

SUMMER 2006 NEWSLETTER

SUMMER UPDATE! NEW NAME!

You may notice a new name on our newsletter— we realized that while this group started off as the *New Hanover Local Watershed Planning Group* back in 2001, we’ve morphed more into focusing on Burnt Mill Creek and Smith Creek. Then with the recent expansion of the County’s *Tidal Creeks Advisory Board* into the *Watershed Management Advisory Board*, we thought it would be prudent to reflect our focus on Burnt Mill Creek and Smith Creek. We’ll let you have the last word though, at the August meeting!
-Christy

Notes from our last meeting –now:

The Group met last on March 23. Participants updated each other on watershed projects and news. Some updates since then are included.

- NCEEP: Kristin Miguez reported that two stormwater BMPs will be installed in conjunction with the stream restoration project. A wetland will be constructed between Burnt Mill Creek and the Mineral Springs Branch, a bioretention with treat runoff from parking lots at Forest Hills Apartments. They will also install dog waste receptacles if the Apartments agree. Bids went out for construction in spring, with construction planned for summer.
- Cape Fear Riverwatch has undergone some organizational changes. Joseph Abbate has been hired as Environmental Specialist. They are in the midst of a large membership campaign, culminating with a

drawing at October’s Riverfest for a Civic Hybrid. A new CFRW storefront opened this spring on the waterfront.

- New Hanover County SWCD has a new Backyard Conservation Program- Hewlett’s Creek was the pilot for the state. Funding has come from the NC Clean Water Management Trust Fund.
- Smith Creek watershed: Dave Mayes, Kristin Miguez and Greg Jennings (NCSU) walked stream segments to look for restoration opportunities. At Trask School a 3,000 square foot bioretention area will treat a parking lot. The County and NCSU were able to leverage 3 projects from the EPA Cooperative grant, instead of the 2 proposed. *Note— a participant suggested speaking to the Schools Superintendent about doing similar projects system-wide.*

BURNT MILL CREEK BMP UPDATE

Jason Wright has been working hard on BMP efforts around the watershed. Questions were from participants who heard an update at the March meeting. This summary includes updates that have happened since then as well. Jason will share pictures at the August meeting.

Stonethrow Townhomes: This wetland/ bioretention project was constructed in June, with help from many volunteers, including

Jennifer Butler, Ellen Colodji, Joe Abbate, and residents.

YMCA: Construction is finished on a pervious pavement lot that replaced a gravel lot. Runoff from half of the building will drain onto the pervious pavement, then into a bioretention area. The contractor oversaw the construction himself, and news crews covered the construction.

NEXT MEETING :

Tuesday, August 29

6:15-8:30

At the Cape Fear River Watch building on Surry Street

Agenda:

- Virtual BMP tour
- Planning community outreach for fall

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BURNT MILL CREEK MONITORING RESULTS 2005

In March 2006, project partner Mike Mallin, UNC-Wilmington, released the report, *Environmental Quality of Wilmington and New Hanover County Watersheds 2004-2005*. The Chapter on Burnt Mill Creek summarized the monitoring results of the 6 sampling sites on the creek.

Mean fecal coliform concentrations were in excess of the State standard for human contact waters. Sediment samples were analyzed for polycyclic aromatic hydrocarbons (PAHs), and all samples exceeded concentrations at

which harmful effects on aquatic communities occasionally occur (according to EPA guidelines). The EPA 319 grant project team will be looking at ways to monitor runoff from parking lots at BMP sites to better understand the scope and cause of PAH contamination in the watershed, and to seek ways to reduce PAH concentrations in runoff.

To view the chapter on Burnt Mill Creek online, visit

www.ces.ncsu.edu/WECO/burntmill

March Meeting Participants:

Bouty Baldrige, Burnt Mill Creek resident

Patrick Beggs, WECO, NCSU

Mike Burchell, NCSU Dept. BAE

Kemp Burdette, Habitat for Humanity

Jennifer Butler, Wilmington

Stormwater Services

Steve Everhart,

NCWRC

Mike Mallin, UNC-W

Dave Mayes, City of Wilmington

Stormwater Services

Kristin Miguez, NCEEP

Bill Murray, Cape Fear River Watch

Christy Perrin, WECO; NCSU

Michael Pope, Wrightsboro resident/Sierra Club

Tom Tewey, Creekwatch

Jason Wright, NCSU Dept. BAE

BURNT MILL CREEK BMP UPDATE CONTINUED...

(Continued from page 1)

Questions from the group and Jason's responses:

Q: Why did we go with porous pavement and not paver? What is price of porous?

R: It is a little more structurally sound. This is the same product used at the Ann McCrary site. It costs ~ \$12.50/sq. ft. or \$125/cubic yard.

Q: How long will it take before the contractor can have crews do porous without direct supervision?

R: Soon— they know what they are doing.

Participants at the March meeting noted that the Green Building Alliance will install pervious concret at Toomer's Alley.

Q: Can underground treatment be used as part of this grant?

R: The grant likely requires natural treatment, and it would also be a bit difficult and expensive to install chambers beneath an existing parking lot.

Dave mentioned that 2 underground filters will be installed off of Market St. as part of a drainage retro-fit. The filters will remove sediment, trash, and volatile compounds.

Port City Java: Jason, Bill Hunt, Christy and Patrick met with Don and Denise Reynolds and

made presentations on Burnt Mill Creek and stormwater management problems and solutions. Don and Denise were interested in participating in constructing BMP retro-fits on the property on Market Street, which is adjacent to the creek.

Jason provided a design, and is working on constructing a bioretention area in the back corner to treat drainage from the corporate headquarters building, and bioretention islands in the front parking lot.

Wallace Park Wetland #2: Christy spoke with adjacent resident, Karen Moorefield about involving the community in planning this wetland. Apparently citizens have been discussing ways to improve the area, so will likely be interested in participating. A workshop will be planned for fall, with a draft design com-



The new YMCA pervious paved lot

WORKING IN THE BOTTOMS COMMUNITY

Eleven members of the Bottoms community participated in a workshop sponsored by the Bottoms Empowerment Group, City of Wilmington, New Hanover County Soil & Water Conservation District, and NC State University at Williston Middle School on June 10. Participants were informed that the purpose of the workshop was to provide them with information about stormwater runoff impacts to the environment and the community, to provide specific actions that residents can take to reduce runoff pollution and to involve them in identifying potential locations for installing projects to reduce stormwater runoff in the community. Participants filled out a pre-workshop survey while munching on bagels donated by the Bagel Basket, and delivered by Bill Murray of Cape Fear River Watch.

Dru Harrison, New Hanover Soil and Water Conservation District, (SWCD), gave a demonstration of stormwater runoff with a table-top model called an *Enviroscape*. Dru simulated impacts of stormwater runoff from built areas—including pollutants being carried into neighborhood storm drains by rainfall, and runoff contributing to neighborhood flooding and stream erosion.

Jennifer Butler, City of Wilmington Stormwater Services, provided explanations and pictures of *non-structural* solutions (Best Management Practices or BMPs) to stormwater runoff problems. These include actions like putting pet waste in a plastic bag and into the trash, disposing of auto fluids properly, and reducing fertilizer and pesticide use.

Shelly Miller, New Hanover SWCD, showed participants pictures of *structural* stormwater Best Management Practices (BMPs). These included streamside buffers, native plantings (or habitat gardens), pervious materials, rain barrels, backyard wetlands & rain gardens. We would like to use our EPA grant to help install some of these in the community.

Participants get working

Participants separated into two subgroups to look at maps of the Bottoms Community and to

mark where they thought structural BMPs could be constructed. Tabletop posters showed the conditions needed at a site for BMPs to be considered. Participants identified 18 potential locations for rain gardens, native plantings, rain barrels, and backyard wetlands. Participants also identified the landowners and when possible, detailed the conditions of each site. Sites included residential backyards, churches, and community spaces. After the mapping exercise, participants enjoyed pizza donated by the neighborhood Dominos, and some toured the Gregory School grounds with Jason Wright, NCSU, to see potential BMP sites on the school grounds.



Workshop participants look for BMP opportunities at Gregory Elementary School

Next steps:

Members of the project team from NCSU, the City of Wilmington, and Cape Fear Riverwatch will work with the BEG to visit the sites and determine possibilities for moving forward with projects. A follow-up workshop will be scheduled in the fall to provide more details about creating rain gardens and installing rain barrels, and about long-term project maintenance. Volunteer labor will be sought to help with installing projects alongside homeowners on designated work days.

Participants offered to help contact landowners as needed and to do what they could to get projects in the ground and inform others in the community about the effort. All the sites that were identified are preliminary – actual project creation will depend on voluntary landowner participation and each site's suitability for projects.



Funding Update:

Participants at our March meeting were enthusiastic about applying for additional EPA 319 funding to continue work in Burnt Mill Creek after the current grant ends in Oct. 2007. Based on that feedback, Christy submitted a proposal for FY07 funding. The proposal survived the first cut, and Christy, Bill Hunt, and Dave Mayes interviewed with the state's grant review committee on August 8. The state's final selection will be announced by Sept. 1.

THOSE WHO
CONTEMPLATE THE
BEAUTY OF THE
EARTH FIND RESERVES
OF STRENGTH THAT
WILL ENDURE AS
LONG AS LIFE LASTS.

-RACHEL CARLSON



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**Cape Fear River Watch is
seeking members– and
giving away a hybrid
Honda Civic at Riverfest
in October!**

**Visit the Cape Fear River Watch
web page for information:**

www.cfrw.us

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