



# New Hanover County Local Watershed Planning Group

## Watershed UPDATE

Summary of Wednesday, June 29, 2005 meeting held at the Cape Fear River Watch.  
Visit the project site on the WECO website: [www.ces.ncsu.edu/WECO/burntmill](http://www.ces.ncsu.edu/WECO/burntmill)

### Next New Hanover Watershed Group Meeting is Weds., October 12, 2005 6:30- 8:30 Cape Fear River Watch Ed. Center

Meeting objectives: Finalize action plan for community outreach. Update each other on project activities.

### New Hanover Watershed Group June Meeting

The group gathered to hear progress on the EPA 319 grant for stormwater management activities in Burnt Mill Creek, and updates on other activities in the watershed.

The EPA 319 grant provides for 3 types of activities to work towards the goal of improving Burnt Mill Creek:

1. **Design and Construction of storm water Best Management Practices (BMPs)**
2. **Community Outreach and involvement**
3. **Water Quality Monitoring**

At the June meeting, Jason Wright, NCSU Dept. Biological and Agricultural Engineering, showed potential Best Management Practice (BMP) sites in the watershed, and Patrick Beggs and Christy Perrin of WECO facilitated the group in a discussion about an outreach/educational effort for the grant project.

This newsletter contains summaries of all presentations and discussions. For more information, contact Christy Perrin at (919) 515-4542  
Email: [christy\\_perrin@ncsu.edu](mailto:christy_perrin@ncsu.edu) or Patrick Beggs at [Patrick\\_beggs@ncsu.edu](mailto:Patrick_beggs@ncsu.edu)

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### Stormwater BMPs in Burnt Mill Creek

Jason Wright, NCSU Dept. BAE, provided an overview of sites he has been investigating as potential BMP sites in Burnt Mill Creek. His powerpoint presentation is posted online for viewing, and contains maps indicating the BMP locations. Jason has been investigating the following sites:

- 1) Stonestrow Apartments
  - a) HOA is interested and assisting us, adjacent condo owner is interested- concerns about flooding
  - b) Jason has surveyed the property for a possible stormwater wetland- drainage area is 6 acres, with 200-300 linear feet (30-40ft. width) available for BMPNext steps: Jason will complete a draft design, which the team will present to the HOA for their review
- 2) Empie Park
  - Potential raingarden at highly visible site
- 3) Forest Hills Elementary School
  - Parking lot on backside could be a demo site
- 4) New Hanover High School
  - Potential highly visible site
- 5) Commercial site at Kerr & Cinema Drive (near Dollar General, fabric store)
  - This site has flooding problems on their lot which makes part of the parking lot unusable
  - Plans for expansion have been approved- possible partnership opportunity
  - Potential for bioretention/ raingardens
- 6) Kmart on College Street
  - The owner has been approached by somebody from the project team and turned the idea down, but the site is still very high on the team's list!
- 7) 84 Lumber Yard
  - This was on the project team's original list as well, but set aside due to lack of space and potential for a BMP. However, the lumber company has moved and the site is up for sale.
  - Potential to work with buyer for BMP?
- 8) YMCA
  - The building area is 1 acre, providing a good

opportunity to treat the rooftop with raingardens, pervious pavement or even a green roof.

- Currently runoff from site likely contains sediment from the gravel lot.

9) Wallace Park

- Another site identified early on, this area between Chesnut and Market Streets near Annie B. Snipes Elementary is an ideal location downstream of the wetland installed by the city
- Visible BMP could treat larger volumes of water and provide more habitat

10) Ann McCrary Pond

- A potential grassed swale to treat runoff on a city-owned site

**Follow-up and Next steps:**

Following the meeting, the technical team discussed these sites. They agreed that since demonstration sites have already been completed in the watershed, the main goal of additional BMPS should be water quality improvement. Locating BMPs near established monitoring sites will help to evaluate their effectiveness. As such, Dr. Mallin recommended and others concurred with attempting projects on the following sites (+indicating best, \* indicating second best):

- +Kerr Avenue and Cinema Dr. site
- +Ann McCrary Pond site
- +Chestnut St., park area site near Sykes
- \*K-Mart parking lot site
- \*Stonethrow site
- \*YMCA site

If these sites do not work out, the team will look at other projects identified, or seek new sites.

**Update on other watershed projects:**

*Mineral Springs Branch and Burnt Mill Creek*  
NCEEP is in the midst of design for the Burnt Mill Creek/Mineral Springs Branch stream restoration project. The segments of stream included in the project are adjacent to properties owned by NHC Schools (Forest Hill Elementary School), the Forest Hills apartment complex, residential parcels along Metts Avenue and a City of Wilmington park. As part of the project, they are hoping to incorporate several stormwater BMPs on the apartment complex property. They are finalizing numerous conservation easements along the project, and they anticipate beginning construction by the end of the year.

Kristin Miguez is the implementation staff at NC EEP for the New Hanover County watersheds. Questions about NC EEP projects can be directed to Kristin at [Kristin.miguez@ncmail.net](mailto:Kristin.miguez@ncmail.net)

*Laney High School BMP*

Chris O'Keefe reported on another EPA grant project for a constructed wetland and bioretention at Laney High School. NCSU Dept. BAE has finished a design for the project, with a July let day.

*Kerr Avenue Wetland*

The City of Wilmington modified The Kerr Avenue wetland to take in more runoff. It now accepts 3 " rain in 1 hour, allowing more first flush to go into it.

*Watershed Management Advisory Board*

Chris O'Keefe informed the group about this new advisory board, which replaces and expands the roles of the Tidal Creeks Committee. They have had one meeting, and currently are determining their focus. Kristin Miguez, NCEEP, and Bill Holman, NC Clean Water Management Trust Fund, will speak at the next meeting.

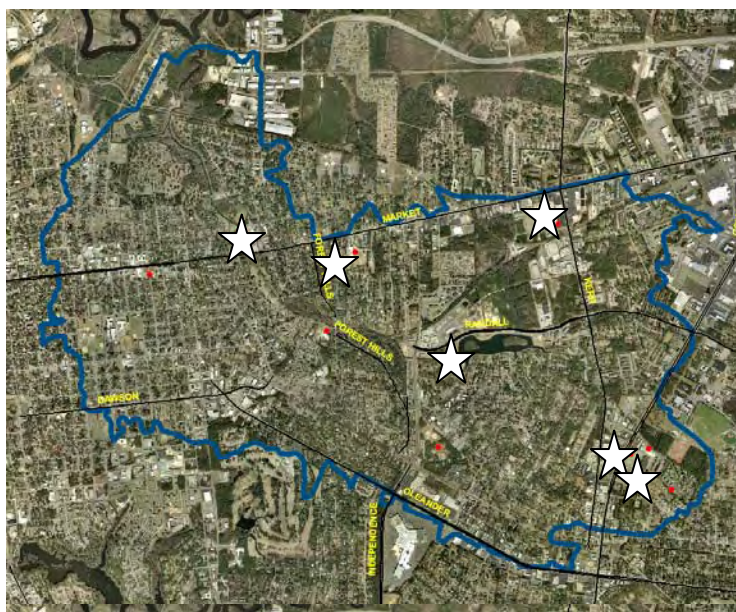
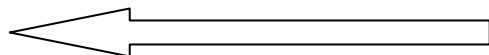


Figure 1: Burnt Mill Creek Watershed with potential BMPs marked by white stars



## **Community Outreach and Involvement in Burnt Mill Creek**

Patrick led the group in a discussion about planning the community outreach and involvement activities for the grant project.

### ***Educational Goals***

The grant includes public meetings in neighborhoods where BMPs are suggested for municipal parks to involve them in designing BMPs, and to hold community meetings to involve residents in implementing backyard BMPs. The group briefly discussed the goals for the community involvement effort, raising the important question of what kind of behaviors are we trying to change?

The City of Wilmington's recent survey work determined that residents are fairly familiar with "non-structural" best management practices, such as picking up after pets. However, there may be more education needed for getting more "structural" BMPs, like raingardens, installed.

To follow-up on the City's findings and educational efforts, WECO recommends the goal of this effort to be to get a tangible number of backyard BMPs, such as raingardens, installed.

### ***Creating a Situation Map***

The group brainstormed the threats and assets that will affect the project goals. They also brainstormed strategies and activities needed to achieve the objectives. The results of this discussion are listed in the "situation map" which is included in this mailing. The situation map served as a basis for WECO and City of Wilmington staff to develop a potential action plan for the community outreach strategy. See the *Update* section on page 4 for the draft plan.

### **Thanks to the RiverKeeper!**

When we heard that he was retiring, we were filled with gratitude for all that Cape Fear River Keeper Bouty Baldrige has done for the Cape Fear River, along with sadness since he's such a great guy to work with!

We wish Bouty and his wife Stacy our best!



## Update on Summer Project Activities

### *Stormwater BMPS*

Jason Wright, Christy Perrin, Bill Murray, and Cape Fear Riverwatch Board Member Paul Nelson met with the Stonestrow Homeowners Association in August to provide educational background on stormwater management and to ask approval for moving forward with designing the project. City of Wilmington Stormwater Services educational materials were provided as well. The HOA enthusiastically agreed to participate, and agreed to review a draft BMP design that Jason will complete in time for their September 26 meeting.

### *Educational Outreach Strategy*

WECO and City of Wilmington staff met in August to develop a draft outreach strategy based on input from the June meeting.

Some criteria discussed for determining focus areas and types of projects included:

- A community outside of the previous EPA 319 grant focus area
- A community that does not have a large-scale BMP proposed immediately upstream or residential BMPs
- Size of backyards in a neighborhood
- Need for economic assistance in community

Two different community projects emerged based on meeting these criteria:

*Rain barrels:* The southwestern area of the watershed is mostly paved and piped, leaving little opportunity for large scale BMP implementation. Given the lack of land availability, working with residents to install low-cost rain barrels is suggested as a strategy for reducing stormwater runoff in this targeted area of town. New Hanover SWCD recently completed a rain barrel campaign and could be consulted as a model.

*Backyard raingardens:* A number of neighborhoods were discussed as potential locations for targeting the installation of backyard raingardens. New Hanover Cooperative Extension recently completed a backyard raingarden campaign and could be consulted as a model. Some communities identified include:

- *The Cherry St., Peachtree Dr., Audubon Drive area (preferred)*
- Birch Creek, in Downey Branch
- Forest Hills
- Greenway Avenue area

We would like to work with the entire group to hammer out a detailed plan in October, including *where, when, and how* to implement these two community projects successfully.

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### **Participants present at June meeting:**

Kate Ardizone, NC Sea Grant  
Deborah Amaral, NCEEP  
Bouty Baldrige, Cape Fear River Watch  
Patrick Beggs, WECO, NCSU  
Jim Bordeaux, Castle Hayne Steering Committee  
Leslie Bromberg, UNC-W  
Mike Burchell, NCSU Dept. BAE  
Jennifer Butler, City of Wilmington Stormwater Services  
Kelly Collins, UNC-W  
Matt Hayes, City of Wilmington  
Carrie Hett, Monitor for Burnt Mill Creek  
Bill Hunt, NCSU Dept. BAE

Mike Mallin, UNC Wilmington  
Dave Mayes, City of Wilmington Stormwater Services  
Kristin Miguez, NCEEP  
Bill Murray, Cape Fear River Watch  
Ashley Noble, UNC-W  
Chris O'Keefe, New Hanover County  
Christy Perrin, WECO; NCSU  
Raven Robertson, UNC-W  
Tom Tewey, Creekwatch  
Kate Turner, UNC-W  
Penny Tysinger, Cape Fear Council of Governments  
Jason Wright, NCSU Dept. BAE