



THE BLACK CREEK WATERSHED WIRE

News from Black Creek Watershed, Cary, NC

October 2008

Visit the project website at www.ncsu.edu/WECO/blackcreek

Black Creek Highlights Aug-Sept

The Black Creek Watershed Association (BCWA) met on Aug. 6 and Sept. 29 at Page Walker center. Thanks to Charles Brown for securing the location.

In August, Jim Gregory shared preliminary results of the pollution survey conducted by volunteers, and provided an update on the land use land cover analysis. The BCWA also discussed ideas for a NC Clean Water Management Trust Fund proposal. In September, Jim provided another update, and the group further discussed the grant proposal. They also reviewed potential logo designs and planned for the 3rd annual Big

Sweep for Black Creek. This newsletter contains highlights from the meetings.

Big Sweep for Black Creek was held on Saturday, October 4 this year. Finally, WECO delivered a presentation to Cary Rotary that can be used for other groups who are interested.

The next BCWA meeting is scheduled for October 27 in the Town Hall, 2nd floor conference room in the Engineering Dept.

Please note that we will start at 6:00 p.m.

At our next meeting, please come prepared to discuss goals for the watershed plan.



Update of Watershed Assessment

Pollution Survey Results:

Jim Gregory informed the BCWA that there were no obvious pollution hot spots identified during the pollution survey, but there is egregious nonpoint source pollution, such as:

- ⇒ Poor construction site management
- ⇒ Leaking garbage containers
- ⇒ Barrels containing unknown materials
- ⇒ Lawn and landscape chemicals
- ⇒ Litter

More than one participant pointed out apparent failure of erosion control BMPs at construction sites. Unfortunately, fine sediment that comes from these sites that are suspended in water is not feasibly (cost-effectively) removed with current technology.

Thanks to everyone who participated in the pollution survey!

Geodatabase Update

Jim mentioned that the data shows exactly where a drop of water would go to, which will help in siting stormwater Best Management Practices (BMPs). In Sept., the BCWA looked at examples of maps that can be produced with the GIS database. See map on page 2 for an example. The maps can be used to engage the community in identifying potential project locations, by showing exactly where stormwater is flowing, and looking for places to intercept that stormwater. Eventually this database will be posted online.

Monitoring data update

All monitoring has been completed and analyzed, except for the organic contaminants data. This data still needs to be analyzed for a couple contaminants (PAH, petroleum) in the lab.

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The Black Creek Watershed Association meets on the last Monday of the month.

Next meeting:

Monday, October 27

6:00-8:30 p.m.

(Social time 6:00-6:15)

LOCATION:

**Engineering Dept.
Conference Room,
2nd Floor Town Hall**

Agenda:

- ◆ Discuss goals for watershed plan
- ◆ Discuss management activities for watershed plan

~~ The next & last meeting of the year is:

**Monday
December 8, 2008 at
6:00 p.m.**

At Bond Park Community Ctr.

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Watershed Assessment Update

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Fate of the stream gauge

The Tech team is no longer collecting water quality data from the stream gauge, and will stop collecting flow data before the grant ends in January. This expensive piece of equipment could stay in the stream and continue to collect data if we can find a sponsor and agency/person to maintain the sampler and collect the data. The Town of Cary was suggested. (editor note- many Phase II stormwater communities conduct or sponsor stream monitoring in order to better track what is going on in their communities. Some examples include the Cities of Durham and Wilmington).

Likely sources of problems

The Tech Team believed the main culprit impairing the stream is high volume, high energy uncontrolled stormwater. The road drainage goes into drop inlets with no detention or control. Parking lots of older apartments and commercial developments shed stormwater to streets or pipes it to ephemeral streams. The team found many examples of stormwater channeled directly to the largest streams in the stream network. An example of one of the worse situations is at Maynard Crossing, which is graded so stormwater flows into the street or drop inlet. Also, toxic contaminants cannot be ruled out as a problem until analysis is complete.

Best management practice examples

Godbold Park has dry detention basins. However, Jim believes an opportunity to improve stormwater management exists here for improving nutrient removal.

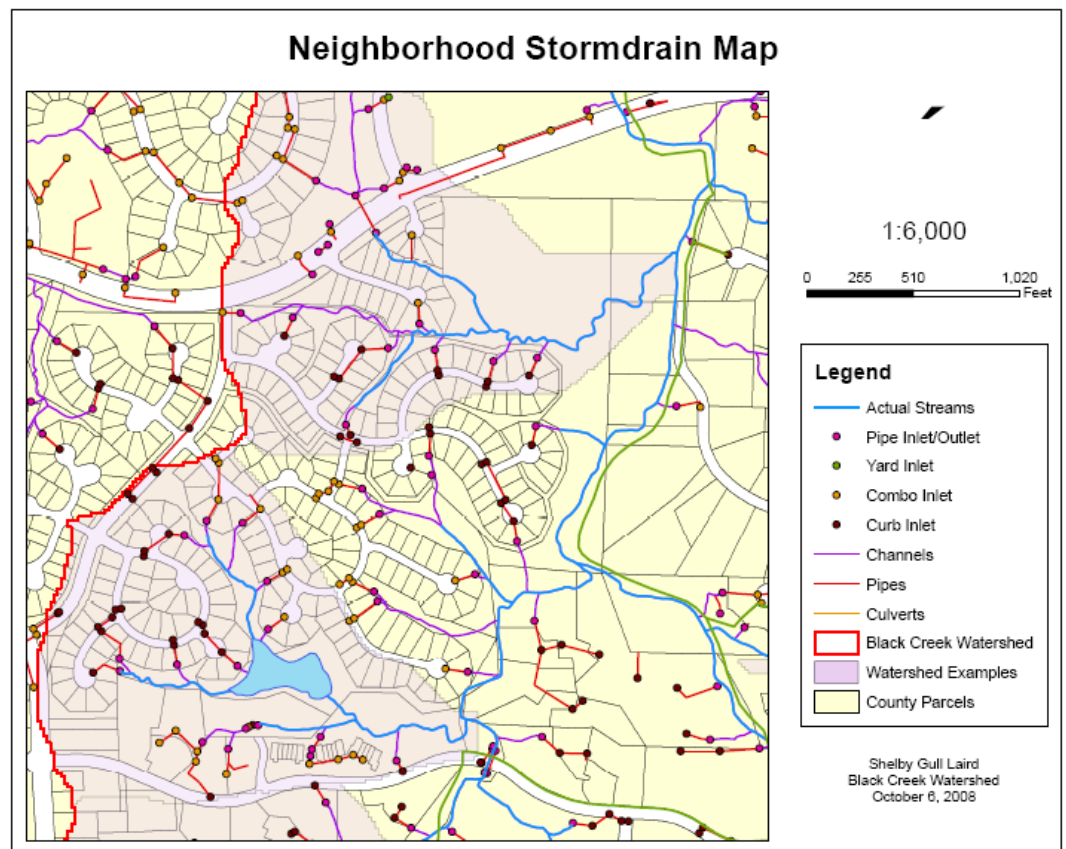
The newest commercial developments have BMPs, for examples see the new Walgreens and Aldi store (Aldi has a stormwater wetland).

An example of *level spreader*, which disperses flow into a natural area or riparian buffer, is near White Plains church on Maynard Rd. towards Kildaire Farm Rd.

Watershed Management Plan

The Tech Team will be writing up their results to be incorporated into a management plan. We will be asking the BCWA to help us develop the goals and actions to be included in the plan.

The map at right is an example of a map that can be used to locate potential stormwater project sites





Grant Proposals for Watershed Management

The BCWA began thinking about how to fund management measures to reduce stormwater runoff in the watershed. The NC Clean Water Management Trust deadline for *Innovative Stormwater* grant proposals was October 15. The group brainstormed ideas in August.

The ultimate goal is to slow stormwater down and promote more infiltration and re-use.

Some ideas included

- ◆ Partnering with homeowners associations to put BMPs in common areas
- ◆ Partnering with Town of Cary to place demonstration BMPs along greenway, in parks, work with them on planning and designing the planned renovation of the Black Creek Greenway
- ◆ Marketing the project to citizens
- ◆ Involving fire stations, schools in installing cisterns and/or rain gardens (as Wake County is doing)
- ◆ Offer cost share to homeowners for installing practices
- ◆ Consider Silverton, Wessex as locations
- ◆ Bringing the NCSU Dept. of Biological and Agricultural Engineering in by proposing BMP research on level

spreaders or parking lot bioretention (their research needs)

Christy and Patrick developed a proposal to work with the Town and homeowners to identify and implement BMPs in public spaces and at residences. The \$250,000, 3-year project would be guided by the BCWA, and would sponsor neighborhood workshops, designing, and constructing BMPs. It also includes a survey of watershed residents and greenway users to ask how they value the natural resources along the greenway, and to identify preferred management activities and funding for improving the resources. The survey would be conducted by the Center for Environmental and Economic Policy at NCSU. The NCSU School of Design is partnering to help with BMP design. This particular proposal did not include water quality monitoring or research.

Two more proposal requests have been posted, one for EPA funds and another CWMTF grant. Both are due on January 9. We will work with the BCWA to improve on the grant proposal recently submitted, so we can apply for additional sources of funds. We will need to have our draft watershed plan complete in December in order to strengthen our proposals.

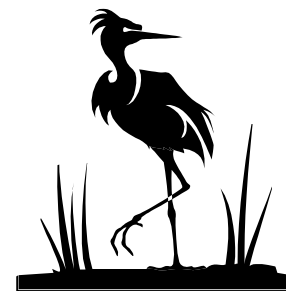
3rd Annual Big Sweep for Black Creek held

Thirty volunteers from Cary Presbyterian Senior High Youth Group, Cary Rotary, and the BCWA tromped throughout the watershed picking up trash and recyclables on Saturday, October 4. Town of Cary Parks Facilities staff picked up and delivered the trash and recyclables afterwards.

Thank you to all of our volunteers for helping to clean the trash out of Black Creek and making this a successful event once again!



Christy Perrin
Watershed Education for Communities and Officials
Dept. Agricultural and Resource Economics, NCSU
Campus Box 8109
Raleigh, NC 27695-8109



BCWA selects a chairperson

Congratulations to Vickie Maxwell for becoming the Black Creek Watershed Association's first Chairperson! The role of the chairperson will be to sign letters from the BCWA, and to serve as a spokesperson as needed.

Logo Update

BCWA members checked out two draft logos developed by an aspiring graphic artist from NC State University. The logo will be refined based on their feedback and used for branding t-shirts, pens, notepads and similar materials that will be purchased with the Cary Community Foundation grant this year.

We also would like to schedule a recognition reception at our December meeting to provide awards to our winning logo contest submittals and thank our contest participants.

Black Creek Watershed Presentation Available

Christy and Patrick provided a presentation about the Black Creek Watershed Association and basic watershed science to Cary Rotary in September upon Pat Hudson's invitation.

Now that we have a basic presentation prepared, we would be happy to deliver presentations to homeowners associations or other community groups as time permits. As the watershed plan is finished, we can incorporate recommendations and updates into the presentation. We would also be happy to provide a copy of the presentation for BCWA members to deliver themselves to groups. We can provide a brief "train the presenter" session if anyone is interested.



August Meeting Participants

Patrick Beggs, *WECO; NCSU*
Charles Brown, *Town of Cary*
Nathan & Austin Cobb, *Beechtree*
Susan Davenport, *Beechtree, Cary*
PRCR
Amin Davis, *Beechtree resident*
Nora Deamer, *NC Div. Water Quality*
Bill Dupont, *North Raleigh*
Jim Gregory, *NCSU*
Marilyn Grolitzer, *North Raleigh*
Bianca Howard, *upper watershed*
Pat Hudson, *Cary Rotary*
Eric Kulz, *North Harrison Trace, DWQ*
Heidi Maloy, *Cary Academy*
Vickie Maxwell, *Wessex HOA*
Bob Morris, *Silverton HOA, Cary*
Greenways Committee
Christy Perrin, *NCSU; Windchase*
Chris Walker, *Cary Rotary, Weston*
Manor
Mitch Woodward, *NCSU Coop Ext.*

September participants

Liz Adams, *Silverton, Cary Env. Brd*
Patrick Beggs, *NCSU*
Charles Brown, *Town of Cary*
Nathan Cobb, *Beechtree*
Susan Davenport, *Cary PRCR*
Shelby Gull Laird, *NCSU*
Elena Horvath, *Silverton*
Pat Hudson, *Cary Rotary*
Jim Gregory, *NCSU*
Vicki Maxwell, *Wessex HOA*
Bob Morris, *Silverton, Cary Greenways*
Mitch Woodward, *NCSU Coop Ext.*

