Lick Creek Watershed Restoration Plan
Summary of Stakeholder Meeting #3
May 9, 2007

Introductions & Agenda

The Stakeholders guiding the Lick Creek Watershed Restoration Plan met at 3:00 P.M. on Wednesday, May 9 in the East Branch Durham Library on Lick Creek Road. Meeting attendees:

Name	Project Partner or Stakeholder	Organization	Contact Information
Bev Norwood	Stakeholder	Triangle Greenways Council	Ndesign@bellsouth.net / 743-3399
Jerry Radman	Stakeholder	MacGregor Devt. Co.	jradman@macgregordev.com
Chris Outlaw	Partner	Durham Stormwater Services	chris.outlaw@durhamnc.gov
Bobby Louque	Partner	Durham Stormwater Services	Robert.louque@durhamnc.gov
Lee Lambert	Stakeholder	Watershed landowner / developer	Bllambert@nc.rr.com
Eddie Culberson	Stakeholder	Durham Soil & Water Cons. Dist.	eculberson@co.durham.nc.us
Frank Thomas	Stakeholder	Home Builders Assoc. of DOC	frank@hbadoc.com / 493-8899
Nora Deamer	Stakeholder	NC Div. of Water Quality-Planning	Nora.deamer@ncmail.net
Heather Boyette	Stakeholder	NC Div. of Water Quality-Planning	Heather.boyette@ncmail.net
Bill Patrick	Stakeholder	Watershed resident	596-1692 / 475-4131 (cell)
Joe Pearce	Partner	Durham Co. Stormwater & E.C.	jpearce@co.durham.nc.us
Sue Harris	Stakeholder	Watershed resident	Dbharris66@nc.rr.com / 596-3054
Dan Line	Partner	NC State University	Dan_line@ncsu.edu
Shari Bryant	Stakeholder	NC Wildlife Resources Comm.	Bryants5@earthlink.net
Jim Fyfe	Stakeholder	Watershed resident	jandbfyfe@touchnc.net / 596-4338
Jeff Kilpatrick	Stakeholder?	Watershed resident	596-8716
Amy Poole	Stakeholder	Rollingview Marina	596-2194
John Schrum	Stakeholder?	Horvath Associates	John.schrum@horvathassociates.com
Judy Riggins	Stakeholder	Watershed resident	RigginsBJ@nc.rr.com
Joel Sholtes	Stakeholder	Durham resident	jsholtes@gmail.com
Kim Nimmer	Stakeholder	NC Div. Water Quality—319 Prog.	Kimberly.nimmer@ncmail.net
Rebecca Ferres	Stakeholder	Durham County	560-0732
John Cox	Partner	Durham Stormwater Services	John.cox@durhamnc.gov
Sally Hoyt	Partner	Center for Watershed Protection	sch@cwp.org
Chris Dreps	Partner	UNRBA	dreps@tjcog.org

The meeting agenda included (decision items marked with *):

3:00 Welcome

3:05 Announcements

3:10 Watershed Restoration Goals

3:45 Lick Creek Fieldwork Findings

5:30 Adjourn

Announcements

Eddie Culberson announced that the Lick Creek stream restoration project is advancing, with landowners signing conservation easements. Soil and Water Conservation District is also pursuing a 2,000 foot-long project on Rocky Branch.

Chris Dreps announced a field trip to hike the Lick Creek section of the NC Mountains-to-Sea Trail on Thursday, May 17 at 3 p.m. Anyone interested should inform Chris and meet a few minutes before 3 p.m. at the trail head where Boyce Mill Rd. crosses Lick Creek (just north of NC 98).

Chris thanked Bobby Louque and Chris Outlaw for sharing information at the April 18 field trip, which was very informative, interesting, and fun.

Lick Creek Watershed Restoration Goals

Chris Dreps followed up on the watershed restoration goals set by the project partners and shared with the stakeholders in advance of the meeting. Chris discussed driving forces behind the goals. Primary driving forces are Lick Creek's impairment listing and the upcoming Falls Lake Nutrient Management Strategy.

The Goals are:

1) Develop a hypothesis about the causes of biological impairment in Lick Creek and recommend approaches to address impairment status.
2) Identify pollutants and their sources that may be impairing aquatic habitat and water quality in Lick Creek (water quality is not impaired currently). Suspected pollutants include dissolved oxygen (and biochemical oxygen demand), fecal coliform bacteria, and turbidity.
3) Develop strategies for reducing, and maintaining at levels meeting water quality standards, the pollutants identified in Goal 2.
4) Mitigate future changes to watershed hydrology and water quality.

The stakeholders generally agreed with the goals as written; however, there was extensive discussion about the meaning of "biological impairment", and stakeholders learned that impairment basically means that the aquatic life ratings (primarily bugs) in Lick Creek are poor compared to those expected in the Piedmont. The group discussed the problem that there are no Triassic Basin-specific aquatic life ratings and how rating Triassic Basin streams against Piedmont standards may skew ratings downward. NC Division of Water Quality staff explained that the Division is no longer rating Triassic Basin Streams but that Lick Creek was rated before this policy change and will remain on the 303(d) list of Impaired water bodies. It is for this reason that Goal 1 is a goal of "developing a hypothesis" about the reasons for impairment, for which one possible finding is that the stream is not currently biologically impaired. Bobby Louque (Durham Stormwater Services biologist) reminded the stakeholders that regardless of impairment listing, Triassic Basin aquatic habitat is particularly sensitive to land use changes and thus susceptible to habitat degradation. Nora Deamer of NC Division of Water Quality reminded the stakeholders that, based on Durham City data, there is a likelihood that the stream could be listed as impaired for other water quality pollutants (see goal 2).

Lick Creek Fieldwork Findings (Sally Hoyt)

Sally Hoyt from the Center for Watershed Protection (CWP) discussed the Feb. 26 – March 2 fieldwork focused on identifying restoration opportunities. At that time, CWP, UNRBA, Durham Stormwater Services, Durham County Stormwater and Erosion Control, NC State Water Quality Group, and other volunteers assessed 30 miles of stream and scores of upland sites in the Lick Creek watershed. The Center for Watershed Protection Memorandum is forthcoming.

The purpose of fieldwork is to provide an on-the-ground snapshot of stream conditions to complement GIS analysis, water quality monitoring, and water quality modeling conducted by the partners. Since the purpose of fieldwork is to identify restoration opportunities, the partners focus efforts in areas of the most likely potential impacts (areas where GIS analysis, land use analysis, and aerial photography reveal relatively high potential for disturbance).

Sally reviewed how land use changes affect the water balance and discussed how these changes affect water quality. In general, our approach should be to attempt to mitigate these changes as close to the source of the impact as possible.

Sally then discussed overall stream conditions. In summary, the stream condition findings are:

- Many Lick Creek tributaries are in good shape from a geomorphic perspective.
- Though this stream is biologically impaired, the impairment may be attributed to sparse in-stream habitat created by the geology and historic impacts.
- Few potential restoration opportunities were found.
- Conversely, many impacts from ongoing construction activities were found.
- These activities are impacting existing good quality streams and wetlands.
- The focus of the Lick Creek Restoration Plan should therefore be to prevent future impacts and to preserve high quality areas.
- A few restoration activities will complement the overall “prevention” strategy.

Sally briefly previewed the current watershed land uses (72% pasture, unmanaged, forested, and protected lands) and the expected future land uses (65% low-medium density residential, rural residential, and roads). She also briefly previewed the expected pollutant loadings from current and expected future conditions and what these mean for the future of water quality in Lick Creek. The upcoming Lick Creek Land Use Memorandum (Triangle J Council of Governments) and Watershed Treatment Model (Center for Watershed Protection) will be discussed at future meetings.

Sally then discussed the specific project types recommended, summarized below.

1. Erosion and sediment control enforcement—the percentage of violations found in the field was very high, particulary in subwatershed 1. Although Durham has good sediment and erosion control programs, why the lack of compliance?
2. Agriculture exemption abuse regarding erosion and sediment control regulations—a few large, apparent violations are causing stream degradation, especially in Rocky Branch (subwatershed 7).

3. Allowable standards for post-construction stormwater management—under current standards, no stormwater management is required for new developments under 15% impervious cover, and no water quality stormwater management is required for developments under 24% impervious cover.
4. Buffer rule enforcement—new development sites had extensive buffer impacts, most of which had been allowed (as variances from the Neuse buffer rules) by the NC Division of Water Quality. Why? In addition, many utility rights-of-way were impacting buffers.
5. Protection of high ecological value streams and wetlands—Many stream corridors and wetlands are of high quality, and impacts to these should be avoided.
6. Major projects—there are very few restoration opportunities, possibly 25 total acres of stormwater treatment (retrofits) and 1 linear mile of stream bank revegetation.
7. Volunteer projects—there exist opportunities for small restoration projects that can utilize volunteer efforts.
8. Outreach and education—there are a few opportunities to educate homeowners (riparian buffer improvements) and business owners (pollution prevention practices). and

The upcoming memorandum will identify all fieldwork impacts and make recommendations about which party (City, County, State, etc.) should receive the recommendations. Maps of fieldwork findings will accompany the memorandum.

Next Meeting

Next meeting: Wednesday, June 20 at 3 p.m. in the Rollingview Community Center on Baptist Rd. in Falls Lake State Recreation Area.

We will discuss subwatershed-level analysis, objectives, and decision-making approach of the stakeholder group.