

# Transylvania County Low Impact Development Roundtable #1 Summary



Watershed Education for Communities and Officials

March 31 2007

## Roundtable #1 Kicks Off with Lively Discussion

On February 22, 2007, approximately 40 people participated in the first Roundtable Workshop on Low Impact Development hosted by NC Cooperative Extension and the Transylvania Natural Resource Council. The meeting was held at the Transylvania County Library in Brevard and attended by a wide cross section of interest groups including Brevard, Rosman, and Transylvania County officials, local residents, private businesses, and natural resource agencies.

The goals of the Roundtable workshops are to discuss how development impacts water quality and determine recommendations for future development which can allow for economic growth and natural beauty to exist side by side. By involving many different stakeholders, the recommendations will be more well rounded than any one group could come up with on their own.

This newsletter summarizes information presented at the February 22 workshop.

## What is Low Impact Development or LID ?

Low Impact Development LID is an approach to land development and stormwater management that helps protect aquatic resources, water quality, and the natural hydrology. LID strives to design and construct in a manner that does not cause degradation to local streams. LID can also improve water quality in the area. For example, traditional development has often funneled as much stormwater off the prop-

erty as it possibly can. LID allows water to percolate into the ground on-site where the rain occurs, instead of transporting it directly to street gutters and creeks.

**The 2nd Roundtable meeting is April 5, 2007, 8:30 am - 12:30 pm at the Transylvania County Library in Brevard. Everyone is welcome to attend.**

**Contact info on page 4.**

### Inside this issue:

NON POINT SOURCE POLLUTION	<b>2</b>
LID ROUNDTABLE	<b>2</b>
PARTICIPANTS VIEWS OF GROWTH	<b>3</b>
US EPA GRANT	<b>4</b>

# Transylvania County

## Low Impact Development Roundtable #1 Summary

---

### Stormwater Runoff and Non Point Source (NPS) Pollution

Stormwater runoff is the rainwater that flows off a site. Impervious surfaces such as roofs, streets, sidewalks, and driveways prevents stormwater causes water to flow off that would normally be absorbed by vegetation or the ground . This runoff carries with it what is in its path, such as automobile pollutants from the street, or fertilizer and pesticide runoff from yards. Because these pollutants can not be pinpointed to a point such as an outfall pipe from a factory or wastewater treatment plant, they are called non point sources of pollution. NPS pollution is the number one water quality problem in the United States. The chemicals in this runoff enter the streams and the sheer amount and velocity of the runoff erodes streams. This erosion can lead to muddy waters, which can be fatal to trout and other wildlife. Another problem with stormwater runoff is the temperature of the water during warmer weather. Water running off parking lots and roofs, can be heated to higher temperatures. This large amount of runoff entering the creeks at once can cause the creek to increase in temperature. Warmer water temperatures are not healthy for many species and can be fatal to trout populations.

Another problem that stormwater runoff causes is the visual degradation of natural resources. Transylvania County is a destination for many visitors because of its scenic beauty. To retain the economic potential of tourism, it is important to retain the natural beauty of Transylvania County.

### What is the LID Roundtable?

The Roundtable is designed to have all the interested stakeholders at the same table to discuss Transylvania County growth and development trends, stormwater, low impact development, the impact of land use on water quality, and current development plans. An objective is to have an informed citizenry engage in a community discussion to help decide how their county can develop. Through learning and discussion, the members of the Roundtable can choose to make recommendations about future development. By involving many different types of stakeholders, these recommendations can include the ideas of many people and be more apt to be accepted by those not at the Roundtable. The participants may find current development standards acceptable and therefore decide not to make any recommendations to local decision makers. Planning takes time, and education & collaborative decision making are the corner stones to well constructed recommendations.

### Roundtable #1 Review

To view a slideshow of all presentations from the roundtable please visit us on the web at: [www.ncsu.edu/weco](http://www.ncsu.edu/weco)

At the first Roundtable, participants learned how land use and development impacts water quality. In addition, they began to discuss with each other their ideas about development in Transylvania County. A list of issues raised can be found on page 3.

#### Survey Result:

88% of participants surveyed at roundtable #1 felt it was likely or somewhat likely that development and natural resource protection can both occur.

---

## What Will Influence Growth and Development in Transylvania County?

In break-out groups, participants were asked to project where growth would occur in Transylvania County between now and 2030. They were also asked to explain their assumptions about what will influence the type and location of growth. Participants raised the following issues and assumptions about growth in their break-out groups. We've organized topics based on common themes for this summary.

### **Water/Sewer as limiting or enabling development**

- ◆ Rosman, Brevard, and possibly Mills River will get an/or expand lines through annexation
  - ⇒ Possibly along hwy 64
- ◆ Water/sewer can lead to high density
  - ⇒ Condos and assisted living in Brevard
- ◆ Septic and wells will exceed carrying capacity in future
- ◆ Lack of sewer influences type and location of development
  - ⇒ Not likely to occur in floodplain without sewer
- ◆ New wastewater treatment plant will be online in 2008

### **Farmland and rural residential**

- ◆ Farmland will be developed
- ◆ Are there incentives for preserving farmland?

### **Parks and forest land**

- ◆ Not available for development

### **Transportation**

- ◆ NC 215 will be done by 2030
- ◆ Massive growth will occur along the hwy 280 corridor
- ◆ New and widened roads will provide growth impacts

### **Ridgetop and slopeside development**

- ◆ Will occur for views
- ◆ Restrictions on floodplain development will drive development up the slopes

### **Second home and tourism development**

- ◆ Much high end development
- ◆ Requires infrastructure to support, even if they are not permanent residents
- ◆ Medical facilities for aging population
- ◆ Move from industrial to service oriented jobs

### **Workforce Housing**

- ◆ Important issue, as service jobs increase

### **Floodplain issues**

- ◆ Restrictions within will drive development up-hill
- ◆ Development here can only occur with sewer
- ◆ Amount of county in floodplain estimated from 5-15%

### **Project population growth and development impacts**

- ◆ Census data projection alone is not an adequate predictor of growth impacts
- ◆ Second homes and tourism is not reflected in census data projection of ~5,000 in 2030

---

Project staff will use the information provided by the break-out groups, and reflect it in maps showing estimated growth impacts, including a rough estimate of the projected increase in impervious surfaces that will result. The maps will provide a quick overview of where development impacts on water resources may occur in the future based on participants' predictions. These maps will be brought to the Second Roundtable workshop on April 5.

There are many current and ongoing projects within the Town of Brevard and Transylvania County that speak to some of the issues raised. We will explore ways to raise awareness of these efforts, and discuss how these efforts may mitigate development impacts on water resources.



Feel free to contact Patrick Beggs or Christy Perrin for information.  
You can learn about the projects, including viewing Roundtable presentations and other  
newsletter at [www.ncsu.edu/weco](http://www.ncsu.edu/weco) > **Transylvania County**

WECO  
Campus Box 8109  
Raleigh NC 27695-8109  
patrick\_beggs@ncsu.edu 919-515-4525  
christy\_perrin@ncsu.edu 919-515-4542

To speak with the project's local representative,  
please contact Eric Caldwell, Director-  
Transylvania County Cooperative Extension  
828-884-3109

**Special thanks to the Tennessee Valley Authority, the Southeast Watershed Forum,  
and Land of Sky Council of Governments for their help and expertise.**

---

## **A Grant from the US Environmental Protection Agency**

In 2006, Transylvania Natural Resources Council (TNRC) along with NC Cooperative Extension received a grant from the US Environmental Protection Agency, via the NC Division of Water Quality. The title of the grant is: *Protecting Transylvania County Watersheds Through Education about Land Use Change Impacts on Water Quality, and Low-Impact Development*. The grant resulted from: the presence of high quality natural resources; the involvement of the local community, including the County and the City of Brevard; the need for increasing awareness of land use impacts on water quality statewide. Watershed Education for Communities and Officials (WECO), a Cooperative extension program in the Department of Agricultural and Resources Economics at NCSU is facilitating the grant and its projects. WECO kicked off the project by forming a planning team including: Cooperative Extension, Transylvania County Planning and Economic Development, City of Brevard Planning, NC Division of Water Quality, and TNRC members.

The grant consists of a number of goals, with the Roundtable series being one tool to meet some of those goals. The goals include:

1. Work with the TNRC throughout the project
2. Educate the community about the relationship between land use and water quality
3. Introduce community resource based planning
4. Use local LID demo projects in educational programs
5. Build knowledge and support for LID
6. Facilitate a collaborative policy review to evaluate local ability to prevent water resource degradation and develop recommendations accordingly.
7. Develop a transferable educational model