# "PROTECTING OUR RIVER AND OUR FUTURE"

Factsheet 6

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# STREAM BUFFERS

#### WHAT ARE STREAM BUFFERS?

Stream buffers, also known as riparian buffers, are the areas of land alongside streams and rivers. When left undisturbed, these areas help to maintain clean water and healthy aquatic wildlife. Buffers:

- capture sediment and pollutants from runoff, serving as natural filters;
- protect people and property from flood damage by slowing and storing flood waters;
- stabilize streambanks;
- increase property values by improving the appearance of the stream;
- provide wildlife habitat;
- shade the water to maintain a healthy temperature for trout and other aquatic life;
- provide logs and other woody debris that serve as homes for fish and other aquatic life.

Scientists believe that riparian buffers are essential to protect the imperiled fish species of the Etowah Basin.

### HOW WIDE SHOULD STREAM BUFFERS BE?



Most scientific recommendations for minimum buffer widths range from 50 to 100 feet for protecting water quality and aquatic habitat. As a general rule, the wider the buffer, the greater the protection of water quality and habitat. However, practical considerations usually limit the width of buffers established by regulations. For the Etowah Aquatic Habitat Conservation Plan (HCP), scientists recommend a minimum buffer of 50 ft on all streams. Wider buffers should be preserved where possible.



#### **DO ALL STREAMS NEED BUFFERS?**

Yes. People have traditionally placed more emphasis on protection of larger streams and rivers, perhaps because they have greater recreational uses. However, even for the narrow creek that runs through a neighborhood backyard, riparian buffers are important for sediment control and aquatic integrity.

In addition, because small streams feed into larger streams and rivers, protecting headwaters is vital for protection of downstream rivers.





#### PROPOSED BUFFER ORDINANCE

As part of the development of the Etowah Aquatic HCP, local governments have agreed to take steps to minimize the impacts of development on imperiled aquatic species. One of these steps is a stream buffer ordinance. The ordinances proposed for Lumpkin, Dawson, and Pickens Counties (as well as Dawsonville) protects 50 ft buffers on all perennial streams. Since state law already requires 50 ft buffers on trout streams, there will be no change in buffer width on most streams in these counties. Most downstream counties already have 50 ft buffer ordinances, and some protect buffers as wide as 75 ft or 100 ft.

#### WHAT ABOUT PROPERTY RIGHTS?

The buffer ordinances proposed for Lumpkin, Dawson, and Pickens Counties apply only to new development. Existing structures and activities, including farming and forestry, are exempted. The effect of a buffer ordinance is not to prevent development, but to ensure that it occurs in the less environmentally sensitive areas of a site. The proposed buffer ordinances also respect private property rights by allowing variances for cases where properties are small or when it is not possible to develop the property without infringing upon the buffer.

### **REFERENCES**

"A Review of the Scientific Literature on Riparian Buffer Width, Extent and Vegetation," Seth Wenger, UGA Institute of Ecology Office of Public Service & Outreach, Athens, GA, 1999.

"Protecting Stream and River Corridors: Creating Effective Local Riparian Buffer Ordinances," Seth Wenger and Laurie Fowler, UGA Carl Vinson Institute of Government, Athens, GA, 2000.

"Where Rivers are Born: The Scientific Imperative for Defending Small Streams and Wetlands," Judy L. Meyer et al., American Rivers, Washington DC and Sierra Club, San Francisco CA, 2003.



## Helpful links:

Etowah HCP: www.etowahhcp.org

Tools for Quality Growth: Buffers www.rivercenter.uga.edu/service/tools/buffers.htm