Agricultural Buffers

Buffer practices have become widely accepted as important management tools in the effort to reduce agricultural nonpoint source (NPS) pollution of streams and lakes.

Buffer installation involves converting portions of crop fields to permanent vegetation. Within a new buffer area, soil becomes stabilized, fertilizers and pesticides are withheld, and pollutants entering in runoff from adjacent crop fields or farm livestock can become trapped among the vegetation and soil (USDA 1999).

When livestock is a concern, it is vital to limit the access to natural buffers around streams and lakes by fencing, if possible, and providing alternate water sources for the sustainability of the livestock. This will protect the natural buffers from soil erosion and from becoming a source of food while simultaneously protecting the water bodies.

Below is a fenced stream and buffer in its natural state.

Internet Resources

*Georgia Wildlife Federation: http://www.gwf.org

*Georgia EPD Adopt-A-Stream Program: http://www.riversalive.org/aas.htm

*Georgia Center for Urban Agriculture: http://www.griffin.peachnet.edu/urbanag/homepage.shtml

*Georgia Native Plant Society: http://www.gnps.org/

*Landscape Management Manual for Georgia Homeowners (ordering information): http://www.p2ad.org/manual.html

*Smart Landscaping-A Georgia Native Plant Guide: http://www.southface.org/home/sfpubs/Sfjb102-native-plants.htm

*Georgia Integrated Pest Management (IPM) site: http://www.gaipm.org

*UGA Pesticide Safety for the Homeownerhttp://www.ces.ugs.edu/pubcd/L430-w.html

*Georgia Department of Community Affairs: http://www.dca.stste.ga.us

*Georgia Environmental Protection Division: http://www.dnr.state.ga.us/dnr/environ/

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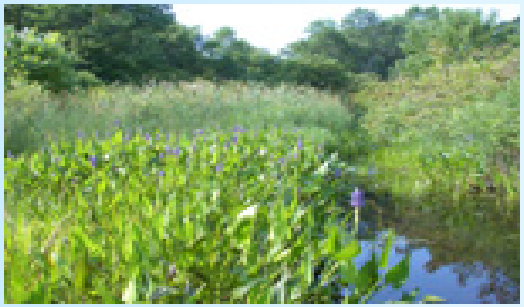
CONSERVATION BUFFERS

BUFFERS Protect Your Land and Visually Demonstrate Your Commitment to Conservation

Compliments of City of Winder Water Distribution

What Are Conservation Buffers?

A buffer (also called a *riparian buffer area* or *zone*) is the strip of natural vegetation along the bank of a stream, lake or other water body that separates the water from developed areas such as lawns, buildings, roads, driveways, etc. Buffers can include grass, shrubs, and trees.



What Do Buffers Do?

Conservation buffers slow water runoff, trap sediment, and enhance filtration by allowing the root systems to hold soil particles together to help prevent erosion, help stabilize stream banks and act as living filters of pollution. Buffers also trap fertilizers, pesticides, pathogens, and heavy metals.

In addition, *buffer strips* enhance wildlife habitat in and out of the water by providing cover for small animals and birds and allowing for stream temperature control and easy and safe connecting corridors from one area to another for these animals.

Conservation buffers also help to reduce odor and noise.

Importance Of Conservation Buffers

If you have a stream, lake or other water body on your property, there are many reasons to protect, preserve, and enhance the *buffer zone* around it. *Buffers* are critical on all streams. For esthetic purposes many residential neighborhoods are built around small streams which feed larger streams and rivers and eventually reach drinking water intakes.

Preserving these *buffers* on all stream sizes not only protects these surface waters but also allows water to percolate through the soil and replenish ground water.

How Can I Help?

*Never mow to the edge of a stream or lake; let the *buffer* develop naturally;

*Plant appropriate native vegetation and cuttings in the *buffer zone*;

*Don't dump anything in a stream, including grass clippings and other yard waste, try *home composting* instead;

*Keep the water body clean by removing trash;

*Leave natural woody debris in a stream. It provides habitat and food for aquatic communities;

*Use pesticides and fertilizers sparingly in your yard and not at all in the *buffer*;

*Keep *septic systems* in good working order to prevent contaminated runoff;

*Don't change the course of a stream or try to use rocks or other materials to stop stream bank erosion yourself. You can do more harm than good.

A natural conservation area and healthy flowing stream is best left in its natural state. Pesticides and fertilizers applied to the lawn can harm water quality, cause algal blooms, and degrade habitat. The above stream bank has been allowed to naturally vegetate. Erosion is minimized, pollutants are filtered out before reaching the stream, habitat for wildlife is created, and shade is provided to keep water temperatures cooler. Benefits increase with a wider buffer.