Cobb County
Watershed Stewardship Program

If you are fortunate enough to live streamside, you may be interested in learning more about the ecology of streams. Contact the Watershed Stewardship Program for further information on stream health.

www.cobbstreams.org

Help keep Cobb County streams clean by preventing residential pollution.

This is an official publication of the Cobb County Water System
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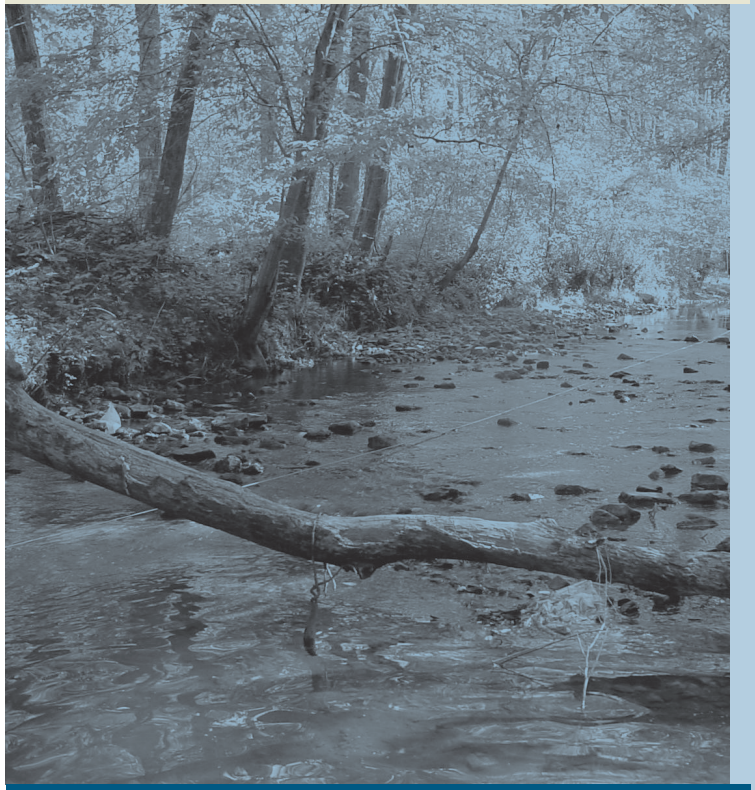
Cobb County

Protecting and Maintaining Small Streams and Open Channels



Guidelines for the Residential Property Owner

Cobb County Water System

Stream Protection

Streamside Property Owners Responsibilities

Property owners with streams or open *channels* (drainage ditches) are faced with many, often unexpected, challenges and responsibilities. Included are increased maintenance, bank erosion, and pollution prevention concerns. Major tasks for these owners are to maintain the buffer of deep-rooted vegetation along the stream, and to remove any litter or debris before it effects the downstream community. Taking these actions lessens the adverse impact of polluted run-off to the downstream neighbors.

Streamside home with a good area of natural vegetation (stream buffer).

Maintaining Stream Buffers

The *stream buffer* is the protective natural area of vegetation adjacent to the stream channel. An effective stream buffer starts at the top of the bank and extends at least 50 feet from the stream channel. The buffer protects the stream by slowing high water flow, absorbing and filtering pollutants, trapping sediment, and stabilizing streambanks. Ideally, the stream buffer consists of upper story (tall trees like Pine, Poplar, Oak, Maple), under story (smaller trees like Alder, Dogwood, Birch) and ground vegetation composed of a wide variety of native shrubs, trees, and grasses. Within the stream channel, the buffer provides shade, habitat, and nutrition for in-stream organisms. Streamside property owners can improve local water quality by ensuring the stream buffer remains healthy.

Enjoy the Stream without Impact

It's possible to enjoy a beautiful yard and a healthy stream. Enhance the natural setting by widening the stream buffer with attractive vegetation. Use plants that attract hummingbirds and butterflies to your streamside habitat. Native trees, shrubs, and grasses will compliment your patio or deck and add value to your home.

Remember, any alteration of the stream bank or impeding the flow of water will most likely lead to additional erosion. Streams are dynamic systems, changing over time with the flowing water. If there is an erosion problem along your stream segment, the best thing to do is stabilize the banks with native vegetation.

Protecting Stream Health on Your Property

Streams play many important roles in our environment, including wildlife habitat, recreation, and source water. It is vitally important that those living along the water understand their role and responsibility in protecting this resource. The flowing water in the stream belongs to the State of Georgia. However, the citizen owns the land beneath the flowing water and along the banks. Since this is private property, responsibility for debris removal is left to the private property owner. Most debris found in local streams is from roadside litter transported to the stream through the storm drain system. Help prevent littering in the community by educating your neighbors about this ongoing problem. Many subdivisions and homeowner associations organize regular community clean-up events to help beautify the area and remove any litter. Upon request, Cobb County Water System supplies bags and gloves for stream clean-up projects.

Cobb County streams are home to a diverse population of organisms. The variety of features within the stream serve as habitats for various animals living in the stream. Woody debris in the stream channel is a vital habitat for stream fauna. These snags are home to many species of fish, crayfish and insects living in the stream.

Good Stream Buffer:
Stable Woody Debris is an important habitat in the stream. These areas are home to a diverse population of organisms.

Breaks in the stream buffer are a common problem that impact streams. Homeowners frequently prevent the establishment of streamside vegetation by manicuring their lawns to the edge of the stream. This practice allows pesticides, fertilizers, pet waste, and sediment to run off the property and reach the stream unimpeded. The shallow roots of grass are inadequate to protect the bank from erosion. Loss of natural vegetation is directly linked to property loss. Without deep-rooted materials holding the bank soils, stream banks will erode every time it rains. Increased stream flow will wash the soils away and increase the rate of property loss along the streamside. To keep the stream healthy and retain your land, plant native vegetation such as river birch along the stream and allow an undisturbed stream buffer to exist.

Lack of Stream Buffer:
Excessive erosion due to lack of deep-rooted vegetation and mowing lawn to bank edge.

Activities that can NEGATIVELY impact stream health:

- Dumping of yard debris, concrete or rocks on stream banks and in streams
- Disturbing land within the stream buffer
- Draining roof or lawn runoff directly into the streams via piping
- Spraying chemicals (pesticide, herbicide, fertilizer) in the stream buffer
- Removing native vegetation within the stream buffer
- Over-applying chemicals on lawns, gardens, and flower beds
- Storing materials in the stream buffer
- Building structures in the stream channel
- Altering the normal course of stream flow
- Modifying stream banks to provide access to the stream channel
- Installing patios, beaches or relaxation areas along the stream

Lack of Stream Buffer:
Water quality is impacted by fecal bacteria from pet waste on the stream bank.

Activities that can IMPROVE stream health:

- Allow stream buffer area to grow naturally
- Plant additional vegetation along the stream buffer
- Pick up pet waste and dispose in the garbage
- Apply appropriate chemicals at correct volumes for pest control
- Store materials in secure locations away from the stream
- Install a rain garden and rain barrels to collect household rainwater
- Use a mulching mower, letting clippings fall instead of bagging
- Compost yard debris (away from stream bank)
- Mulch or plant bare earth on your property
- Remove litter and downed trees from the stream
- Enjoy the stream using passive recreation measures

Good Stream Buffer:
Banks are stabilized with deep-rooted vegetation.