



Water Resource Protection

Article X

Ordinance Revision

February 14, 2007

Today's Presentation



- Buffer Definitions
- Buffer Functions\Benefits
- Buffer Ordinance Purpose
- Overview of the Local, and State buffer rules
 - Watershed Protection
 - Soil & Erosion Control
 - Metro North Georgia
 - City-Owned Greenbelts
- Recreation Ordinances

Riparian Buffer



A riparian buffer 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.

Common Names:

"Buffer Area"

"Vegetative Buffer Strip" – VBS

Interchangeable terms

Buffer vs Vegetative Buffer

"Buffer"

Setback, non-disturbance area, or upland review area; a physical dimension only.



"Vegetative Buffer"

Functional entity used to treat stormwater runoff, and enhance/protect/preserve water quality.



Functions of Buffers

- Trap and remove sediment in runoff
- Reduce bank erosion.
- Capture sediments and pesticides as well as large amounts of nitrogen and phosphorus.
- Helps reduce algae-bloom.
- Store flood waters.
- Maintain habitat for fish and wildlife.
- Help maintain base flow in stream channels.
- Maintain and improve the aesthetic appearance of stream and river corridors.
- Provide opportunities for recreation.



How Do Buffers Protect Water Quality?



Keep new development and land disturbing activities away from surface waters.



Lake Peachtree - Peachtree City, Georgia

How Do Buffers Protect Water Quality?

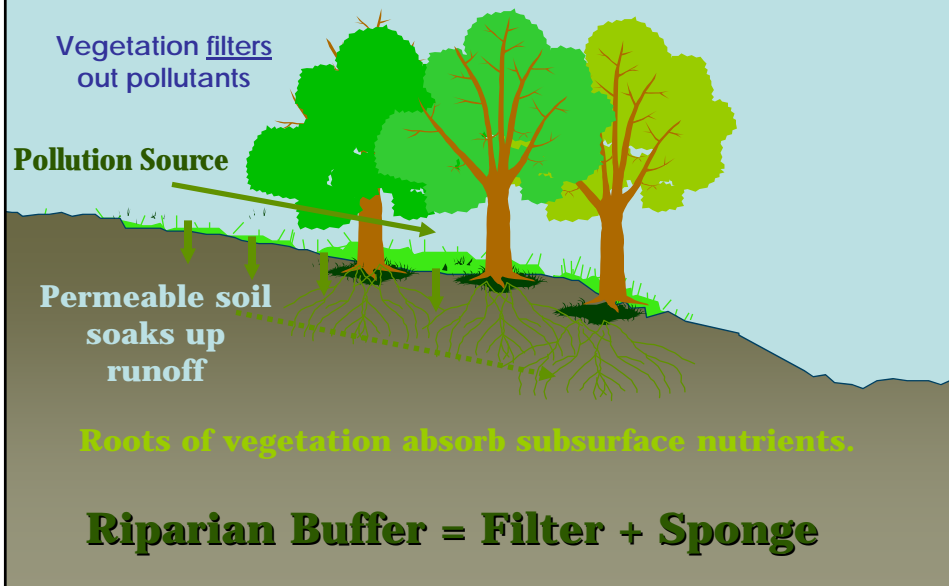


Reduce the amount of impervious surfaces near lakes and streams.



Lake Kedron - Peachtree City, Georgia

How Do Buffers Protect Water Quality?



Sediment



Lake Peachtree

- Georgia's top water quality pollutant.
- Sediment inputs from construction & buffer activities have been measured to exceed 200 tons per acre.

Short-term Benefits Control of Sediment and Nutrients



Sediment removal by dredging machine

Long-term Benefits

Shoreline stabilization, protection of woody debris, reduced runoff, improved aesthetics, etc.



Water Resource Protection Ordinance Purpose

- It is the purpose of this Ordinance is to protect the public health, safety, environment and general welfare; to minimize public and private losses due to erosion, siltation and water pollution; and to maintain stream water quality by provisions designed to:
 1. Create buffer zones along the reservoirs and streams of **Peachtree City** for the protection of water resources; and,
 2. Minimize land development within such buffers by establishing buffer zone requirements and by requiring authorization for any such activities.

Water Resource Protection Buffer Ordinances

- Watershed Protection Buffers
- Metro North Georgia Stream Buffers
- Soil Erosion & Sediment Control Buffer
- City-Owned Greenbelts

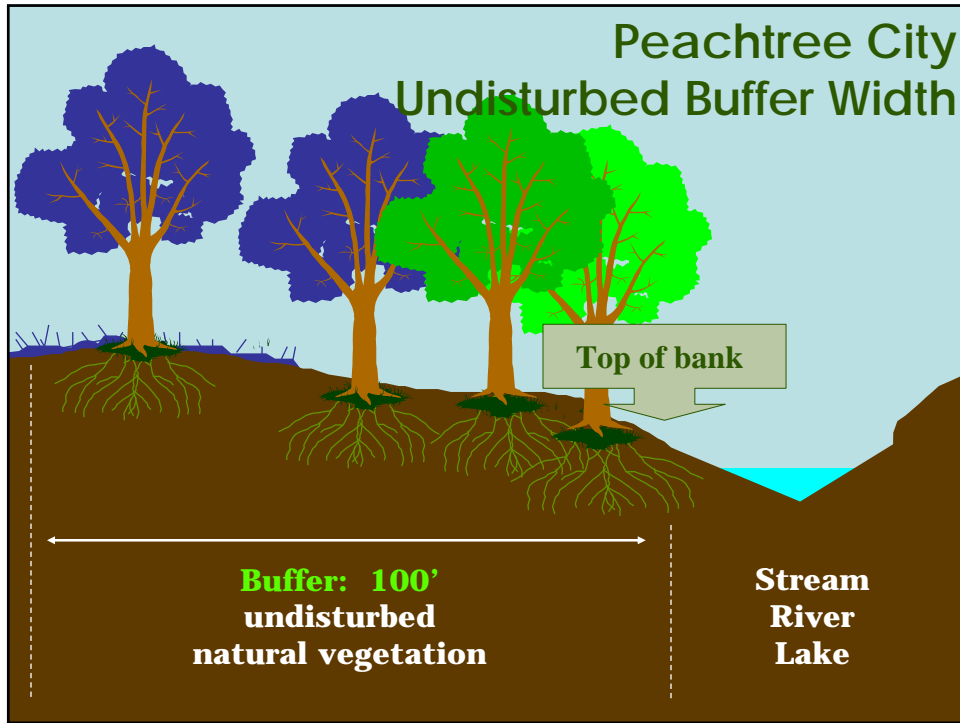
Watershed Protection Buffers

An undisturbed natural buffer area shall be maintained for a distance of 100 feet measured from the normal pool elevation or the stream banks.

Grandfather Provisions

Final plats that are recorded without watershed protection buffers and setback are not subject to the provisions of this ordinance section. Any new permitted activities will be subject to the buffers and setbacks shown on the recorded plat; however, when any property is subdivided the full requirements of this ordinance section will come into effect.

Complete ordinance can be found in Section 1004 – Separate requirements for Streams



Watershed Protection Buffers

Reservoir Requirements

100 ft Undisturbed Natural Buffer Area

<u>Allowed in Buffer</u>	<u>Prohibited in Buffer</u>
<ul style="list-style-type: none"> - Permitted in the buffer as long as cleared areas are kept to an absolute minimum: <ul style="list-style-type: none"> • Perpendicular road • Driveway • Path crossings • 2' wide mulch or gravel foot paths - Planting native vegetation - Hand removal of trash & noxious weeds - Removal of diseased/dead trees - Buffer landscaping by a licensed landscape architect, but the overall plan must be approved by the City Planner. - Limited trimming and pruning if done in the late fall, winter or early spring only. 	<ul style="list-style-type: none"> - Storm drain piping - Storage of: <ul style="list-style-type: none"> • Watercraft • Trailers • Campers • Benches • Fire pits • Other equipment - Impervious surfaces within 150 ft of normal pool elevation, including <ul style="list-style-type: none"> • Septic tanks • Drain fields • Paved paths - Public Utilities - Grubbing, stump removal, land disturbing activity - Herbicides & Pesticides

Complete ordinance can be found in Section 1004 – Separate requirements for Streams

Georgia Native Plant Lists

FLOWERING PERENNIALS

Scientific Name	Common Name	Family	Native	State	Life Span	Height	Fl. Color	Fl. Time	Soil	Light	Notes
<i>Asplenium platyneuron</i>	Common Rock Fern	Asplenium	Yes	GA	Perennial	1-2'	Green	Spring	Moist	Shade	Common in wet woods
<i>Asplenium adnigrum</i>	Common Rock Fern	Asplenium	Yes	GA	Perennial	1-2'	Green	Spring	Moist	Shade	Common in wet woods
<i>Asplenium platyneuron</i>	Common Rock Fern	Asplenium	Yes	GA	Perennial	1-2'	Green	Spring	Moist	Shade	Common in wet woods
<i>Asplenium adnigrum</i>	Common Rock Fern	Asplenium	Yes	GA	Perennial	1-2'	Green	Spring	Moist	Shade	Common in wet woods

TREES

Scientific Name	Common Name	Family	Native	State	Life Span	Height	Fl. Color	Fl. Time	Soil	Light	Notes
<i>Asplenium platyneuron</i>	Common Rock Fern	Asplenium	Yes	GA	Perennial	1-2'	Green	Spring	Moist	Shade	Common in wet woods
<i>Asplenium adnigrum</i>	Common Rock Fern	Asplenium	Yes	GA	Perennial	1-2'	Green	Spring	Moist	Shade	Common in wet woods

SMALL TREES

Scientific Name	Common Name	Family	Native	State	Life Span	Height	Fl. Color	Fl. Time	Soil	Light	Notes
<i>Asplenium platyneuron</i>	Common Rock Fern	Asplenium	Yes	GA	Perennial	1-2'	Green	Spring	Moist	Shade	Common in wet woods
<i>Asplenium adnigrum</i>	Common Rock Fern	Asplenium	Yes	GA	Perennial	1-2'	Green	Spring	Moist	Shade	Common in wet woods

Georgia Native Plant Lists

GRASSES

Scientific Name	Common Name	Family	Native	State	Life Span	Height	Fl. Color	Fl. Time	Soil	Light	Notes
<i>Asplenium platyneuron</i>	Common Rock Fern	Asplenium	Yes	GA	Perennial	1-2'	Green	Spring	Moist	Shade	Common in wet woods
<i>Asplenium adnigrum</i>	Common Rock Fern	Asplenium	Yes	GA	Perennial	1-2'	Green	Spring	Moist	Shade	Common in wet woods

Invasive \ Noxious Plant List

Scientific Name	Common Name
<i>Lonicera maackii</i>	Amur Honeysuckle
<i>Elaeagnus umbellata</i>	Autumn Olive
<i>Ligustrum sinense (& Ligustrum vulgare)</i>	Chinese Privet (& European Privet)
<i>Wisteria floribunda (& W. sinensis)</i>	Japanese Wisteria (& Chinese Wisteria)
<i>Lonicera japonica</i>	Japanese Honeysuckle
<i>Sorghum halepense</i>	Johnsongrass
<i>Pueraria montana</i>	Kudzu
<i>Albizia julibrissin</i>	Mimosa
<i>Rosa multiflora</i>	Multiflora Rose
<i>Ailanthus altissima</i>	Tree of Heaven

Metro North Georgia Buffers

Newly Adopted

Required to be adopted in its entirety by the EPD, and refers only to streams as defined by the ordinance.

"Stream" means any stream, beginning at:

1. The location of a spring, seep, or groundwater outflow that sustains streamflow; or
2. A point in the stream channel with a drainage area of 25 acres or more; or
3. Where evidence indicates the presence of a stream in a drainage area of other than 25 acres, the City of Peachtree City may require field studies to verify the existence of a stream.

All land development activity subject to this ordinance shall meet the following requirements:

1. An undisturbed natural vegetative buffer shall be maintained for 50 feet, measured horizontally, on both banks (as applicable) of the stream as measured from the top of the stream bank.
2. An additional setback shall be maintained for 25 feet, measured horizontally, beyond the undisturbed natural vegetative buffer, in which all impervious cover shall be prohibited. Grading, filling and earthmoving shall be minimized within the setback.
3. No septic tanks or septic tank drain fields shall be permitted within the buffer or the setback.

Grandfather Provisions & Exemptions are included in this buffer ordinance

Soil Erosion & Sedimentation Control Buffers

The Georgia State Legislature has passed the "Erosion and Sedimentation Control Act of 1975" to control soil erosion and protect natural resources by regulating soil disturbing activities such as clearing, grading, excavating, and/or filling.

- This law also restricts land disturbance and trimming of vegetation within the state-required 25 foot buffer adjacent to creeks, streams, rivers, saltwater marsh, and most lakes and ponds.
- Homeowners are prohibited from undertaking any land disturbance within the buffer without a variance from the EPD; however, they are allowed to thin or trim vegetation so long as water quality and aquatic habitat are protected and a natural canopy is left in sufficient quantity to provide shade on the stream bed.
- City is attempting to clarify what thinning/trimming is allowed.

Complete ordinance can be found in Section 1005 – No Grandfather Provisions

Soil Erosion & Sedimentation Control Buffers

25 ft Undisturbed Natural Buffer Area of State Waters

Allowed Thinning/Trimming in Buffer

- A city permit is required to perform limited activities within buffer. These activities can include:
 - Limited trimming and pruning if done in the late fall, winter or early spring only.
 - Shrubs and forest undergrowth may be selectively maintained.
 - Removal of diseased/dead trees.
 - Hand removal of trash & noxious weeds.
 - 2' wide mulch or gravel foot paths.
 - Planting native vegetation.
- A plan prepared by a registered landscape architect or arborist is required for any of the above activities that involve removal, pruning or planting within the buffer.
- Maintaining existing structures

Prohibited in Buffer (Partial list)

- Mechanized equipment to remove trees from buffer.
- Land-Disturbing activities, including but not limited to:
 - Stripping of vegetation
 - Regrading
 - Grubbing
 - Stump Removal
- Use of herbicides, pesticides, or other chemicals, either natural or manmade.
- Cutting more than 25% of the crown of a tree or removing more than 2/3 of the tree height.
- Trimming native shrubs and forest undergrowth under a height of 4 to 5 feet.
- Enhancing existing structures

Complete ordinance can be found in Section 1005 – Exemptions are included in this buffer ordinance

Soil Erosion & Sedimentation Control Buffers

- **Objectives:**
 - Runoff filtration & infiltration
 - Streambank stabilization
 - Downstream flood attenuation
 - Wildlife habitat and corridors

Soil Erosion & Sedimentation Control Buffers

Vegetation Function Table

Function	Ground Cover	Shrubs	Trees
Sediment Trapping	High	Medium	Low
Filtration of Sediment Borne Nutrients, Microbes & Pesticides	High	Low	Low
Soluble Nutrients & Pesticides Removal	Medium	Low	Medium
Flood Conveyance	High	Low	Low
Reduce Streambank Erosion	Medium	High	High

City-Owned Greenbelts

Newly Adopted

The areas that are platted as Greenbelt throughout the City of Peachtree City are to be left natural.

Allowed in Greenbelt

- Removal of trash and debris
- Hand removal of noxious weeds is allowed within 3 feet of an adjacent private property line
- Foot traffic



Prohibited in Greenbelt

- Improvements such as:
 - Tables
 - Foot trails
 - Paths
 - Picnic areas
 - Thinning or trimming of vegetation
- Storage of:
 - Boats
 - Canoes
 - Kayak
 - Any other equipment

Recreation Ordinances – Chap 54

In general, the revised recreation ordinances help to:

- Clarify access to Lake Peachtree and Lake Kedron.
- Refer people back to Water Resource Protection Ordinance for buffer restrictions.
- Limit horsepower of boats on Lake Peachtree.
- Clarify state registration requirements and rules for boating.
- Prohibit unattended watercraft.

Thank You



**Water
Resource
Protection**
City of Peachtree City

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