Westchester County Committee on Nonpoint Source Pollution

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[redacted] County Executive

Frequently Asked Questions ON BUFFERS

Q: WHAT IS NONPOINT SOURCE POLLUTION?

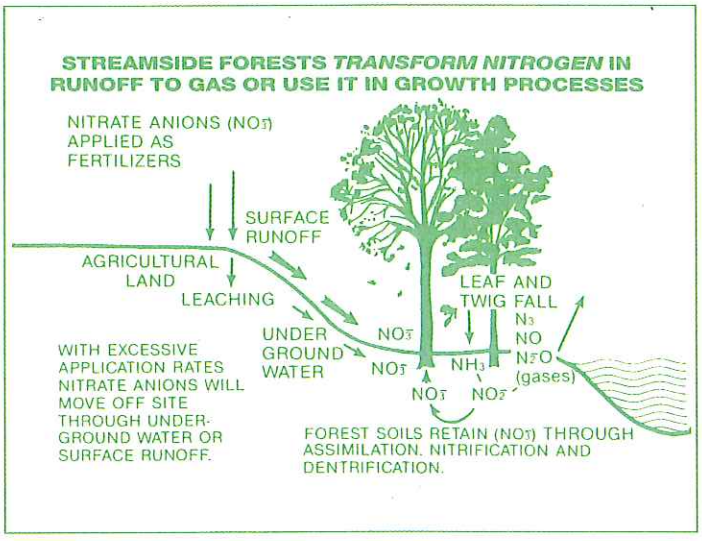
A: Nonpoint source pollution comes from a variety of places. Nonpoint source pollution includes sediments, oil from roads, organic chemicals and excess fertilizers from lawns and managed turf areas, and wastewater from failing septic systems. All of these nonpoint source pollutants can be carried to local waterways with stormwater runoff.

Q: WHAT ARE BUFFERS?

A: Buffers are a transition zone between a watercourse, water body or wetland and developed areas such as roads, houses, mowed areas, etc. Buffers are vegetated strips of land that protect water resources from impacts caused by land uses and disturbance.

Q: WHAT DO BUFFERS DO?

A: Buffers filter surface and subsurface stormwater flows before they enter a wetland, watercourse or body of water, reducing the amount of pollutants entering these systems. Naturally vegetated buffers can significantly reduce the water quality impacts of development. These buffers, around watercourses and wetlands, are one of the most practical and cost effective pollution prevention and ecosystem protection measures.



Q: WHY ARE BUFFERS NECESSARY?

A: In general, riparian (streamside) and wetland buffers do the following:

- Naturally vegetated buffers filter out excessive nutrients and other non-point source pollutants in runoff, before they reach streams, lakes, wetlands and embayments.
- Moderate runoff and stream temperatures. (Runoff from pavement is significantly warmer than runoff that passes through soil and vegetation, and trees provide shade for streams).
- Control the velocity, quantity and quality of stream flows.
- Enhance wildlife habitat and diversity.
- Stabilize steambanks and reduce channel erosion.
- Regulate stream channel shape and size.
- Provide leaf litter as food for animals at the base of the food chain.
- Reduce nitrogen from shallow groundwater flows to streams.
- Reduce potential formation of fish migration barriers (shallow areas and accumulated sediment).
- Enhance recreational opportunities.
- Increase property values.

Q: WHAT ARE THE COMPONENTS OF A RIPARIAN BUFFER?

A: The most effective buffers have three distinct zones with different functions and vegetative targets. The widths can vary depending on site-specific conditions.

- **Streamside zone** - a minimum of 25 ft. wide, this is the zone nearest to the stream or wetland. The streamside zone protects the physical and ecological integrity of the ecosystem. Activities should be highly restricted in this area.
- **Middle Core** - a minimum of 50 ft. wide, it borders the streamside zone. This zone can allow for passive recreation and stormwater management practices.
- **Outer Core** - a minimum of 25 ft. wide, this zone functions as the buffer's buffer. It may support turf, but native trees and shrubs are more effective at reducing stormwater flows and pollutants.

See these additional Water Quality Fact Sheets (FAQS):

Fact Sheet 1 - Urban Watershed Management
Fact Sheet 2 - Imperviousness
Fact Sheet 3 - Septic Systems
Fact Sheet 4 - Wetland Restoration and Creation
Fact Sheet 5 - Stormwater Runoff

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BUFFERS
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CONSERVATION

Visit the United States Department of Agriculture - Natural Resources Conservation Service web site at www.nrcs.usda.gov

Additional information on buffers can be obtained from the Chesapeake Bay Program at (800) 968-7229, or visit www.chesapeakebay.net

For more information on water quality, contact the Westchester County Department of Planning at (914) 285-4422, or visit the Planning Department web site at www.westchestergov.com/planning