

RIPARIAN BUFFERS BECOMING THE TOOL OF CHOICE FOR STORMWATER MANAGEMENT

(Editor's Note: This month, the Legal and Regulatory Notes column makes a brief departure from its normal focus on new case law and new or revised state and federal regulations. Instead, it looks at how larger municipalities are complying with federal stormwater regulations and how smaller ones are implementing local regulations to protect water quality. It also explains the concept of riparian buffers, the land use tool that is being used by both large and small municipalities in their efforts to improve water quality.)

Municipalities should take note of the increasing attention being paid to riparian buffer zones as a tool for protecting lakes and streams from stormwater degradation, especially in places where stream banks and shorelines have not yet been developed. It signifies a renewed focus on natural infiltration as the most desirable and least expensive option for stormwater management.

The Vermont General Permit for stormwater discharges from MS4 municipal separate storm sewer systems provides a case-in-point. (MS4 municipalities are those with populations greater than 10,000 and densities greater than 1000 people per square mile. They are: Burlington, Colchester, Essex, Essex Junction, Milton, Shelburne, South Burlington, Williston and Winooski.) As part of a settlement agreement between the Agency of Natural Resources and the Conservation Law Foundation, these nine municipalities regulated under the MS4 permit are required to include riparian buffer protection strategies in their stormwater plans. As a result, most of these Chittenden County municipalities already have some form of riparian buffer standards in place.

According to the agreement, by April 1, 2007, each MS4 municipality must prepare and submit to the state a report on the ordinances or other strategies it has adopted to protect and regulate development in stream corridors. By January 1, 2008, the MS4 municipalities must submit a comprehensive plan including a map indicating developed and undeveloped areas within each stream corridor. The plan must include options to ensure enhanced protection of stream corridors that have not been developed as well as stream corridor restoration options for those that have been developed or otherwise converted to impervious surfaces (i.e., human-made surfaces such as roads, parking areas and roofs, where precipitation runs off rather than infiltrates).

Riparian buffers are finding their way into the forefront of Act 250 permitting as well. A state guidance document for Act 250 projects adopted on December 9, 2005 recommends a minimum riparian buffer zone width of 100 feet for lakes, and 50 or 100 feet for streams, depending on the physical and biological characteristics of the stream, its banks and the floodplain. Where a wetland or critical aquatic or terrestrial wildlife habitat area extends beyond the edge of the buffer width, the buffer zone may need to be wider.

Even municipalities that are not required by law to adopt riparian buffer ordinances should consider the benefits of doing so. Establishing local riparian buffer zones maintains reasonable distances between development and adjacent lakes and streams. Riparian buffers are simply the strips of grass, shrubs, trees and naturally vegetated ground along the banks of lakes, rivers and streams. A clearly written riparian buffer ordinance can lay out, in no uncertain terms, what uses are permitted within the buffer zone and under what conditions other specific uses may be appropriate.

Local officials have long heard how naturally vegetated riparian buffers serve many laudable environmental purposes: they filter pollutants delivered in urban stormwater, reduce erosion and control sedimentation, stabilize stream banks, contribute organic matter that is a source of energy for aquatic ecosystems, provide a tree canopy to shade streams and promote desirable aquatic organisms such as trout, provide riparian wildlife habitat, and furnish scenic value and recreational opportunity.

Riparian buffers can also protect valuable property, including municipal infrastructure such as roads, bridges, recreation facilities and trails. When sediment accumulates in streams and rivers, their capacity to carry runoff is diminished. The gradual build-up clogs natural channels, resulting in increased

flooding and property damage. Using vegetated buffers to set development back from stream banks and shorelines is a cost-effective protection against the hazards caused by flooding, unstable streams, and shoreline erosion.

Now is the time to consider developing a local ordinance to protect the undeveloped stream corridors in your municipality. VLCT MAC is currently working on a model riparian protection ordinance and is ready to work with you on incorporating buffer standards into your zoning regulations. Please contact the Municipal Assistance Center if you are interested in this free service.

- Milly Archer, VLCT Water Quality Coordinator

VLCT News, March 2006