SECTION 2A: WATERCOURSE PROTECTION OVERVIEW

As noted, the unique geology of the Finger Lakes has been crucial to its human history. In addition to steep slopes, a geological feature common throughout the Finger Lakes are streams, creeks, waterfalls, rivers, ponds, and lakes. These features, collectively known as "watercourses," face the same development pressures that steep slopes do. Larger, year-round homes on challenging sites—with owners wealthy enough to utilize non-standard building or engineering practices—have lead to concerns amongst citizens and their elected leaders. Increased construction on challenging sites can quicken the natural erosion and sedimentation system. This is especially true when working in close proximity to watercourses.

Watercourses and wetlands are in jeopardy of being damaged and destroyed by filling, excavating, building, clearing and grading, and other such acts inconsistent with the natural conditions of such areas. Land adjacent to watercourses is an environmentally sensitive area and valuable natural resource, which benefits the entire region. The environmental sensitivity of watercourses and adjacent land is due to their ability to restore and maintain the chemical, physical, and biological integrity of the water resources, reduce erosion and control sedimentation, stabilize stream banks, provide infiltration of stormwater runoff, provide tree canopy to shade streams and promote desirable aquatic organism, provide riparian (stream-side) and lacustrine (lake-side) wildlife habitat, and furnish scenic value and recreational opportunity.

A buffer for a stream system consists of a forested strip of land extending along both sides of a stream and its adjacent wetlands, floodplains, or slopes. The forest buffer width should be adjusted to include contiguous sensitive areas, such as steep slopes or erodible soils, where development or disturbance may adversely affect water quality, streams, wetlands, or other water bodies.

The width of forest buffers should be a minimum of one hundred feet. Depending on stream order, percent slope, 100-year floodplain, and presence of wetlands or other critical natural resources, the buffer may be wider.

The forest buffer shall be composed of three distinct zones, with each zone having its own set of specified uses and vegetative targets. The description of these zones comes from several governmental sources at the state and national level.

Zone 1 Streamside Zone

The function of the streamside zone is to protect the physical and ecological integrity of the stream ecosystem. The streamside zone begins at the edge of the stream bank of the active channel and extends a minimum of 25 feet from the top of the bank. Allowable uses within this zone are restricted to flood control structures, utility rights of way, footpaths, and road crossings. The vegetative target for the streamside zone is undisturbed native vegetation.

Zone 2 Middle Zone

The function of the middle zone is to protect key components of the stream and to provide distance between upland development and the streamside zone. The middle zone begins at the outer edge of the streamside zone and extends a minimum of 50 feet. Allowable uses within the middle zone are restricted to biking or hiking paths, stormwater management facilities, limited recreational uses, and limited tree clearing with approval. The vegetative target for the middle zone is mature native vegetation adapted to the region.

Zone 3 Outer Zone

The function of the outer zone is to prevent encroachment into the forest buffer and to filter runoff from residential and commercial development. The outer zone begins at the outward edge of the middle zone and provides a minimum width of 25 feet between Zone 2 and the nearest permanent structure. There should be no septic systems, permanent structures or impervious cover, with the exception of paths, within the outer zone. The vegetative target for the outer zone may vary, although the planting of native vegetation should be encouraged to increase the total width of the buffer.

The forest buffer, including wetlands and floodplains, should be managed to enhance and maximize the unique value of these resources. Management includes specific limitations on alteration of the natural conditions of these resources. The following practices and activities should be prohibited within the forest buffer:

1. Clearing of existing vegetation.
2. Soil disturbance by grading, stripping, or other practices.
3. Construction or placement of any permanent or semi-permanent structures
4. Filling or dumping.
5. Drainage by ditching, under drains, or other systems
6. Use, storage, or application of pesticides, except for the spot spraying of noxious weeds or non-native species consistent with recommendations of the New York State Department of Environmental Conservation.
7. Housing, grazing, or other maintenance of pets or livestock.
8. Storage or operation of motorized vehicles, except for maintenance and emergency use

Regulation of development near watercourses can help mitigate damage to the natural environment and human environment and ultimately protects the public health, safety, and general welfare. Regulation allows the reasonable use of private property by encouraging flexible design of development in these critical areas.