

DRAFT LANGUAGE FOR MODEL LOCAL LAW – OCTOBER 2015

Developed for the Moodna Creek Watershed Intermunicipal Council
by the Council's Outreach & Education Committee
with technical assistance from the Orange County Planning Department

**[Name of municipality], Orange County, New York
Stream Corridor Overlay Local Law [April 2014]**

1. Title

This Local Law shall be known and may be cited as the “Stream Corridor Overlay Local Law of the _____ (municipality).” [If applied to zoning – This Local Law shall amend the Zoning Local Law of the _____ (municipality) to add Article (section) entitled “Stream Corridor Overlay Requirements.”]

2. Findings

The _____ (municipal type) Board of the _____ (municipality) hereby finds that the encroachment of development activities into stream corridors could create a public and private nuisance, degrade the natural environment, and be harmful to the public health, safety and welfare. Such activities can increase the risk of flooding in the stream corridor, damage water quality in the surface waters within and downstream of the _____ (municipality), harm the aesthetic qualities of the _____ (municipality), damage wildlife and vegetative habitat, pose additional threats to rare, threatened and endangered species that depend on riparian habitats, and tend to depreciate the value of properties in the _____ (municipality). The _____ (municipal type) Board finds that these problems can be diminished by applying a primary and a secondary riparian buffer to all stream corridors within the _____ (municipality) in keeping with the standards established in this Local Law.

3. Purpose

The purpose of this Local Law (article) is to establish requirements for creating and maintaining buffers to protect the water quality in the streams of the _____ (municipality), Orange County, and the natural environment around them, thereby protecting public health, safety and welfare in this _____ (municipal type). This Local Law (article) promotes the prevention of sediment, nutrient and pollutant loads from entering streams by maintaining stream buffers measured from the top of the stream bank with a width to be determined by the conditions adjacent to the stream corridor. Research has shown that the distances set forth within this local law are effective at filtering nutrients and pollutants to protect water quality.¹ Additionally, creating buffers for structures and improvements from highly erodible streams will help minimize future property damage and other impacts associated with streambank erosion. Although it is not mandated in this Local Law (article), the _____ (municipality) strongly

¹ Stream buffer widths were determined using scientific guidance set forth in *Conservation Thresholds for Land Use Planners*, published by the Environmental Law Institute in 2003, and *Conservation Buffers: Design Guidelines for Buffers, Corridors, and Greenways*, published by the United States Department of Agriculture in 2008.

encourages landowners to maintain stream buffers of 330 feet from the top of stream bank, on undeveloped land where feasible, in order to protect wildlife and vegetative habitat.

4. Definitions

Below is a list of terms used in this code that should be defined in the municipality's local land use regulations. If any of the following terms are not defined in the existing local land use regulations, or if the municipality wishes to refine their definition of a term, definitions are included in Appendix A of this section.

- Bank
- Buffer
- Development Activities
- Green Infrastructure Practices
- Highly Erodible Soils
- Improvement
- Intermittent Stream
- Impervious Surface
- Parcel
- Perennial Stream
- Pollutant
- Riparian
- Steep Slope
- Stream
- Structure
- Top of Bank
- Wetlands

5. Applicability

These requirements do not supersede or replace any greater applicable requirements established under state, federal or local law and are applicable to all land within _____ (municipality). This Local Law (article) shall apply to all proposed actions requiring approval by a staff member, board, or other party or entity acting on legal behalf of _____ (municipality). The Riparian Buffer Area, both Primary and Secondary, shall be acknowledged and displayed graphically on all plans and relevant materials that are submitted to _____ (municipality) as part of any land use approval process, including approvals for subdivisions, site plans, building permits and appeals for variances.

6. Requirements

6.1. Protection Requirements for Perennial Streams

A buffer shall be required for all development activities that occur in proximity to perennial streams with additional considerations for wetlands, highly erodible soils, 100-year floodplains and steep slopes. Protection shall be divided into a Primary Riparian Buffer and a Secondary Riparian Buffer that protects overall water quality by limiting development in accordance with

the adjacent land's ability to filter sediment, nutrients and other pollutants. This protection will provide stability to the stream and stream bank. The minimum total buffer width for all perennial streams is 100 feet (*Additional Protection Option: 200 feet*) as measured from the top of the stream bank. There is no established maximum buffer width.

The _____ (municipality) shall require the delineation of any applicable Primary or Secondary Riparian Buffers on all subdivision plats, site plan applications, special permits, special approval and variance applications, building permit applications, and excavation or fill permit applications, even in the event that a stream is not located within the subject parcel but either the Primary Riparian Buffer or the Secondary Riparian Buffer is located on the subject parcel. This delineation shall be subject to review and approval by the appropriate board or officer. Said delineation shall also be referenced in any deed for any parcel located wholly or partly within any Primary or Secondary Riparian Buffers, which shall state that:

The premises hereby conveyed are subject to a Primary and/or Secondary Riparian Buffer established pursuant to the "Stream Corridor Overlay Local Law of the ____ (municipality), as shown on _____ (plat or other map or permit) recorded in the Office of the Orange County Clerk on _____ (date) in _____ (book/page/file/drawer)." Prior to any soil-disturbing activity resulting from a permit or approval by the _____ (municipality), the Primary Riparian Buffer and Secondary Riparian Buffer shall be clearly delineated on site and shall be left undisturbed or otherwise protected throughout the construction phase.

6.1.1 Riparian Buffer Area. SELECT ONE OF THE FOLLOWING OPTIONS:

Protection Option A: The Riparian Buffer will begin at the top of the stream bank and extend a minimum of 100 feet horizontally measured in a direction directly perpendicular to the stream bank in a horizontal plane. The Buffer area will be divided into a Primary Riparian Buffer extending 50' from the stream bank and a Secondary Riparian Buffer extending 50' from the outward edge of the Primary Riparian Buffer **OR**

Protection Option B: The Riparian Buffer will begin at the top of the stream bank and extend a minimum of 200 feet horizontally measured in a direction directly perpendicular to the stream bank in a horizontal plane. The Buffer area will be divided into a Primary Riparian Buffer extending 100' from the stream bank and a Secondary Riparian Buffer extending 100' from the outward edge of the Primary Riparian Buffer.

OR

Protection Option C: The Primary Riparian Buffer will begin at the top of the stream bank and extend a minimum of 100 feet horizontally measured in a direction directly perpendicular to the stream bank in a horizontal plane. The Buffer area will be divided into a Primary Riparian Buffer extending 50' from the stream bank and a Secondary Riparian Buffer extending 50' from the outward edge of the Primary Riparian Buffer. Should a wetland or a 100-year floodplain exist at least partially within the Secondary Riparian Buffer, the entirety of that area will be included within the Secondary Riparian Buffer and will be subject to the restrictions afforded to the Secondary Riparian Buffer. Should a steep slope or highly erodible soils exist partially within the Secondary Riparian

Buffer, that steep slope or highly erodible soil area *up to a maximum* of 400 feet from the stream bank shall be included within the Secondary Riparian Buffer. **OR**

Protection Option D²: The Riparian Buffer will begin at the top of the stream bank and extend a minimum of 200 feet horizontally measured in a direction directly perpendicular to the stream bank in a horizontal plane. The Buffer area will be divided into a Primary Riparian Buffer extending 100' from the stream bank and a Secondary Riparian Buffer extending 100' from the outward edge of the Primary Riparian Buffer. Should a wetland or a 100-year floodplain exist at least partially within the Secondary Riparian Buffer, the entirety of that area will be included within the Secondary Riparian Buffer and will be subject to the restrictions afforded to the Secondary Riparian Buffer. Should a steep slope or highly erodible soils exist partially within the Secondary Riparian Buffer, that steep slope or highly erodible soil area *up to a maximum* of 400 feet from the stream bank shall be included within the Secondary Riparian Buffer.

6.1.2 Primary Riparian Buffer

a. Purpose: The function of the Primary Riparian Buffer is to protect the physical and ecological integrity of the portion of the riparian corridor in closest proximity to the stream through protection and enhancement of the vegetation. Vegetation provides erosion protection, shade, leaf litter, woody debris, wildlife habitat, and filtering of sediment, nutrient and pollutant loads to the stream.

b. **Permitted Uses.** Development and use within the Primary Riparian Buffer are restricted to the following, the entirety of which may not modify or interrupt more than 10% of the entire Primary Riparian Buffer unless more area is necessary for the protection of human health, utility usage, public infrastructure, or the betterment of the riparian corridor.

- Benches or seating;
- Implementation of educational and scientific research activities that enhance or otherwise do not negatively impact the composition or health of the existing vegetation;
- Flood control structures, bioretention areas or other green infrastructure stormwater management practices , and stream bank stabilization measures approved by the Orange County Soil and Water Conservation District, Natural Resource Conservation Service, Army Corps of Engineers, or NYS Department of Environmental Conservation;
- Maintenance of roadways or impervious surfaces existing at the time of the adoption of this provision;

² Protection Option D is recommended for all Class A streams.

- Culverts or other stream crossings necessary to construct a driveway, transportation route, or utility line to provide access and utilities to a parcel, which are designed to minimize negative impacts to the stream and Primary Riparian Buffer;
- Public water supply infrastructure, including wells, or public wastewater outfall structures and associated pipes;
- Public access and public recreational facilities that must be on the water including boat ramps, docks, foot trails leading directly to the stream, fishing platforms and overlooks;
- Public sewer lines and/or other utility easements.
- Techniques to remove invasive species;
- Non-paved recreational trails no wider than 10 (*Additional Protection Option: 5*) feet that either provide access to the stream or are part of a continuous trail system running roughly parallel to the stream;
- Storage of nonmotorized recreational watercraft measuring less than 15 feet in length.
- Temporary use of erosion control measures such as silt fencing;
- Limited tree cutting, forestry or vegetation management done in accordance with a Forest Stewardship Plan prepared by the Department of Environmental Conservation, a forester who is certified by the Society of American Foresters or such successor organization as is later created, or a Cooperating Consulting Forester with the New York State Department of Environmental Conservation. Any harvest must furthermore be done in accordance with the *New York State Forestry Best Management Practices for Water Quality – BMP Field Guide*. Vegetation management may not compromise the integrity of the stream bank or negatively impact the function of the Primary Riparian Buffer. Tree cutting within 25 (*Additional Protection Option: 50*) feet of the top of stream bank is prohibited. Any such activity must retain at a minimum 60% (*Additional Protection Option: 95%*) of the preexisting tree canopy in the Primary Riparian Buffer at all times. Removal of trees in any location shall be permitted provided the tree or trees pose an immediate threat to property or public safety.

6.1.2. Secondary Riparian Buffer

a. Purpose The function of the Secondary Riparian Buffer is to filter sediment, nutrients and pollutants in runoff and slow the rate at which runoff enters the Primary Riparian Buffer.

b. Permitted Uses. Within the Secondary Riparian Buffer development uses are restricted to the following:

- All development and uses permitted in the Primary Riparian Buffer;
- Minor recreational structures and improvements to allow passive recreation in the Secondary Riparian Buffer such as decks, picnic tables, playground equipment, and small concrete slabs, the total area of which is not to exceed 200 square feet each and in aggregate occupy no more than 10% of the Secondary Riparian Buffer area on the parcel;
- Fences, provided such structures do not impede floodwaters;
- Landscaping, planting or routine maintenance activities that do not encroach upon or negatively impact the integrity of the Primary Riparian Buffer.

6.2 Prohibited Activities in the Riparian Buffer

The following activities are explicitly prohibited in both the Primary and Secondary Riparian Buffers.

6.2.1. Storage or placement of any hazardous materials. All sewage systems, both drain fields and raised systems, must adhere to a 100- foot buffer from perennial streams, in compliance with the New York State Codes, Rules and Regulations, Title 10. (*Additional Protection Option: All sewage systems, both drain fields and raised systems shall adhere to a 150-foot buffer from perennial streams.*)

6.2.2. Purposeful introduction of invasive vegetative species that may impact or reduce the persistence of other vegetation present within the stream corridor. For a listing of invasive vegetation to avoid, refer to the New York State Department of Environmental Conservation (NYS DEC) Advisory Invasive Plant List (periodically updated; most recent version dated 14 May 2012) and the NYS DEC Division of Materials Management Bureau of Pest Management. If invasive or nuisance species are present on your property, NYS DEC may have developed a protocol to combat that species. Refer to the NYS DEC website for additional information.

6.2.3. Waste storage and disposal including but not limited to disposal and dumping of snow and ice, recyclable materials, manure, hazardous or noxious chemicals, used automobiles or appliances, and other abandoned materials.

6.2.4. Any combination of allowed or exempt activities that may compromise or alter more than 10% of the total Primary and Secondary Riparian Buffer that lies within a parcel.

6.2.5. Mining or removal of soil, sand and gravel, and quarrying of raw materials.

6.2.6. Widening, straightening or any such alteration of the beds and banks of streams except where the New York State Department of Environmental Conservation has issued a permit expressly allowing such activities on the parcel.

6.2.7. Application of herbicides, pesticides, fertilizers, or other chemicals that contain hazardous substances as defined by Chapter V of the New York State Department of Environmental Conservation, §597.2 Hazardous Substance List, as amended.

6.2.8. Parking of motorized vehicles, including watercraft.

6.2.9. Construction or replacement of private wells within 100 feet of perennial streams, in keeping with Title 10 of the New York State Codes, Rules and Regulations.

6.2.10. Altering habitat of rare, threatened or endangered species.

6.3 Protection Requirements for Intermittent Streams

Although seasonal or temporary in nature, ephemeral and intermittent streams provide the same ecological and hydrological functions as perennial streams by moving water, nutrients, and sediment through watersheds. These streams provide hydrological connections across the landscape, absorb high volumes of water during storm events and other high-water flows to reduce erosion and improve water quality. For those streams classified as intermittent, only the Primary Riparian Buffer shall apply and it shall be measured in the same manner as dictated for a perennial stream. All provisions applicable to the Primary Riparian Buffers for perennial streams shall apply to intermittent streams.

7. Exemptions

The following specific activities are exempt from the requirements of this Local Law (article).

7.1. Agricultural activities on parcels that meet New York State Department of Agriculture and Market's definition of a farm operation shall not be subject to the requirements of this local law.

7.2. Work consisting of the repair or maintenance of any lawful use of land that was approved for such parcel on or before the effective date of this Local Law, or if no approval was required for such use, was lawfully in existence as of said date.

7.3 (Language re: pre existing non-forming uses being exempt will be included; or a cross-reference to the municipal code regarding same should be included)

8. Administration and Enforcement (Delete if added to a Zoning Local law that already contains such provisions.)

8.1 This Local Law shall be administered by _____ (Municipal Administrator, i.e. Code Enforcement Officer/ Planning Board, if adopted as a zoning amendment) or other official as designated.

8.2 A development plan shall not be approved, and therefore a building permit shall not be issued, unless the development plan satisfies the requirements of this Local Law. The _____ (municipality) may deny, suspend, or revoke any development plan if the plan violates this Local Law.

8.3. The _____ (municipality) may cancel or revoke any approved development plan or issued building permit if the permittee or property owner fails to comply with the requirements of this Local Law; and may take legal action to stop, revoke or cancel the approval or the building permit, to enjoin any violation of this Local Law, and to require remediation of any damage resulting from such violation.

9. Severability (Delete if added to a Zoning Local law that already contains such provisions.)

9.1 If any section or specific part or provision or standard of this Local Law/article or the application thereof to any person or circumstance be adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part, provision or application directly involved in the controversy in which such judgment shall have been rendered and shall not affect or impair the validity of the remainder of this Local Law/article or the application thereof to other persons or circumstances, and the _____ (Municipal) Board hereby declares that it would have enacted this Local Law/article or the remainder thereof had the invalidity of such provision or application thereof been apparent. The other portions of these regulations not affected by the decision of the court shall remain in full force and effect.

APPENDIX A: DEFINITIONS

Bank: the lateral confines of a stream, river, or other watercourse which contains the normal flow of the watercourse.

Buffer: land on each side of a stream that shall be left vegetated to provide riparian corridor functions. Buffers are measured horizontally from the top of the stream bank in a direction directly perpendicular to the bank and in the horizontal plane.

Development Activities: the construction, reconstruction, conversion, structural alteration, relocation, or enlargement of any structure or improvement that requires a permit or approval from the _____ (municipality) including that intended for agricultural use; any mining excavation, landfill, or land disturbance, including grading and filling.

Green Infrastructure Practices—stormwater management practices that maintain or restore natural stormwater flow pattern by allowing the water to permeate slowly into the ground and be used by plants; green infrastructure practices generally incorporate better site design and low impact development design techniques.

Highly Erodible Soils: Soils that have a maximum potential for erosion that equals or exceeds eight times the tolerable erosion rate³.

Improvement: alterations to the land that enhance the utility or value of any structure placed on the site.

Intermittent Stream: surface water drainage channels with definite bed and banks in which there is not a permanent flow of water (and may be represented as a dashed line on United State Geological Survey (USGS) 7.5 Minute Quadrangle maps). Sometimes referred to as “ephemeral stream.”

Impervious Surface: any paved, hardened or structural surface including, but not limited to, buildings, dams, decks, driveways, parking areas, patios, streets, swimming pools, tennis courts, walkways, and other non-permeable structures and improvements. Hardened surfaces shall include compacted shale, gravel, and packed dirt, as well as other materials that become impervious when compacted.

Parcel: a designated tract or area of land established by plat, subdivision, or as otherwise permitted by law, to be separately owned, used, developed, or built upon.

³ The maximum potential erosion rate for any given soil can be determined by using the following formula: $R \cdot K \cdot LS / T < 8$, where R= rainfall, K= erodibility value of the soil, LS= the slope factor, and T= the tolerable erosion rate; factors K, LS, and T are established by the Natural Resources Conservation Service. Highly erodible soils must be verified in the field; a list of highly erodible soils is available from the Orange County Soil and Water Conservation Service.

Perennial Stream: a stream that typically flows continuously throughout the year in a natural or man-made channel (which may be represented as a solid blue line on United States Geological Survey (USGS) 7.5 Minute Quadrangle maps).

Pollutant: dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials other than those regulated under the Atomic Energy Act of 1954 as amended (42 USC 2011 *et seq.*), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water.⁴

Riparian: of, inhabiting or situated on the bank of a natural course of water such as a river.

Steep Slope: any slope of 15% grade or greater.

Stream: the full length and width, including the bed and banks, of any watercourse that has a channel which periodically or continuously contains moving water. It further has a defined bed, and has banks that serve to confine water at low to moderate flows (and may be represented as either a solid or dashed blue line on United States Geological Survey (USGS) 7.5 Minute Quadrangle maps). For the purpose of this Local Law, constructed drainage-ways, including water bars, swales, and roadside ditches, are not considered streams, unless they were constructed by channelizing or otherwise modifying a natural stream, wetland, or water body of any kind.

Structure: anything constructed or erected on or under the ground or upon another structure or building.

Top of Stream Bank: the primary edge of the ordinary high water mark, or break in slope for a watercourse, which maintains the integrity of the watercourse.

Wetlands: lands, including submerged lands, saturated by water at a frequency and duration sufficient to support vegetation adapted for life in saturated soil conditions. For the purpose of this Local Law, wetlands are limited to those lands that meet any of the following criteria: 1) are categorized as wetlands by the New York State Department of Environmental Conservation (DEC), 2) have been documented and mapped as part of an officially adopted community wetlands inventory, or 3) meet the US Army Corps of Engineers' definition of a wetland.

⁴ Definition of "pollutant" taken from the federal Clean Water Act, 40 CFR 122.2