

CANANDAIGUA LAKE WATERSHED COUNCIL

LAND USE SUBCOMMITTEE

LOCAL LAWS PROJECT

FINAL REPORT

May 2007

**Genesee/Finger Lakes Regional Planning Council
Canandaigua Lake Watershed Council Land Use Subcommittee**

This report was prepared by Genesee/Finger Lakes Regional Planning Council (G/FLRPC) for the Canandaigua Lake Watershed Council, with the invaluable assistance of the Canandaigua Lake Watershed Council's Land Use Subcommittee. G/FLRPC would like to thank all who helped in producing this document, including:

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EXECUTIVE SUMMARY

Steep slopes and adjacent watercourses and wetlands in the Canandaigua Lake Watershed have been and are in jeopardy of being damaged and destroyed by filling, excavating, building, clearing and grading, and other such activities. Steep slopes and watercourses are not only environmental features that contribute to the unique character of the region, but overdevelopment or poorly designed development can endanger the public health, safety, and general welfare of the community. Municipalities in New York State have the power to adopt laws for the “protection and enhancement of its physical and visual environment.” These regulations can help balance the rights of the community as a whole and the rights of the individual property owner.

In the Canandaigua Lake Watershed, rising real estate values and increasing residential and recreational development pressures are leading to construction on increasingly challenging building sites. The unique geography of the Finger Lakes often creates a situation where the greatest pressures are on the most environmentally sensitive areas. Steep slopes, due to natural proximity to lakes and their ensuing views, and watercourses are highly-prized because of their scenic quality. However, development activities threaten the natural functions of steep slopes and watercourses which in turn can affect water quality.

To address this situation, the Canandaigua Lake Watershed Council created the Land Use Subcommittee consisting of planning and zoning officials from several of the watershed municipalities and the Ontario County Planning Department to review existing land use laws, identify possible water quality impacts, and make recommendations on possible changes and additions to the existing regulatory framework as it pertains to water quality. Three priority areas were identified by the Canandaigua Lake Watershed Council: steep slopes, stormwater management, and watercourses.

The project’s goal is to provide guidance to the Canandaigua Lake Watershed municipalities on steep slopes, stormwater management, and watercourse protection. This guidance takes the form of local laws from other municipalities (Appendix D: Steep Slope Law Examples and Appendix E: Watercourse Protection Law Examples) and perhaps, more importantly, model laws that have been reviewed by the Canandaigua Lake Watershed Council’s Land Use Subcommittee (Appendix B: Steep Slope Overlay Model, Appendix C: Watercourse Protection Model, Appendix F: New York State Stormwater Management, Erosion and Sediment Control Model Law, and Appendix G: City of Canandaigua Stormwater Management, Erosion and Sediment Control Ordinance). These model laws are being proposed to the watershed municipalities for their adaptation and/or adoption.

The local laws examined in this report that address development on steep slopes are overlay districts and stand-alone laws. An overlay district is created by the local legislature when a special resource has been identified and new provisions are adopted that apply within that area in addition to the provisions of the zoning law. A stand-alone law is separate from the zoning law and also protects specific environmental features. For example, a steep slope overlay zone may address design and construction techniques together with the underlying zoning classification while a steep slope law establishes a detailed permitting system for development affecting slopes

with a minimum usually beginning at 15% slope. For watercourse protection, a stream buffer system and zoning setback provisions are discussed. A stream buffer system specifies the size and management of the stream buffer and are a specific planning tool to protect stream quality and aquatic habitat. Incorporating setbacks into zoning law allows municipalities to prohibit development near watercourses. Finally, stormwater considerations are based on the New York State Model for Stormwater Management and Erosion & Sediment Control. Municipalities that have zoning, subdivision, and site plan approval can adopt sections of the model law while municipalities that do not have the three basic land use laws can adopt the model law as a stand-alone regulation. Municipalities in the watershed also have the ability to enhance the model law by changing its language to meet their community's stormwater objectives.

It should be noted that this report and the work of the Land Use Subcommittee is intended as recommendations to the Canandaigua Lake Watershed municipalities to assist in their decision-making authority. Municipalities should review this guidance document in their next steps towards water quality improvement and work together with the Canandaigua Lake Watershed Council. Thus municipalities can adopt—if they so choose—new or revised local laws to help protect their special environmental features such as steep slopes and watercourses and upgrade stormwater management at the local level to ultimately improve water quality in the Canandaigua Lake Watershed.

PROJECT BACKGROUND

The *Canandaigua Lake Watershed Council Land Use Subcommittee Local Laws Project* originated from concerns among the municipal members of the Canandaigua Lake Watershed Council in addition to the municipalities throughout the Canandaigua Lake Watershed. Development ranging from single parcels of land to subdivisions and other large-scale tracks have raised concerns about erosion, degradation of water resources, and long-term environmental damage.

The Land Use Subcommittee was created by the Canandaigua Lake Watershed Council in response to the various development pressures resonating throughout the Canandaigua Lake Watershed. Members of the Land Use Subcommittee consist of planning and zoning officials from several of the fourteen (14) Canandaigua Lake Watershed municipalities and the Ontario County Planning Department. They were tasked with the review of existing land use laws, the identification of possible water quality impacts, and to recommend improvements to the existing regulatory framework. Five (5) municipalities have participated regularly in the Land Use Subcommittee: the Towns of Canandaigua, Gorham, Italy, Middlesex, and South Bristol.

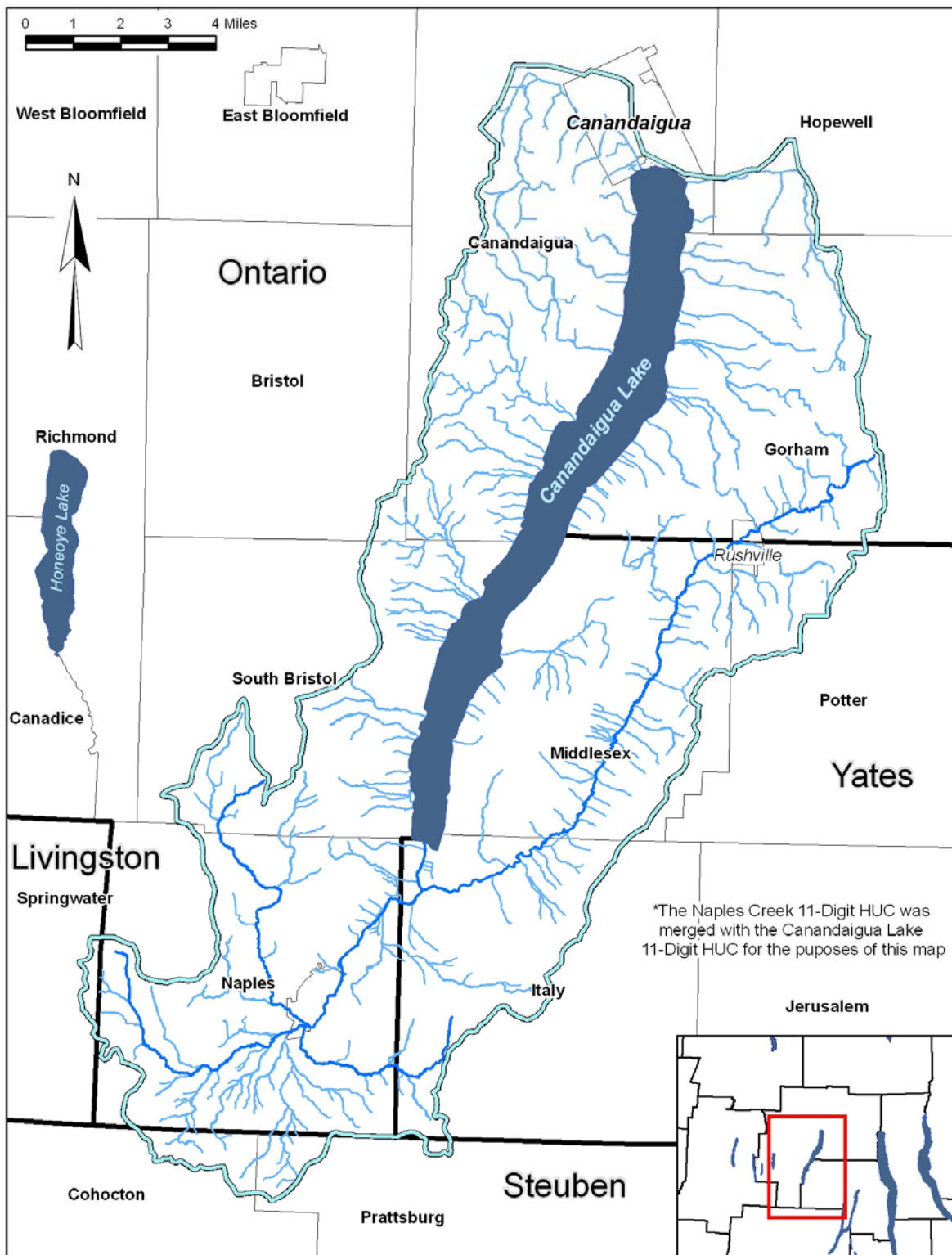
The Land Use Subcommittee used its first few meetings to list water quality issues and identify possible recommendations. The Ontario County Planning Department provided a comprehensive review of existing land use regulations. Canandaigua Lake Watershed Council staff provided a review of existing erosion and sediment control laws in the various municipalities. Based on this information, the Canandaigua Lake Watershed Council identified three areas of main concern for the Land Use Subcommittee to concentrate: steep slopes, stormwater management, and watercourses. The Canandaigua Lake Watershed Council obtained a grant through the Department of State to hire the Genesee/Finger Lakes Regional Planning Council (G/FLRPC) and assist the Land Use Subcommittee in recommending how to better manage and regulate development on and near steep slopes and watercourses. The Land Use Subcommittee and G/FLRPC used the following methods to generate recommendations for the protection of steep slopes and watercourses and stormwater management:

- research how municipalities around New York State and neighboring states have addressed the issues of steep slopes and watercourse protection,
- review the state model local law for stormwater management and erosion and sediment control and make any necessary changes, and;
- develop land use tools and models that municipalities in the Canandaigua Lake Watershed can adopt.

The goal of the Land Use Subcommittee and this report is to provide assistance and guidance to the Canandaigua Lake Watershed municipalities when balancing development and growth with the protection of critical environmental areas and water quality. Each municipality has the ultimate authority, however, in deciding whether to adopt one if any of the recommendations in this report. It's also important to note that the Land Use Subcommittee does not believe that absolute uniformity among the municipalities is necessary. The Land Use Subcommittee recognizes that differences exist among the watershed municipalities, which rationally precludes the adoption of an identical local law. The goal of the Land Use Subcommittee is to develop and

recommend a common framework for the watershed municipalities to work within the three focus areas: steep slopes, stormwater management, and watercourses. This report provides a suggested approach for the watershed municipalities when confronted with development pressures on steep slopes and near watercourses and its ensuing stormwater management. It also provides examples on how other communities manage their steep slopes, stormwater and erosion control, and watercourse protection.

Through the fall and winter of 2006-2007, G/FLRPC worked closely with the Land Use Subcommittee to research relevant land use tools that municipalities could use to address the issues regarding erosion control, degradation of water resources, and long-term environmental damage.



SECTION 1A: STEEP SLOPE OVERVIEW

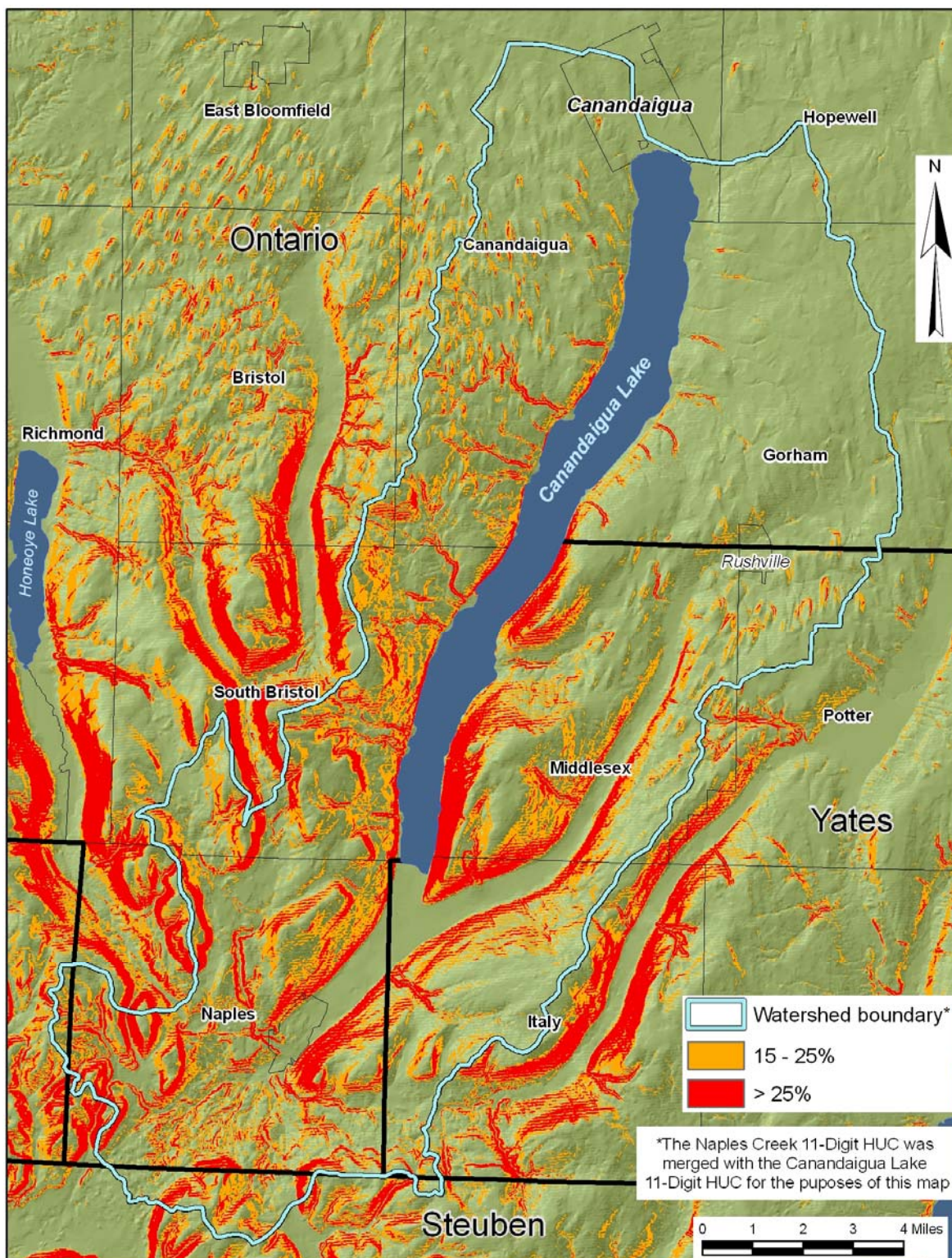
The unique geology of the Finger Lakes has been crucial to its human history. From the settlement patterns of Native Americans around sources of rock salt, to the modern patterns of forests, dairy farms, wineries, and recreational activities, the geological history of the Finger Lakes has profoundly affected where people have lived and what they have done on (and to) the land.

The Finger Lakes consist of eleven long, narrow, roughly parallel lakes, formed over the last two million years by glacial carving of old stream valleys oriented north-south. The southern ends have high walls, cut by steep gorges and gullies. The latest glacial episode was most extensive around 21,000 years ago, when glaciers covered almost the entire state. Around 19,000 years ago, the climate warmed, and the glacier began to retreat, disappearing entirely from New York for the last time around 11,000 years ago.

One of the geological features common to the Finger Lakes, especially towards their southern ends, are steep slopes. Many towns have significant areas of slopes over 25%. Historically, this challenging topography limited activities mostly to agricultural and forestry. “Developed” areas were in small villages or hamlets situated in the level valley floors. Recreational development in the Finger Lakes was focused on small, seasonal cottages.

Scenic and coastal areas across North America face the challenges of development and rising property values, and people seek other areas. This has led, in recent years, to the growth of tourism and recreational development in the Finger Lakes. Rising land prices have led to development pressures on sites that previously would not have been considered due to their challenging topography. In addition, new homes are often much larger and built for year-round occupancy, in contrast to the historical pattern in the Finger Lakes.

These development pressures—larger, year-round homes on challenging sites, with owners wealthy enough to utilize non-standard building or engineering practices—have led to concerns amongst citizens and their elected leaders. Increased construction on challenging sites such as steep slopes can quicken the natural erosion and sedimentation system. Erosion and sedimentation often include the loss of topsoil, which can result in the disturbance of habitats, the degradation of the quality of surface water, the alteration of drainage patterns, obstruction of drainage structures, and the intensification of flooding. Steep driveways can limit emergency access and exacerbate stormwater runoff on neighboring properties or public roads. Regulation of development on steep slopes mitigates damage to the natural 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.

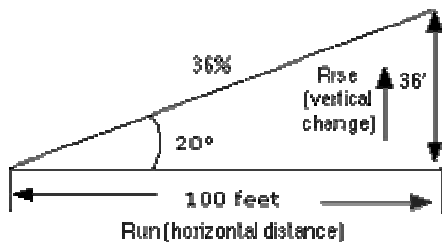


Slope

Slope is often measured in degrees or in percent rise. A flat region has zero slope. The steeper the surface, the higher the slope. Percent slope is defined as the change in elevation as measured over a 100-foot distance, sometimes called the rise over the run. For example, a one-foot vertical change over 100 feet of horizontal distance is a 1% slope. A rise of 36 feet over 100 feet is a 36% slope. Generally, slopes greater than 15% are considered steep.

Measuring slope as a percentage, and measuring slope as a ratio can be confusing. Many people speak about slope as percent slope, while others speak about it as degrees. These are very different numbers. For example, a 45 degree slope would be a 100 percent slope. For comparison, the maximum slope one would find on a mountain highway would probably be 10 percent or less, which is about 5.8 degrees. Service roads and fire roads in the forest are commonly 15 percent or less, which would be 8.5 degrees. A change of 1 foot elevation for every 4 feet traveled, or a 25 percent slope would be a pretty steep slope, but would be 14 degrees.

Figure 1. Degrees and percent slope



SECTION 1B: LAND USE TOOLS TO ADDRESS STEEP SLOPES

1. Steep Slope Overlay

The overlay zoning technique is a modification of the system of conventionally mapped zoning districts. An overlay zone applies a common set of standards to a designated area that may cut across several different conventional or ‘underlying’ zoning districts. The standards of the overlay zone apply in addition to those of the underlying zoning district. Some common examples of overlay zones are the flood zones administered by many communities under the National Flood Insurance Program, historic district overlay zones, areas of steep slopes, a waterfront zone, or an environmentally sensitive area.

For example, steep slope overlay zone regulations would address such matters as design and construction techniques (having all plans stamped by a licensed engineer, for example), greater municipal oversight (all development, even single family homes, go through the site plan review process, for example). These “overlay” requirements do not replace the underlying zoning district regulations, but are in addition to them, and would only apply in the overlay district corresponding to a defined and mapped geographical area of steep slopes in the municipality.

There are no specific procedures in the State zoning enabling statutes dealing with overlay zoning. Overlay requirements may be enacted or amended in the same manner as other zoning regulations.

Steep slope overlay districts have a direct benefit on the water quality of a watershed by imposing additional restrictions on the type of land use allowed within their boundaries. Depending on the environmental conditions, more than one overlay district may apply to a single area. The proposed development, and all necessary materials, must be brought before the proper reviewing agency before the issuance of a permit.

In a regional area with a common concern, such as the Canandaigua Lake Watershed, municipalities can coordinate their local laws, such as overlay districts. This helps provide consistency in protecting the steep slopes of the entire watershed, but also helps in raising the awareness and importance of this regulation for buildings and developers.

Steep Slope Overlay regulations are the proposed recommendation for dealing with steep slope development in the Canandaigua Lake Watershed (see Appendix B). These regulations are based on the Town of Bristol’s Steep Slope Law and were modified through a collaborative process with Genesee/Finger Lakes Regional Planning Council and the Canandaigua Lake Watershed Council’s Land Use Subcommittee. These regulations are formatted to be adopted as an amendment to existing zoning law, although with a few revisions, could be adopted as a stand-alone local law.

2. A stand-alone law addressing steep slopes

Municipalities can adopt laws separate from their zoning laws to protect specific environmental features and promote concrete environmental interests using their home rule authority and authority delegated to them under other state laws. A steep slope law would regulate development on areas with slopes greater than a specified percentage, usually in the 10-15% range.

As noted, Steep Slope Overlay regulations are the proposed recommendation for dealing with steep slope development in the Canandaigua Lake Watershed (see Appendix B). Although these regulations are formatted to be adopted as an amendment to existing zoning law, with a few revisions, they could be adopted as a stand-alone local law.

SECTION 1C: MUNICIPAL RECOMMENDATIONS

Five municipalities have participated regularly in the Land Use Subcommittee: the Towns of Canandaigua, Gorham, Italy, Middlesex, and South Bristol. Based on their input, as well as that of the Canandaigua Lake Watershed Council and Yates County Soil and Water Conservation District staff, the Steep Slope Overlay zoning amendment is the proposed recommendation to address development on steep slopes. All municipalities in the watershed are encouraged to utilize the model local law language developed.

Amending Zoning

Adapted from Section 265 of New York State Town Law

Zoning may from time to time be amended. Such amendment shall be effected by a simple majority vote of the town board, except that any such amendment shall require the approval of at least three-fourths of the members of the town board in the event such amendment is the subject of a written protest, presented to the town board and signed by:

(a) the owners of twenty percent or more of the area of land included in such proposed change; or

(b) the owners of twenty percent or more of the area of land immediately adjacent to that land included in such proposed change, extending one hundred feet therefrom; or

(c) the owners of twenty percent or more of the area of land directly opposite thereto, extending one hundred feet from the street frontage of such opposite land.

The provisions of Section 264 of New York State Town Law, relative to public hearings and official notice, shall apply equally to all proposed amendments.

Amendments made to any zoning ordinance (excluding any map incorporated therein) adopted pursuant to the provisions of this chapter shall be entered in the minutes of the town board; such minutes shall describe and refer to any map adopted in connection with such change, amendment or supplement and a copy, summary or abstract thereof (exclusive of any map incorporated therein) shall be published once in a newspaper published in the town, if any, or in such newspaper published in the county in which such town may be located having a circulation in such town, as the town board may designate, and affidavits of the publication thereof shall be filed with the town clerk. Such ordinance shall take effect upon filing in the office of the town clerk. Every town clerk shall maintain every map adopted in connection with a zoning ordinance or amendment.

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.

SECTION 2B: LAND USE TOOLS TO PROTECT WATERCOURSES

1. Incorporating setbacks into zoning area requirements

The forest buffer system as previously described represents the “ideal situation” and should be thought of as a “goal” to strive for in land use regulation. Not all municipalities, however, are in a position to mandate and enforce forest buffers to such detail, although the option is always available to them.

A simpler way to provide a *basic* level of watercourse protection is for municipalities to prohibit development near watercourses. This can be done by amending the existing zoning code. Virtually all zoning codes have what are referred to as ‘area requirements.’ These regulations stipulate where on a parcel a structure may be located. Typically, these requirements are expressed in terms of setbacks, or how far a building must be set back from the property line.

Area requirements can also be used to stipulate how far a building can be from a watercourse. For example, the zoning can require that all new structures to be set back 50 feet from the a watercourse. How a watercourse is defined and whether the 50 feet is measured from the centerline of the watercourse or the top of bank are also important details. However, the overall outcome of this technique is that water resource protection is achieved through a standard zoning tool.

As noted, a “simple” watercourse setback requirement can be enhanced by the additional requirements for a three zone based buffer as described above.

It is recommended that “defined watercourses” shall be those on the Ontario County GIS mapping system. Defining a water course based on how many months out of the year that it flows is subject to wide interpretation and is unenforceable. Each municipality should include defined watercourses on their official zoning maps. In addition, it is recommended that setbacks be measured from the “top of bank” rather than the “centerline.” In order to obtain a center line, you need to locate the top of each bank. Also, using center line measurements means that larger streams would have a smaller buffer area than smaller streams.

SECTION 2C: MUNICIPAL RECOMMENDATIONS

Five municipalities have participated regularly in the Land Use Subcommittee: the Towns of Canandaigua, Gorham, Italy, Middlesex, and South Bristol. Based on their input, as well as that of the Canandaigua Lake Watershed Council and Yates County Soil and Water Conservation District staff, the watercourse setback zoning amendment is the proposed recommendation to address development near watercourses. All municipalities in the watershed are encouraged to utilize the model local law language developed. See Section 1C of this report for notes on the zoning amendment process.

SECTION 3A: STORMWATER MANAGEMENT OVERVIEW

The Canandaigua Lake Watershed is experiencing significant residential growth and will continue to see growth well into the future. Land development activities and associated increases in site impervious cover often alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, and stream channel erosion. Stormwater runoff from development activities also contributes to increased quantities of various pollutants. The improper design, construction, and long term management of stormwater facilities will not adequately handle the changes in water quantity and quality resulting from these developments. Therefore, it is imperative that municipalities increase their level of oversight on development—ranging from single-lots to subdivisions and other large-scale sites.

SECTION 3B: STORMWATER MODEL LAW OVERVIEW

The State of New York recently adopted higher erosion and sediment control standards and specifications on developments greater than one acre in size. Once a development exceeds five (5) acres of disturbance, proper management of post-construction stormwater quantity and quality is mandated. Put more simply, a developer must control sediment from leaving the site during development activities so there is no visible contrast to the outlet waters. After construction is over and the development is complete, the developer and/or Home Owners Association must control the peak discharge of water to pre-development rates. They must also remove 80% of the suspended solids and 40% of the phosphorus from the site.

Several of the watershed municipalities have existing erosion and sediment control laws that regulate disturbances with a threshold of 10,000-15,000 square feet and 500 square feet within the lakefront district. Although this is a lower threshold than New York State, the specific standards are outdated and in some cases inadequate based on experience. New York State drafted a model local law for municipalities to adopt in order to update the standards.

The Land Use Subcommittee is recommending that the municipalities in the watershed utilize the state model law as a baseline and install land disturbance thresholds that fit its needs. The committee does recommend that at minimum municipalities use a 15,000 square foot threshold disturbance requiring a basic erosion and sediment control plan. As mentioned previously, some municipalities lower that threshold to 500 square feet near the lakeshore area.

The committee is also recommending that the municipalities amend the state model local law to include increased standards for post-construction phosphorus control. The state has drafted these increased standards in the Chapter 10 supplement to their water quality specifications for phosphorus limited lakes in the Catskills and lower Hudson valley area.

While Canandaigua Lake is a phosphorus-limited lake, water quality monitoring since 1996 has documented a distinct trend of increasing phosphorus levels. Minimizing new sources of pollution will help curb this upward trend in phosphorus loading. The law increases the upper threshold for water quality treatment of phosphorus from 0.8 inches to 2.2 inches of rain. The City of Canandaigua is in the process of adopting the revised state model law with these standards. Appendix G is the City of Canandaigua Stormwater Management, Erosion and Sediment Control Ordinance.

CONCLUSION

The municipalities of the Canandaigua Lake Watershed face serious challenges in the imminent future when it comes to balancing growth with the preservation of the very attributes that continue to attract residential and recreational development. The waterways and hillsides of Canandaigua Lake—intrinsic to all the Finger Lakes—are unique areas with important environmental, scenic, and economic value.

This report is a small part of the overall guidance and education process required to inform the visitors, residents, municipal staff, and elected leaders of the issues related to steep slope and watercourse protection and stormwater management. The land use regulatory tools provided in this report can help municipalities guide change in their environment in a way that is both conscientious of conservation values and development goals.

Appendix A - Definitions

Agricultural Activity - the activity of an active farm including grazing and watering livestock, irrigating crops, harvesting crops, using land for growing agricultural products, and cutting timber for sale, but shall not include the operation of a dude ranch or similar operation, or the construction of new structures associated with agricultural activities.

Applicant - a property owner or agent of a property owner who has filed an application for a land development activity.

Building - any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal, or property, and occupying more than 100 square feet of area.

Channel - a natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

Clearing - any activity that removes the vegetative surface cover.

Dedication - the deliberate appropriation of property by its owner for general public use.

Department - the New York State Department of Environmental Conservation

Design Manual - the New York State Stormwater Design Manual, most recent version including applicable updates, that serves as the official guide for stormwater management principles, methods and practices.

Developer - a person who undertakes land development activities.

Erosion Control Manual - the most recent version of the “New York Standards and Specifications for Erosion and Sediment Control” manual, commonly known as the “Blue Book”.

Grading - excavation or fill of material, including the resulting conditions thereof.

Impervious Cover - those surfaces, improvements and structures that cannot effectively infiltrate rainfall, snow melt and water (e.g., building rooftops, pavement, sidewalks, driveways, etc).

Industrial Stormwater Permit - a State Pollutant Discharge Elimination System permit issued to a commercial industry or group of industries which regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

Infiltration - the process of percolating stormwater into the subsoil.

Jurisdictional Wetland - an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

Land Development Activity - construction activity including clearing, grading, excavating, soil disturbance or placement of fill that results in land disturbance of equal to or greater than one acre (see Note), or activities disturbing less than one acre of total land area that is part of a larger common plan of development or sale, even though multiple separate and distinct land development activities may take place at different times on different schedules.

NOTE: A community should review their local site plan, subdivision, zoning and erosion & sediment control laws and ordinances to see if there are minimum land disturbance requirements already specified in those laws. To meet the SPDES guidelines under GP-02-02, the municipality must require SWPPPs for

construction activities that result in land disturbance equal to or greater than one acre, or activities disturbing less than one acre if they are part of a larger common plan of development or sale or in a specified watershed.. The municipality may wish to reduce this threshold to a lesser amount of disturbance to conform to local standards which may be stricter than the standards set forth in the state regulations. Many communities regulate land disturbance activities of more than 5000 square feet (1/8 acre), with an exemption if the amount of impervious cover created does not exceed 1000 square feet.

Landowner - the legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights in the land.

Maintenance Agreement - a legally recorded document that acts as a property deed restriction, and which provides for long-term maintenance of stormwater management practices.

Nonpoint Source Pollution - pollution from any source other than from any discernible, confined, and discrete conveyances, and shall include, but not be limited to, pollutants from agricultural, silvicultural, mining, construction, subsurface disposal and urban runoff sources.

Phasing - clearing a parcel of land in distinct pieces or parts, with the stabilization of each piece completed before the clearing of the next.

Pollutant of Concern - sediment or a water quality measurement that addresses sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the land development activity.

Project - land development activity

Recharge - the replenishment of underground water reserves.

Sediment Control - measures that prevent eroded sediment from leaving the site.

Sensitive Areas - cold water fisheries, shellfish beds, swimming beaches, groundwater recharge areas, water supply reservoirs, habitats for threatened, endangered or special concern species.

SPDES General Permit for Construction Activities GP-02-01 - A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to developers of construction activities to regulate disturbance of one or more acres of land.

SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems GP-02-02 - A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to municipalities to regulate discharges from municipal separate storm sewers for compliance with EPA established water quality standards and/or to specify stormwater control standards

Stabilization - the use of practices that prevent exposed soil from eroding.

Stop Work Order - an order issued which requires that all construction activity on a site be stopped.

Stormwater - rainwater, surface runoff, snowmelt and drainage

Stormwater Hotspot - a land use or activity that generates higher concentrations of hydrocarbons, trace metals or toxicants than are found in typical stormwater runoff, based on monitoring studies.

Stormwater Management - the use of structural or non-structural practices that are designed to reduce stormwater runoff and mitigate its adverse impacts on property, natural resources and the environment.

Stormwater Management Facility - one or a series of stormwater management practices installed, stabilized and

operating for the purpose of controlling stormwater runoff.

Stormwater Management Officer - an employee or officer designated by the municipality to accept and review stormwater pollution prevention plans, forward the plans to the applicable municipal board and inspect stormwater management practices.

Stormwater Management Practices (SMPs) - measures, either structural or nonstructural, that are determined to be the most effective, practical means of preventing flood damage and preventing or reducing point source or nonpoint source pollution inputs to stormwater runoff and water bodies.

Stormwater Pollution Prevention Plan (SWPPP) - a plan for controlling stormwater runoff and pollutants from a site during and after construction activities.

Stormwater Runoff - flow on the surface of the ground, resulting from precipitation

Surface Waters of the State of New York - lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction.

Storm sewers and waste treatment systems, including treatment ponds or lagoons which also meet the criteria of this definition are not waters of the state. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the state (such as a disposal area in wetlands) nor resulted from impoundment of waters of the state.

Watercourse - a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.

Waterway - a channel that directs surface runoff to a watercourse or to the public storm drain.

Appendix B – Steep Slope Model

TOWN OF _____

ARTICLE _____ - STEEP SLOPE REGULATIONS

Section 1. Title.

Steep Slope Regulations and Districts - Amendment to the _____ Zoning Ordinance of the Town of _____.

Section 2. Purpose and Intent.

The purpose of the Steep Slope Regulation is to protect and manage slopes with grades of 15% or more in order to:

- A. Minimize erosion, pollution and environmental damage;
- B. Reduce soil, pavement and building subsidence;
- C. Ensure proper emergency access;
- D. Comply with New York State Pollution Discharge Effluent System (SPDES) permit requirements; and
- E. Preserve and enhance, to the extent practicable, public scenic views as identified in the Comprehensive Plan for the Town of _____ therefore,

Include subsection E only if the municipality has identified such views

Section 3. General Provisions.

- A. Steep Slopes Area Designation. The Town of _____ has adopted as part of its Official Town Zoning Map, the Steep Slopes Overlay District. This district identifies and categorizes lands exhibiting slopes in three categories: 1) less than 15%; 2) between 15% and 50%; and 3) greater than 50%.
- B. No construction, grading, excavation or other development, except for non-tillable farming purposes, is permitted on any land with slope of fifty percent (50%) or greater. Any construction, grading, excavation, or other development of land with a slope of more than fifteen percent (15%) but less than fifty percent (50%) shall conform to these Steep Slope Regulations. An exception is granted for farming purposes using standard farming practices.
- C. No driveway, vehicular access lane, or private road may be constructed that exceeds 15% slope for more than 5% of its total length.

D. Any parcel that falls in whole or in part in a Steep Slope Overlay District shall be considered to contain steep slopes any construction, grading, excavation, or other development on such a parcel shall require a Steep Slopes Permit. Determination of the status of a particular parcel shall be made by the Code Enforcement Officer.

E. Submission Requirements. Applicants for Steep Slope Permits shall submit the following information in writing to the Code Enforcement Officer (CEO) to begin the review process:

Note: Towns may wish to modify these submission requirements; however consistency throughout the watershed can help developers understand the regulations.

1. Development in steep slope areas requires the minimum lot size for that district plus any additional acreage that may be needed to comply with proper engineering requirements.
2. Plans to minimize flooding by maintaining storm water runoff to pre-development levels. Strict adherence to the technical standards (see Section 3, Subsection H) shall be required.
3. Plans to limit the amount of pollution transported by storm water at predevelopment levels.
4. Plans to minimize decreases in groundwater recharge and stream base flow.
5. Plans to maintain existing stream and drainage geometry.
6. Plans to minimize and control erosion and sedimentation

F. Verification of compliance with the requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities General Permit (GP) 02-01 or as amended or revised.

G. A plan prepared by a licensed professional engineer showing and certifying the following:

1. All existing and proposed natural and artificial drainage courses and other features for the control of drainage, erosion and water.
2. The calculated volume and velocity of water run-off from the slopes and from the lot in question, as unimproved.
3. The calculated volume and velocity of water run-off from the slopes and from the lot in question, as improved.
4. The existence, location, and capacity of all natural and artificial drainage courses and facilities within five hundred feet (500') of the lot, which are or will be used to carry or contain the water run-off from the slope and the lot.

5. The effect of any increased water run-of on all adjacent properties and any other property which will be materially affected by increased water run-off and infiltration.
6. Subsurface geology and hydrology that would impact the proposed development or downstream or adjacent properties.

H. Technical Standards

1. For the purpose of this zoning law, the following documents shall serve as the official guides and specifications for stormwater management. Stormwater management practices that are designed and constructed in accordance with these technical documents shall be presumed to meet the standards imposed by this law:
 - a. *The New York State Stormwater Management Design Manual* (New York State Department of Environmental Conservation, most current version or its successor, hereafter referred to as the Design Manual)
 - b. *New York Standards and Specifications for Erosion and Sediment Control*, (Empire State Chapter of the Soil and Water Conservation Society, 2004, most current version or its successor, hereafter referred to as the Erosion Control Manual).

Section 4. Erosion and Stormwater Control.

- A. A Stormwater Pollution Prevention Plan (SWPPP) for development in the Steep Slope Overlay District shall be submitted to the Town of _____ in connection with any application for a Site Plan, Subdivision proposal, Building Permit, Special Use Permit or Variance. (Note: a SWPPP may be required for development in the town not falling within the Steep Slope Overlay District criteria)
- B. A Stormwater Pollution Prevention Plan (SWPPP) shall contain provisions to control erosion and sedimentation and reduce the impacts of stormwater; stormwater infiltration and runoff from the site based on best management practices. The objective of such practices is to maintain or reduce the impact of stormwater, stormwater infiltration and run-off from the site and to prevent soil erosion. Such practices are described in the technical standards (see Section 3, Subsection H).

Alternative principles, methods and procedures may be used with prior approval of the Town of _____ based upon a favorable recommendation from all of the following: 1) Town Engineer (staff)/Town's Consulting Engineer; 2) County Soil and Water Conservation District; 3) Canandaigua Watershed Inspector

Wherever possible, erosion shall be prevented by minimizing disturbance to existing land cover. The Stormwater Pollution Prevention Plan (SWPPP) shall contain the following:

1. Background information about the scope of the project, including location, type and size of project.
2. Site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map should show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); wetlands and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and location(s) of the stormwater discharges(s);

[Site map should be at a minimum 1:100 or greater detail (e.g. 1:50 is greater detail than 1:100)]

Note: Towns can require maps in greater detail.

3. Description of the soil(s) present at the site;
4. Construction phasing plan describing the intended sequence of construction activities, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance. Consistent with, and in addition to, the *New York Standards and Specifications for Erosion and Sediment Control* (Erosion Control Manual), not more than one-quarter (1/4) acre shall be disturbed at any one time unless pursuant to an approved SWPPP.
5. Description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in stormwater runoff;
6. Description of construction and waste materials expected to be stored on-site with updates as appropriate, and a description of controls to reduce pollutants from these materials including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response;
7. Temporary and permanent structural and vegetative measures to be used for soil stabilization, runoff control and sediment control for each stage of the project from initial land clearing and grubbing to project close-out;
8. A site map/construction drawing(s) specifying the location(s), size(s) and length(s) of each erosion and sediment control practice;
9. Dimensions, material specifications and installation details for all erosion and sediment control practices, including the siting and sizing of any temporary sediment basins;
10. Temporary practices that will be converted to permanent control measures;

11. Implementation schedule for staging temporary erosion and sediment control practices, including the timing of initial placement and duration that each practice should remain in place;
12. Maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practice;
13. Name(s) of the receiving water(s);
14. Delineation of SWPPP implementation responsibilities for each part of the site;
15. Description of structural practices designed to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable; and
16. Any existing data that describes the stormwater runoff at the site.

Note to Towns adopting this zoning amendment: the State model law mandates that commercial developments of 1 acre or more disturbance and residential developments of 5 acres or more disturbance include all 24 items in this list of SWPPP components. All other developments needing a SWPPP need only provide items 1-16. The Canandaigua Lake Watershed Land Use Subcommittee (LUSC) recommends lowering the State's threshold for SWPPP components. The LUSC recommends that all development (commercial and residential) within the Steep Slope Overlay that disturbs 1 acre or more must include all 24 items on its SWPPP; all development (commercial and residential) that disturbs between 0 and 1 acre must include items 1-16. Towns adopting this zoning amendment can ultimately set the thresholds at their discretion as long as they are equal to or more stringent than the State model.

17. Description of each post-construction stormwater management practice;
18. Site map/construction drawing(s) showing the specific location(s) and size(s) of each post-construction stormwater management practice;
19. Hydrologic and hydraulic analysis for all structural components of the stormwater management system for the applicable design storms
20. Comparison of post-development stormwater runoff conditions with pre-development conditions
21. Dimensions, material specifications and installation details for each post-construction stormwater management practice;
22. Maintenance schedule to ensure continuous and effective operation of each post-construction stormwater management practice.

23. Maintenance easements to ensure access to all stormwater management practices at the site for the purpose of inspection and repair. Easements shall be recorded on the plan and shall remain in effect with transfer of title to the property.
24. Inspection and maintenance agreement binding on all subsequent landowners served by the on-site stormwater management measures.
- C. The Town of _____ Planning Board shall refer the Stormwater Pollution Prevention Plan (SWPPP) to a qualified engineering consultant and/or to the County Soil and Water Conservation District for professional advice concerning compliance of the plan. The Town of _____ shall not approve the Special Use Permit, Site Plan or Subdivision Application unless it finds that the Stormwater Pollution Prevention Plan (SWPPP) complies with this section.

Section 5. Review Process.

To the extent practicable, Steep Slopes Permit reviews shall run concurrently and be coordinated with other local approvals.

- A. Pre-application Sketch Plan: The applicant is encouraged to present a sketch plan of the proposal to the Planning Board for informal review and discussion. The Planning Board is not authorized to and shall not take any formal action on sketch plans.
- B. Final Decision: Findings of fact must be made by the Planning Board for all decisions to approve, deny, or modify steep slope permits. "Findings" are a written description of facts relevant to and in support of the decision made and shall be made part of the public record. No Steep Slopes Permit shall be granted unless it is consistent with this zoning law.
- C. Provisions for Inspection: A Steep Slopes Permit may be approved only after physical inspections of the property have been made by the Town at the times and in the manner described below. The applicant shall arrange with the Town of _____ Code Enforcement Officer (CEO) for scheduling of the following inspections:
1. Initial inspection: prior to final approval of the requested Steep Slopes Permit.
 2. Erosion Control Inspection; to ensure erosion control practices are in accordance with the approved plan.
 3. Bury Inspection; prior to backfilling of any underground drainage or stormwater conveyance structures.
 4. Final Inspection: when all work, including construction of stormwater management facilities, has been completed.
 5. Annual Report: for any development that includes permanent post-construction stormwater facilities, the owner shall maintain a maintenance record and submit it

annually to the CEO. The CEO retains the right to access and inspect such facilities.

Section 6. Sureties

- A. **Completion of Work:** To ensure compliance with all requirements of an approved permit, the Town Board may require the applicant to provide a performance guarantee or surety, prior to construction in the form of a performance bond, escrow account certification, or irrevocable letter of credit from an insured financial institution. The guarantee shall be for the full cost of all work to be performed on the property subject to the permit and shall be payable solely to the Town of _____. The Town Board shall determine the amount based on the final design plans and actual construction costs.
- B. **Maintenance of Facilities:** Where stormwater management and erosion control facilities are to be operated and maintained by the developer, or by a corporation that owns or manages the development, the Town Board shall require the developer to provide the Town of _____ with a performance guarantee/surety in the form of a performance bond, escrow account certification, or irrevocable letter of credit from an insured financial institution, payable to the Town of _____ to ensure maintenance of all stormwater management and erosion control facilities which have been approved for the Steep Slopes Permit during the life of the facility.
- C. **Duration:** Sureties will remain in force until the Town of _____ releases the responsible party from liability. All accrued interest in any surety account shall be reinvested to the benefit of the account and may be applied only to the purposes originally established for the surety until the Town of _____ releases the responsible party from liability.
- D. **Compliance Failure:** If the developer or owner fails to perform as required under the permit, the Town of _____ may draw any portion of the amount guaranteed for the purpose of work in default under the permit. If the developer, owner or other named responsible party fails to maintain facilities as required, the Town of _____ may draw any portion of the amount guaranteed to pay the costs of operation and maintenance of permitted facilities.
- E. **Costs:** In addition to application fees, the costs of reviewing plans by legal, engineering, planning consultants, and outside agencies, and inspecting sites for compliance, shall be paid by the applicant.

Appendix C – Watercourse Protection Model

TOWN OF _____

WATERCOURSE PROTECTION

Concept

The *Example Zoning Language* that follows is provided as a model. Certain sections ('purpose,' 'permitted uses,' etc.) are included just to show how and where the watercourse protection language can be inserted into a typical zoning code. Towns adopting the buffer area language to protect watercourses should obviously use their own zoning code's sections on purpose, permitted uses, etc.

Example Zoning Language

R1 – Rural Residential District

1. Purpose

The purpose of this district is to provide opportunities for residential development in areas of the Town of _____ that are not suitable for agriculture and are not generally served by public water and sewer, and to provide the Town with the ability to assert reasonable controls over residential development consistent with the comprehensive plan, organized and logical growth, and protection of land and water resources.

2. Permitted Uses

Towns should use their existing regulations for permitted uses.

3. Permitted Accessory Uses

Towns should use their existing regulations for permitted accessory uses.

4. Uses Requiring Special Permit

Towns should use their existing regulations for uses requiring a special permit.

5. Lot Area & Yard Requirements

Towns should use their existing regulations for minimum lot area and dimensions, front yard setbacks, side yard setbacks, rear yard setbacks, building height, lot coverage, etc.

6. Buffer Areas

No buildings or other impervious surfaces, parking areas, or on-site waste water treatment systems shall be located within 100 feet horizontal distance from the top of bank of any watercourse designated by the Canandaigua Watershed Council and included on the Town's official zoning map. With the exception of stream crossings no roadways shall be located within 100 feet horizontal distance from the top of bank of any watercourse designated by the Canandaigua Watershed Council and included on the Town's official zoning map, or any wetland as defined by state or federal law.

This 100 foot buffer zone shall be further divided into the following sub-zones, each of which shall have specific uses and vegetation as noted:

Sub-zone 1: From 0 to a minimum of 25 feet horizontal distance from the top of bank of any watercourse designated by the Canandaigua Watershed Council

Uses: flood control structures, utility rights-of-way, footpaths, road crossings
Vegetation: undisturbed or re-naturalized native vegetation

Sub-zone 2: From the outer edge of Sub-zone 1 to a minimum width of 50 feet

Uses: flood control structures, utility rights-of-way, biking and hiking paths, road crossings, stormwater management facilities, passive recreational uses
Vegetation: landscaped native vegetation (i.e. trees, shrubs, groundcovers native to the Finger Lakes region that are pruned or maintained, as well as limited mown-lawn areas).

Sub-zone 3: From the outer edge of Sub-zone 2 to a minimum width of 25 feet

Uses: flood control structures, utility rights-of-way, biking and hiking paths, road crossings, stormwater management facilities, passive recreational uses
Vegetation: mown-lawn areas although landscaped native vegetation (i.e. trees, shrubs, groundcovers native to the Finger Lakes region that are pruned or maintained) is encouraged

Note to Towns adopting this zoning amendment: Town's should update their official zoning maps to include the watercourses as catalogued in the Ontario County Planning Department's GIS system. The Canandaigua Lake Watershed Council can assist any Town with acquiring an updated map.

Appendix D – Steep Slope Law Examples

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5. Township of Chestnuthill, Monroe County, Pennsylvania	Page 21
6. City of Scranton, Lackawanna County, Pennsylvania	Page 22
7. Township of Falls, Bucks County, Pennsylvania	Page 23
8. Township of Bristol, Bucks County, Pennsylvania	Page 24

1. Town of Irondequoit, Monroe County, New York

Chapter 235: Zoning (Adopted 1977 with Amendments)

No definition of "steep slope(s)."

Article XI: Environmental Protection Overlay Districts (*Added 1986*)

§ 235-52. EPOD2 - Steep Slopes Protection District.

(Amended 1988, 1995, 1997, and 1998)

A. Purpose. The purpose of the Steep Slope Protection District is to minimize the impacts of development activities on steep slopes in the Town of Irondequoit by regulating activities in these areas and by requiring review and permit approval prior to project commencement. The developmental impacts include soil erosion and sedimentation, destruction of vegetation, increased runoff rates and slope failure. The regulations contained in this district are designed, prevent increased erosion and runoff, maintain established drainage systems, locate development where it is less likely to cause future slope failures and to retain as much as possible the natural character of these areas.

B. Delineation of district boundaries. The boundaries of the Steep Slope Protection District shall be delineated on the Official Town of Irondequoit EPOD Maps and shall include all areas in the Town of Irondequoit with a fifteen-percent slope or greater. The Town Department of Planning and Zoning and Town Engineer may consult other information, including but not limited to soil survey reports prepared by the Soil Conservation Service, topographic maps produced by the United States Geological Survey, field surveys and other appropriate sources in order to more accurately locate and delineate steep slope protection district boundaries within the Town. The following additional areas shall also be considered within the "steep slope" definition:

(1) A transition zone at the top of the slope defined as that area containing soil classes (as defined in the Monroe County Soil Survey) with moderate to severe limitations for development and recreational uses as determined on a site-specific high-intensity soil survey.

(2) Natural protective features (beaches, bluffs and near-shore areas) around Irondequoit Bay, as defined in regulations in Part 505 of the NYCRR implementing the Coastal Erosion Hazard Act.

C. Regulated activities. No person shall conduct any of the following regulated activities within any Steep Slope Protection District in the Town of Irondequoit, unless such person has first applied for and obtained an EPOD development permit pursuant to the requirements of this article:

(1) Clearing of or constructing on any land area within the district, including construction or clearing activities related to providing equipment access on the site, except for those activities exempted from the permit requirements of this article as indicated in § 235-45 of this chapter.

(2) The construction or placement of any sewage disposal system, including individual sewage disposal systems, septic tanks, septic drainage or leach fields.

(3) Filling, cutting or excavating operations.

(4) Discharge of stormwater and/or construction and placement of stormwater runoff systems.

(5) Construction of new buildings or structures or additions and modifications to existing buildings and structures in areas of slopes exceeding 15%.

D. Development standards/permit conditions.

(1) In granting, denying or conditioning any application for an EPOD development permit, the Town Planning Board shall consider the effect that the proposed regulated activity will have on the public health, safety and welfare and the protection or enhancement of the fragile and environmentally sensitive steep slope areas within the Town. No permit to undertake a regulated activity within a Steep Slope Protection District in the Town of Irondequoit shall be issued by the Town Planning Board unless the applicant can adequately demonstrate to the Board that:

(a) The stable angle of repose of the soil classes as found on the site has been used to determine the proper placement of structures and other development-related facilities within the plateau area. Site specific calculations of the stable angle of repose for the site shall be determined by a professional soil scientist or engineer using the soil classes and nomenclature contained in the best management practices of the Irondequoit Bay Coordinating Committee, as defined and illustrated in Table 1, which is attached hereto and incorporated herein by reference, and obtained for the site by borings, as well as high-density soil survey data provided by the developer.

(b) The stability of soil will be maintained or increased to adequately support any construction thereon or to support any landscaping, agricultural or similar activities. This shall be documented

by soil bearing data provided by a qualified testing laboratory or engineer and paid for by the developer.

(c) No proposed activity will cause uncontrolled erosion or slipping of soil or cause sediment to be discharged into Irondequoit Bay, Lake Ontario, the Genesee River and their wetlands or tributaries.

(d) Plant life located on the slopes outside of the minimum area that need be disturbed for carrying on approved activities shall not be destroyed. Plants or other acceptable ground cover shall be reestablished in disturbed areas immediately upon completion of development activity so as to prevent any of the harmful effects set forth above to maintain the natural scenic characteristics of the Irondequoit Bay or other scenic areas.

(e) Access down steep slopes shall be provided with ramp slopes no greater than 16% and side slopes no greater than 30% if not terraced or otherwise structurally stabilized. Disturbed nonroadway areas shall be stabilized with vegetation or other approved physical means. Completed roadways shall be stabilized and adequately drained. Disturbance to slopes of greater than 30% to provide access to subdivision sites shall be limited to 3% of such slope area.

(f) Construction of erosion protection structures, particularly along the water side of eroding bluffs, shall be permitted to provide protection of bluff features according to the following standards:

[1] All erosion protection structures shall be designed and constructed according to generally accepted engineering principles which have demonstrated success or a likelihood of success in controlling long-term erosion. Such engineering principles can be found in publications of the United States Soil Conservation Service. The protective measure must have a reasonable probability of controlling erosion on the immediate site for at least 30 years.

[2] A long-term maintenance program shall be included in any application for construction, modification or restoration of an erosion protection structure. Such programs shall include specifications for normal maintenance of degradable materials and the periodic replacement of removable materials.

[3] All material used in such structures shall be durable and capable of withstanding inundation, wave impacts, weathering and other effects of storm conditions. Individual component materials may have a working life of less than 30 years only when a maintenance program ensures that they will be regularly maintained and replaced as necessary to attain the required 30 years of erosion protection.

[4] The construction, modification or restoration of erosion protection structures shall not be likely to cause any measurable increase in erosion at the development site or other locations and prevent adverse effects to natural protective features, existing erosion protection structures and natural resources such as significant fish and wildlife habitats.

(g) Drainage of stormwater shall not cause erosion or siltation, contribute to slope failures, pollute groundwater or cause damage to or flooding of property. Drainage systems shall be designed and located to ensure slope stability.

(h) Any grading, excavating or other soil disturbance conducted on a steep slope shall not direct surface water runoff over the receding edge during construction.

(i) There is no reasonable alternative for the proposed regulated activity on that portion of the site containing steep slopes.

(j) All applications for EPOD development permit shall be prepared and reviewed using the following guidelines:

[1] All structural foundations shall be placed on virgin, undisturbed soil. (The site plan shall have a note to this effect and depict a section through the proposed structure indicating the areas of slopes greater than 15% and areas of fill.)

[2] The finished grade for all cut or fill slopes shall not exceed 3 to 1, i.e., three horizontal to one vertical. The use of retaining structures may be required to eliminate slopes greater than 3 to 1. All such retaining walls must be approved by the Town Engineer. The site plan shall show proposed contours and indicate all proposed slopes greater than 3 to 1.

[3] Surface runoff or downspout water will not be allowed to discharge on slopes greater than 15%. Said waters shall be discharged from a closed drainage system to the toe of the

slope or into a recharge structure (i.e., dry well) or a dedicated stormwater system. Storm drainage methods shall be shown and noted on the site plan.

[4] All disturbed steep slope areas shall be regraded and stabilized as soon as practical but in less than 30 days.

[5] Disturbance of steep slopes areas shall be the minimum required to allow for the completion of the subject construction. Such areas shall be clearly marked and noted on the site plan.

[6] Temporary erosion control (i.e., straw bales, siltation fences, hydroseeding, mulching, etc.) shall be provided for all disturbed areas, shall be installed before work starts and shall be maintained until restoration is complete. (The site plan shall show the location and method of erosion/siltation control.)

[7] The selection of vegetation shall be appropriate for subject applications and the plant list and ground cover vegetation shall be shown on the site plan.

[8] Steep slope areas which will not support vegetation (i.e., beneath a deck in full shade) shall receive an appropriate soil cover (i.e., stone pavers, etc.). The type and limit of nonvegetative cover shall be shown on the site plan.

[9] Removal of existing mature trees from steep slope areas will only be permitted where absolutely necessary to allow the subject construction. All trees larger than three inches in diameter shall be shown on the site plan. Trees to be removed shall also be indicated on the site plan.

[10] Deck support systems on steep slopes shall be designed by a licensed professional engineer. Details for deck supports on steep slopes shall be shown on the site plan.

[11] All steep slope EPOD permit plans shall bear the original seal and signature of a licensed professional engineer.

(2) The applicant for a permit shall have the burden of demonstrating that the proposed regulated activity will be conducted in accordance with the standards and requirements set forth above.

2. Town of Blooming Grove, Orange County, New York

Chapter 235: Zoning (Adopted 1995)

STEEP SLOPES — Areas with an average slope equal to or greater than 25% with a minimum area of 200 square feet and a minimum width perpendicular to the contour of 10 feet.

Article VA: District Regulations (Added 2005)

§ 235-14.4. Overlay districts.

C. Ridgeline Overlay District.

(1) Intent. The purpose of the Ridgeline Overlay District (RL) is to establish clear guidelines for protection of the Town's hillsides and ridgelines, which are found largely at higher elevations and steeply sloped areas and serve to:

- (a) Retain major natural topographic features, such as drainage swales, steep slopes, watershed areas, view corridors and scenic vistas;
- (b) Preserve and enhance the prominent landmark features, such as natural rock outcroppings, prominent trees and plants, other areas of special natural beauty, and stone walls and structures;
- (c) Preserve and introduce plants so as to protect slopes from soil erosion and minimize the visual effects of grading and construction on hillside areas.

(2) Applicability. For the purpose of protecting ridgelines, the provisions and standards shall be in addition to the use, bulk and site development regulations applicable to any use located in any district to which the Ridgeline Overlay District is applied. The Ridgeline Overlay District is shown on the Town's Zoning Map.

(3) General provisions.

- (a) The provisions of this section shall apply to all applications for land use development, including site plan, subdivision, special use and conditional use permits, zoning variances, building permits for new residential dwellings, dwelling additions exceeding 300 square feet, and accessory structures exceeding 300 square feet, on any parcel of land lying fully or partially within the Ridgeline Overlay District.
- (b) To ensure the placement of structures outside of the exposed ridgeline area on proposed building lots, building sites, including areas of vegetation, shall be clearly designated on the applicable subdivision plat and/or site plan.
- (c) No land shall be developed and no building or structure erected, expanded, or developed unless the Planning Board finds that the development proposed will be consistent with the standards of the Ridgeline Overlay District and grants approval.
- (d) Sites in the RL District, also located within the Scenic Roads, Scenic Viewshed or Scenic Gateways Overlay Districts are subject to the provisions and standards found therein.

3. Town of New Paltz, Ulster County, New York

Chapter 140: Zoning (Adopted 1976 with Amendments)

STEEP SLOPE — Any geographical area proposed for disturbance, whether on a single lot or not, having a topographical gradient of 15% or greater (ratio of vertical distance to horizontal distance), with a minimum horizontal dimension of 10 feet, and a minimum area as defined below, and whether man-made or natural, and whether created by a retaining structure or not. Steep slopes are further categorized as:

A. MODERATELY STEEP SLOPE -- A slope equal to or greater than 15% but less than 25% and covering a minimum horizontal area of 3/10 acre or 13,068 square feet.

B. EXTREMELY STEEP SLOPE -- A slope greater than 25% and covering a minimum horizontal area of 2/10 acre or 8,712 square feet.

Article XV: Steep Slope Protection (Added 2004)

§ 140-132. Purpose.

It is the intent of the Town of New Paltz to preserve steep slopes to the greatest extent practicable and to regulate their use to protect the public interest by minimizing detrimental effects of disturbance and development of these areas. This section is intended to protect the public from the potential negative impacts of the erosion, siltation, pollution of water supplies, slope failure, increase in downstream runoff, alteration of scenic views, and destruction of potentially significant habitat, which may result from disturbance of steep slopes.

§ 140-133. Findings.

A. Steep slopes and adjacent watercourses and wetlands have been and are in jeopardy of being damaged and destroyed by unregulated filling, excavating, building, clearing and grading, and other such acts inconsistent with the natural conditions of steep slopes. Steep slopes in the Town of New Paltz are environmentally sensitive landforms and valuable natural resources, which are of benefit to the entire Town and surrounding region. The environmental sensitivity of steep slopes often results from such features as rock outcrops, shallow soils over bedrock, bedrock fractures, groundwater seeps, watercourses, and other wetlands found on or immediately adjacent to steep slopes.

B. Protection of steep slopes is a matter of concern to the entire Town of New Paltz. The establishment of regulatory and conservational practices in this critical area is needed to protect the public health, safety, and general welfare. Experience has demonstrated that effective protection of steep slopes requires preservation wherever possible. Experience has further demonstrated that where steep slopes have to be disturbed, careful review and regulation, including stringent mitigation measures, are required.

C. The Town of New Paltz's experience with past development has shown that improperly managed disturbances of steep slopes can aggravate erosion and sedimentation beyond rates experienced in the natural geomorphological processes. Erosion and sedimentation often include the loss of topsoil, a valuable natural resource, and can result in the disturbance of habitats, the degradation of the quality of surface water, the silting of wetlands, the alteration of drainage patterns, obstruction of drainage structures, and the intensification of flooding.

D. The Town of New Paltz's experience with past development has shown that inadequately controlled disturbance of certain steep slopes can lead to the failure of slopes and the mass movement of earth, rock slides and landslides, damage to the natural environment, threats to man-made structures and personal safety, and the degradation of aesthetics.

E. Steep slopes, including vegetation on rock cliffs, are important environmental features that contribute to the character of the Town. Overdevelopment or improperly managed disturbances are detrimental to the character of the Town and can result in public and private expenditures for corrective measures.

F. Regulation of development on steep slopes is consistent with the legitimate interest of landowners to make reasonable use of their land. Regulation can prohibit the degradation of steep slopes and allow reasonable use of private property by encouraging flexible design of development so as to avoid disturbance of steep slopes. Regulation can also permit environmentally sound disturbance of steep slopes conducted in accordance with acceptable management and engineering practices to permit reasonable use of private property.

G. Regulation of development on steep slopes will not preclude the Town from continuing to meet its social, economic and other essential responsibilities.

H. These regulations are enacted with the intent of providing reasonable balance between the rights of the individual property owner to the fair use of his property and the rights of present and future generations. Therefore, this chapter recognizes the rights of owners of property exhibiting steep slopes to use their property for reasonable purposes consistent with other regulations and controls, provided that such use, in the judgment of the appropriate agencies or

officials of the Town, does not result in a significant loss or degradation of steep slopes or a loss of visual or open space benefits which steep slopes have been found to provide.

I. It is declared to be the intent of the Town of New Paltz to preserve steep slopes to the greatest extent practicable and to regulate their use within the Town to protect the public interest by ensuring the maximization of benefit found to be provided by the preservation of steep slopes and by ensuring the minimization of detrimental effects for the practice of properly managed disturbance of steep slopes as set forth in this article.

§ 140-134. Definitions.

As used in this chapter, the following terms shall have the meanings indicated: **AGRICULTURE** — All agricultural operations and activities related to the growing or raising of crops, livestock or livestock products, and agricultural products, as such terms are defined in or governed by the Agriculture and Markets Law of the State of New York on lands qualified under Ulster County and NYS law for an agricultural exemption by the Assessor of the Town of New Paltz.

ANGLE OF REPOSE — The maximum angle at which the exposed face of various soil and rock minerals can deviate from the horizontal without incurring the likelihood of slope failure.

APPLICANT — A person requesting a steep slope permit from the Town of New Paltz in accordance with the provisions of this chapter.

APPROVING AUTHORITY — The municipal agency or public official empowered to administer the permit procedures of this chapter.

CLEARING — Any activity which removes or significantly disturbs trees, brush, grass, or any other type of vegetation.

CUSTOMARY LANDSCAPING — Land maintenance involving tree trimming and pruning, the removal of dead and/or diseased vegetation, lawn and garden care and the planting of decorative trees, shrubs, and plants.

DEPOSIT — To fill, place, eject, or dump any material (not including stormwater).

DISTURBANCE — The removal of vegetation, excavation, regrading, filling, removal of soil, rock or retaining structures in areas of steep slope, or any combination thereof, whether by manual labor, machine, or explosive, and shall include the conditions resulting from any excavation or fill. The condition of disturbance will be deemed to continue until the area of disturbance is revegetated and/or permanently stabilized.

DISTURBED AREA — Any steep slope area for which a disturbance is proposed or is ongoing.

DRAINAGE — The gravitational movement of water or other liquids by surface runoff or surface flow.

EROSION — The wearing away of the land surface by action of wind, water, gravity, or other natural forces.

EXCAVATION — Any act by which earth, sand, gravel, rock or any other similar material is cut into, dug, quarried, uncovered, removed, displaced or spread.

FILL — Any act by which earth, sand, gravel, rock, or any other material is deposited, placed, replaced, dumped, transported, or moved by person or persons to a new location and shall include conditions resulting therefrom.

FOREST LAND — An ecosystem supporting a dense growth of trees covering a large area. The fence rows alone do not constitute a forest system.

GRADING — The alteration of the surface or subsurface conditions of land, lakes, ponds, or watercourses by excavating or filling.

LAND STEWARDSHIP PLAN — A written description of land management and stewardship practices employed on the property, and how such practices are in keeping with the intent of this Local Law as set forth in the "purpose" section herein. Said written description shall include an enumeration of all such land management practices, but does not need to be specific in terms of location, scope or duration of said practices.

MULCHING — The application of a layer of plant residue or other material for the purpose of controlling erosion.

PERSON — Any person, firm, partnership, association, corporation, company, organization or other legal entity of any kind, including public agencies and municipal corporations.

REMOVAL — Cutting vegetation to the ground, leaving it as stumpage, extracting it completely, or killing it by spraying.

SEDIMENT — Solid material, both mineral and organic, that is in suspension, is being transported, has been deposited, or has been removed from its site of origin by erosion.

SITE — One or more lots or parcels of land, where regrading work is performed as a single unified operation.

SITE PLAN — The map or drawn representation of a proposed development, which is submitted to the municipal approval authority for consideration and approval.

SITE PREPARATION — The activities of stripping, removal, excavating, filling, and grading, no matter what the purpose of these activities.

SOIL — The natural, unconsolidated, mineral and organic material occurring on the surface of the Earth; it is a medium for the growth of plants.

SOIL CONSERVATION — The protection of soil by careful management in order to prevent physical loss by erosion and to avoid chemical deterioration.

SOIL STABILIZATION — Measures which protect soil from the erosive forces or raindrop impact and flowing water and include, but are not limited to, vegetation establishment, mulching and the early application of gravel base on roads to be paved.

SOIL SURVEY — The systematic examination and mapping of soil in the field.

STATE ENVIRONMENTAL QUALITY REVIEW ACT (SEQRA) — The law pursuant to Article 8 of the New York Environmental Conservation Law providing for environmental quality review of actions which may have a significant effect on the environment.

STEEP SLOPE — Any geographical area proposed for disturbance, whether on a single lot or not, having a topographical gradient of 15% or greater (ratio of vertical distance to horizontal distance), with a minimum horizontal dimension of 10 feet, and a minimum area as defined below, and whether man-made or natural, and whether created by a retaining structure or not. Steep slopes are further categorized as:

A. MODERATELY STEEP SLOPE — A slope equal to or greater than 15% but less than 25% and covering a minimum horizontal area of 3/10 acre or 13,068 square feet.

B. EXTREMELY STEEP SLOPE — A slope greater than 25% and covering a minimum horizontal area of 2/10 acre or 8,712 square feet.

STEEP SLOPE PERMIT — A written form of municipal approval granted by the approving authority and required for the issuance of a work permit and the conduct of any “steep-slope-regulated activity.”

TOPOGRAPHY — The configuration of the land surface, including its relief and the position of its natural and man-made features.

VEGETATED — Covered or provided with vegetation or plant life.

VEGETATION — The process of vegetating, the faculty of growth possessed by plants and seeds.

§ 140-135. Exempt and regulated activities.

A. Exempt activities.

- (1) Agriculture, as defined herein;
- (2) Any customary landscaping, not involving regrading, is allowed without the need for obtaining a permit, provided that any such activities conform to all other applicable laws of the Town of New Paltz;
- (3) Regulated activities on lands which are open to the public for a park, nature preserve or wildlife refuge, for recreation or tourism, whether or not a fee is charged for such use, or lands governed by the terms of a conservation easement on file with the Assessor of the Town of New Paltz and the County Clerk, or lands protected by a conservation easement or owned in fee by a not-for-profit land trust or conservation organization, or nonpublic lands owned and maintained by bone fide religious/apostolic organizations possessing a tax exemption under Section 501(d) of the United States IRS Code, or on lands designated as a national landmark, provided that all such lands are managed by a land stewardship plan on file with the Town of New Paltz Environmental Conservation Commission to meet the spirit and intent of this chapter;
- (4) Emergency actions, and measures necessary to protect human life and preserve property, such as clearing rock slides, creating a fire break to fight fire, or other situations in which there is an imminent threat to public health, safety and welfare.
- (5) Any property that is already subject to one or more established plans of land stewardship, such as a:
 - (a) Federal, state, or local historic landmark designation;
 - (b) Farmland conservation easement pursuant to the New York State Agricultural and Markets Law, Article 25-AAA;
 - (c) New York State DEC-approved forestry plan pursuant to §§ 480 and 480-a of the Real Property Tax Law, or pursuant to a Forest Land Enhancement Program (FLEP);
 - (d) USDA Natural Resource Conservation Services-approved Wildlife Habitat Incentives Program plan (WHIP);
 - (e) USDA Agricultural Management Assistance Conservation Plan (AMA);
 - (f) USDA Conservation Security Plan (CSP);
 - (g) USDA Conservation Reserve Program (CRP);
 - (h) USDA Conservation Reserve Enhancement Program (CREP);
 - (i) USDA Debt for Nature Program;
 - (j) USDA Wetland Reserve Program (WRP);
 - (k) Cooperative Agricultural Environmental Management Plan (AEM) (implemented through Cornell Cooperative Extension, Soil and Water Conservation Service and the USDA Natural Resources Conservation Service).

B. Regulated activities. It shall be unlawful to create any disturbance and/or to remove any more than two trees with a diameter greater than four inches, when measured from 1 ½ feet from ground level, on any steep slope as defined by this section, with the exception of an exempt activity as defined herein, without a specific written permit as required by this section.

§ 140-136. Approval authority.

The approval authority with respect to applications hereunder shall be as follows:

A. The Zoning Board of Appeals shall be the approval authority with respect to any application which requires the issuance of any other permit or approval by it pursuant to the local laws of the Town of New Paltz.

B. The Planning Board shall be the approval authority with respect to any application which requires the issuance of any other permit or approval by it pursuant to the local laws of the Town of New Paltz, including any application which also requires the issuance or approval by the Zoning Board of Appeals.

C. The Town of New Paltz Town Board shall be the approval authority with respect to any application which requires the issuance of any permit or other approval by it pursuant to the laws, rules and regulations of the State of New York and/or the local laws of the Town of New Paltz.

D. The Town of New Paltz Town Engineer or other qualified representative that is duly authorized by the Town Board shall be the approval authority with respect to all other regulated activities.

§ 140-137. Standards for approval.

In denying, granting or granting with modifications any application for a permit, the approval authority shall consider the consistency of the proposed activity with the findings set forth in § 140-133 of this chapter and the following standards:

A. Alterations of trees and forests and topographical alterations on steep slopes shall conform to any applicable regulations of the Town of New Paltz.

B. Activities within wetlands and their adjacent area, and within the regulated areas of protected streams shall be in conformance with the applicable federal and state regulatory requirements.

C. Disturbance of areas with steep slopes should conform with the following provisions:

(1) The planning, design, and development of buildings shall provide the maximum structural safety, slope stability and human enjoyment while adapting the affected site to, and taking advantage of, the best use of the natural terrain.

(2) The terracing of building sites, including the mounding of septic tile fields, shall be kept to an absolute minimum.

(3) The roads and driveways shall follow the natural topography to the greatest extent possible in order to minimize the potential for erosion and shall be consistent with other applicable regulations of the Town of New Paltz and current engineering practices.

(4) Replanting shall consist of indigenous vegetation and shall replicate the original vegetation on the site as much as possible.

(5) The natural elevations and vegetative cover of ridgelines shall be disturbed only if the crest of a ridge and the treeline at the ridge remains unobstructed. This may be accomplished either by positioning buildings and areas of disturbance below a ridgeline or by positioning buildings and areas of disturbance at a ridgeline so that the elevation of the roofline is no greater than the elevation of the natural treeline. However, under no circumstances shall more than 100 feet along the ridgeline, to a width of 100 feet generally centered on the ridgeline, be disturbed.

(6) Regrading shall blend in with the natural contours of the land.

(7) Cuts and fills shall be rounded off to eliminate sharp angles at the top, bottom, and sides of regraded slopes.

(8) The angle of cut and fill slopes shall not exceed a slope of one vertical to two horizontal except where retaining walls, structural stabilization, or other methods acceptable to the Town Engineer are used.

(9) Tops and bottoms of cut and fill slopes shall be set back from structures a distance that will ensure the safety of the structure in the event of the collapse of the cut or fills slopes. Generally, such distance shall be considered to be six feet plus 1 ½ the height of the cut or fill. Nevertheless, a structure built on a slope or at the toe of a slope is permitted if it is properly designed to retain the slope and withstand the forces exerted on it by the retained slope.

(10) The disturbance of rock outcrops shall be by means of explosive only if labor and machines are not effective and only if rock blasting is conducted in accordance with all applicable regulations of the Town of New Paltz and the State of New York.

- 11) Disturbance of steep slopes shall be undertaken in workable units in which the disturbance can be completed and stabilized in one construction sequence so that areas are not left bare and exposed during winter and spring thaw periods (December 15 through April 15).
- 12) Disturbance of existing vegetative groundcover shall not take place more than 15 days prior to grading and construction.
- 13) Temporary soil stabilization, including, if appropriate, temporary stabilization measures such as netting or mulching to secure soil during the grow-in period, must be applied to an area of disturbance not longer than two days after establishing the final grade, and permanent stabilization must be applied within 15 days of establishing the final grade.
- 14) Soil stabilization must be applied not longer than two days after disturbance, if the final grade is not expected to be established within 60 days.
- 15) Measures for the control of erosion and sedimentation shall be undertaken consistent with the New York State Guidelines for Urban Erosion and Sediment Control, latest edition, or its equivalent (satisfactory to the approval authority).
- 16) All proposed disturbance of steep slopes shall be undertaken with consideration of the soils limitations characteristics contained in the Soils Survey of Ulster County, 1979, as prepared by the Soil Conservation Service, in terms of recognition of limitation of soils on steep slopes for development and application of all mitigating measures as deemed necessary by the approval authority.
- 17) Topsoil shall be stripped from all areas of disturbance and then stockpiled and stabilized in a manner to minimize erosion and sedimentation and replaced elsewhere on the site at the time of final grading. Stockpiling shall not be permitted on slopes greater than 10%.
- 18) No organic material or rock shall be used as fill material that is of a size that will not allow appropriate compaction or cover by topsoil. Fill materials shall be no less granular than the soil upon which it is placed and shall drain readily.
- 19) Compaction of fill materials and fill areas shall be such to ensure support of proposed structures and stabilization for intended uses.

§ 140-138. Permit procedures.

A. Application for permit. An application for permit to alter a steep slope shall be filed with the approval authority and shall contain the following information and such other information as required by it, except when waived by it as not pertinent or necessary for the proposed disturbance:

- (1) The name and post office address of the owner and applicant.
- (2) This street address and tax map designation of the property covered by the application.
- (3) A statement of authority from the owner for any agent making application.
- (4) A listing of property owners adjacent to, across streets from, and downgradient within 500 feet of the property as well as any additional property owners deemed appropriate by the approval authority.
- (5) A statement of the proposed work and purpose thereof.
- (6) Copies, in such reasonable number as determined by the approval authority, of plans for the proposed regulated activities drawn to a scale of not less than one inch equals fifty feet (unless otherwise specified by the approval authority). Such plan for alteration of land containing moderately steep slopes shall be prepared by an experienced professional with qualifications satisfactory to the approval authority. Plans for alteration of land containing extremely steep slopes shall be prepared and certified by a qualified professional licensed by the State of New York, such as a professional engineer, a certified professional in erosion and sediment control, or a landscape architect. The plan for the regulated activities must incorporate the following information:
 - (a) The location of the proposed construction or area of disturbance and its relationship to the property lines, easements, buildings, roads, walls, sewage disposal systems, wells, and streams and wetlands within 100 feet of the proposed construction or area of disturbance for adjacent properties at the same elevation and within 500 feet of the properties significantly lower.
 - (b) The estimated material quantities of excavation/fill.
 - (c) The location and size of areas of soils listed by soil types in the area of the proposed disturbance and to a distance of 100 feet beyond same.
 - (d) The existing and proposed contours [National Geodetic Vertical Datum (NGVD)] at two-foot intervals in the area of the proposed disturbance and to the distance of 100 feet beyond same.
 - (e) Cross sections of steep slope areas.
 - (f) Retaining walls or like constructions, with details of construction.
 - (g) The erosion and sedimentation control plan.

(h) Other details, including specific reports by qualified professionals on soils, geology and hydrology, and borings and/or test pits, as may be determined to be necessary by the approval authority.

(i) A list of all applicable County, State, or federal permits which are required for such work or improvements.

(j) An application fee in the amount set forth in a fee schedule established by the Town of New Paltz Town Board.

B. Referral. The approval authority shall refer any application submitted to it pursuant to this chapter to the Environmental Conservation Commission for review and report. The Environmental Conservation Commission shall report back to the approval authority within forty five days of the date of the referral or within such greater period as may be specified by the approval of authority (at the time of the referral). Failure to comply with the specified time period shall be interpreted by the approval authority as indicating no objection to the application.

C. Notice. Upon receipt of a completed application under this chapter, the approval authority shall cause notice of receipt of the same to be mailed by first-class mail to the adjoining property owners, including those across the street adjoining the involved property. Such property owners shall have ten days from said day of notice to submit written comment to the approval authority with regard to said application. The approval authority may waive this notice procedure if it has received responses from all the adjoining property owners prior to action by it. In cases where the approval authority is the Town Engineer or other qualified representative that is duly authorized by the Town Board, he/she shall cause such notice to be posted at one or more locations along the street or streets abutting the property.

D. Public hearing. A public hearing shall be held by the approval authority on the application made hereunder at such times, under such circumstances, and upon such notice as may be required for the granting of the permit or approval required of such approval authority pursuant to the local laws and ordinances of the Town of New Paltz. A public hearing may be held when the approval authority is the Town Engineer or other qualified representative that is duly authorized by the Town Board.

E. Action by the approval authority. In approving any application, the approval authority may impose such conditions or limitations as it determines necessary to insure compliance with the intent, purposes, and standards of this chapter.

(1) On applications for which no public hearing is required, a determination shall be made to approve, approve with modifications or disapprove the application within 60 days of receipt of a completed application therefore.

(2) On applications for which a public hearing is required, a determination shall be made to approve, approve with modifications, or disapprove the issuance of such permit simultaneously with a determination by the approval authority of the other permit or approval for which the application was made.

F. Appeal. Any party aggrieved by a decision of the Town Engineer or other qualified representative that is duly authorized by the Town Board to approve, approve with conditions, or disapprove an application may appeal the decision to the Zoning Board of Appeals.

§ 140-139. Duration of permit.

A. Activities specified by the permit shall be undertaken pursuant to any conditions of the permit and shall be completed according to any schedule set forth in the permit.

B. A permit shall expire on completion of the activities specified and shall be valid for a period of one year from the date of approval or for the period of any other permit issued by the approval authority.

C. A permit may be renewed by the approval authority for a period of up to one year.

D. The approval authority may revoke or suspend a permit if it finds that the applicant has not complied with any of the conditions or limitations set forth in the permit.

§ 140-140. Security.

In granting a permit, the approval authority shall require a security (in an amount and with surety and conditions satisfactory to it), securing to the Town of New Paltz compliance with the conditions and limitations set forth in the permit.

§ 140-141. Inspection and monitoring.

A. The approval authority may inspect activities undertaken pursuant to a permit (or have such activities inspected by its representative) so as to ensure satisfactory completion.

B. The approval authority may require that the applicant submit for approval a detailed monitoring program, including but not necessarily limited to written status reports at specified intervals documenting activities undertaken pursuant to a permit.

C. The approval authority may require that the activities undertaken pursuant to a permit be supervised by an appropriate licensed professional.

§ 140-142. Compliance with State Environmental Quality Review Act.

All actions by the Planning Board under the provisions of this chapter shall comply with the provisions of the State Environmental Quality Review Act under Article 8 of the Environmental Conservation Law and its implementing regulations.

§ 140-143. Fees.

A. The Town Board of the Town of New Paltz shall establish by resolution the fee to be charged, collected and received for the granting of each permit required by this chapter.

B. The fees required pursuant to the provisions of this chapter shall be paid in advance upon submission of an application, and the failure to submit the full payment required shall render the application and complete.

§ 140-144. Penalties for offenses.

A. Every person who shall fail to comply with a violation order issued by the enforcement officer within the time limit stated thereon shall be deemed to have committed an offense against this chapter and also shall be liable for any such violation for the penalty therefore.

B. A violation of this chapter is hereby declared to be an offense, punishable by a fine not exceeding \$350 or imprisonment for a period not to exceed six months, or both, for conviction of a first offense; for conviction of a second offense, both of which were committed within a period of five years, punishable by a fine not less than \$350 nor more than \$700 or imprisonment for a period not to exceed six months, or both; and upon conviction for a third or subsequent offense, all of which were committed within a period of five years, punishable by a fine not less than \$700 nor more than \$1,000 or imprisonment for a period not to exceed six months, or both. However, for the purpose of conferring jurisdiction upon courts and judicial officers generally, violations of this chapter shall be deemed misdemeanors, and, for such purposes only, all provisions of law relating to misdemeanors shall apply to such violations. Each week's continued violations shall constitute a separate additional violation.

C. Any person violating this chapter shall be subject to a civil penalty enforceable and collectible by the Town. Such penalty shall be collectible by and in the name of the Town for each week that such violation shall continue.

D. In addition to the above-provided penalties and punishment, the Town Board may also maintain an action or proceeding in the name of the Town in a court of competent jurisdiction to compel compliance with or to restrain by injunction the violation of this chapter.

E. The enforcement responsibility, procedures and fines shall be coordinated with zoning enforcement and flood damage control law provisions so that any instance where multiple violations occur because of the same set of facts can be effectively and efficiently prosecuted.

§ 140-145. Relief from decisions.

Any person or persons jointly or severally aggrieved by any decision of the Planning Board, and/or the Town Board, and/or the Zoning Board of Appeals, and/or the Town Engineer and/or their duly authorized representative under this article may apply to the Supreme Court of the State of New York for relief through a proceeding under Article 78 of the Civil Practice Law and Rules of the State of New York. Such proceeding shall be governed by the specific provisions of Article 78, except that the action must be commenced within 30 days after the filing of the decision of the Planning Board, or of the Zoning Board of Appeals, or of the Town Engineer, or of such duly authorized representative, as the case may be, in the office of the Town Clerk in accordance with applicable provisions of New York State Town Law.

4. Town of Gardiner, Ulster County, New York

Chapter 220: Zoning ** (Adopted 1984 with Amendments)

No definition of "steep slope(s)."

Article V: Supplementary District and Use Regulations

§ 220-13.1. Shawangunk Ridge protection regulations (SP District). ** (Added 2006)

A. Findings.

(1) The Town of Gardiner finds that the unique scenic character and fragile ecology of the Shawangunk ridge, escarpment, and foothills are critical features of the Town whose conservation enriches and benefits residents and visitors.

(2) The ecological resources of this entire area (which includes not only the SP District but also land located in the same ecosystem in adjoining towns) are of national and international significance, considered by the State of New York and major conservation organizations as one of the most important sites for biodiversity conservation in the Northeastern United States. Because this area includes a set of closely related ecosystems, whatever occurs on one portion of it can have a significant effect on other resources. This area includes visually prominent and geologically significant cliffs and talus slopes and five globally rare plant communities, including the world's best example of the dwarf pine ridge community. The significance of this area has been documented in numerous programs and studies, including the Town's 2004 Comprehensive Plan and the "Green Assets" program, described in the Town of Gardiner Comprehensive Plan, in which Gardiner is a participating town with the Shawangunk Ridge Biodiversity Partnership.

(3) As documented in the Town's 1992 Comprehensive (Master) Plan and the 2004 Comprehensive (Master) Plan update, which both contain provisions for the protection of the Shawangunk Ridge and its immediate surroundings, conservation of the visual resources and sensitive ecosystems in this area of the Town has repeatedly emerged as an important priority in the public planning process. While not all of this area is within the Town of Gardiner, any development within the Town at the higher elevations or on the steeper slopes of the Ridge can significantly affect the ecological integrity of this entire area. At higher elevations and on steeper slopes, the visual and ecological impacts tend to be more significant.

(4) The Town therefore finds that protection of the scenic character and ecological integrity of the Shawangunk Ridge area are important to maintaining rural character, a sense of place, and scenic landscapes, all of which contribute to the Town's quality of life and its attractiveness for tourism and for residential and commercial development.

(5) The Town further finds that limited development of the area covered by this district may be appropriate, as long as such development is carefully planned and designed to maintain, conserve, and enhance the scenic and ecological features of the area and the views into the landscape from publicly accessible locations. Protection of this area from inappropriate development is necessary to protect visual quality and environmentally fragile areas.

(6) In order to achieve the Town's goal of protecting the visual and environmental quality of this sensitive area, the Town finds that planning and zoning should direct development to areas of lower elevation by strictly regulating development at higher elevations and providing incentives for development to occur in the least sensitive locations. The Town finds that a "tiered" approach, in which land use is regulated less stringently at lower elevations and more stringently at higher elevations, is an appropriate tool to accomplish this goal, particularly with respect to protection of the steepest slopes and the large blocks of unfragmented forest.

B. Purpose. The purpose of the Shawangunk Ridge Protection District (hereafter the "SP District") is to protect the resource values of the Shawangunk Ridge area as described in the Comprehensive Plan and to establish clear guidelines for its future protection and sensitive development.

C. Location and boundaries. The Shawangunk Ridge Protection District is delineated on the Town of Gardiner Zoning Map and is divided into three subdistricts shown thereon as SP-1, SP-2, and SP-3. The purpose of this division into three subdistricts is to have a graduated system of regulation that is least restrictive at the bottom of the slope (SP-1), more restrictive on the middle portion of the slope (SP-2), and most restrictive at the higher elevations (SP-3). The subdistricts are shown on the map attached hereto as Exhibit A and entitled the "Town of Gardiner Shawangunk Ridge Protection (SP) Subdistrict Lines." The location of the boundary lines between the subdistricts has been determined based on a combination of elevation, slope factors, and the pattern of existing development.

D. Use regulations.

- (1) The uses permitted shall be as shown on the Use Table attached at the end of this section 220-13.1. The Use Table in this section supersedes the Use Index in Attachments A and B of this chapter, except with respect to accessory uses in the SP-1 Subdistrict. Additions to existing dwellings in the SP-2 and SP-3 Subdistricts which do not exceed a cumulative total of 750 square feet shall not require a special permit.
- (2) Any use not shown on the Use Table referred to in Subsection D(1) above shall be prohibited.
- (3) The following are specifically prohibited within the SP District:
 - (a) Privately owned central sewage systems or sewage disposal facilities as defined in this chapter.
 - (b) Privately owned central water systems.
 - (c) Commercial excavation.
- (4) Special permits within the SP District shall be issued by the Planning Board, except that special permits for home occupations and multifamily dwellings shall be issued by the Town Board.
- (5) In making its determination on a special permit application, the Planning Board shall require the preparation of a conservation analysis pursuant to § 220-12A and shall make conservation findings as provided in § 220-12A(8). The Board shall consider all resource protection criteria and standards listed in Subsection F below and shall ensure maximum feasible protection of the SP District's unique resources, in particular the cliffs and talus slopes and the five globally rare plant communities identified in the Comprehensive Plan.
- (6) The Planning Board shall attach conditions to its special permit approval it deems necessary to achieve the resource protection objectives of the SP District. Such conditions may include the following:
 - (a) Limiting building to a specified "building envelope" area.
 - (b) Requiring a conservation easement as described in § 220-12.1 on land outside a building envelope, only within the SP-3 Subdistrict.
 - (c) Requiring landscaping to buffer and screen proposed structures.
 - (d) Reducing the height, footprint, or floor area of a proposed structure.
 - (e) Modifying the architecture, building materials, or other design features of a structure so that it will blend into the landscape.
 - (f) Limiting alteration of landforms through grading, cutting, or filling.
 - (g) Changing the location and siting of structures, including the alignment of roads and driveways and the placement of any other improvements on the property.
 - (h) Restricting clearing of trees and reduction of tree cover.
- (7) In the event that, even with the imposition of conditions, the resource protection objectives of this section cannot be satisfied, the Planning Board shall deny an application for a special permit.
- (8) In order to enable the Planning Board to fulfill its obligations under Subsection D(5) and (6) above, an applicant shall be required to submit site plans, architectural elevations and models, ecological data, watershed analyses, or any other materials that are deemed necessary by the Planning Board to make an informed decision.

E. Dimensional regulations. The dimensional regulations for uses in the SP District shall be as follows:

- (1) In the SP-1 Subdistrict, dimensional regulations shall be as shown on the Bulk Table on Attachment F. Editor's Note: The Table of Bulk Requirements is included at the end of this chapter.
- (2) In the SP-2 and SP-3 Subdistricts, dimensional regulations shall be as shown on the Bulk Table on Attachment F, except as modified below in Subsections E(3) and (4).
- (3) Within the SP-2 Subdistrict, the following modified dimensional standards shall apply:
 - (a) The minimum lot area shall be 10 acres except in open space developments.
 - (b) The maximum building height shall be 25 feet.
 - (c) The maximum total floor area of all structures shall not exceed 6,000 square feet, unless the Planning Board finds that a structure of greater size will not compromise the purposes of this § 220-13.1 or the conservation findings, and that special design features or other mitigating circumstances justify allowing an increased floor area. Such circumstances may include the grant of a conservation easement on land of conservation value substantially in excess of the minimum lot area requirement.
 - (d) No lot shall have more than 5% impervious surface coverage except in open space subdivisions.
 - (e) Subsection E(3)(c) and (d) above shall not apply to existing dwellings but shall apply to additions to such dwellings in excess of 750 square feet of floor area.
- (4) Within the SP-3 Subdistrict, the following modified dimensional standards shall apply:

- (a) The minimum lot area shall be 20 acres except in open space developments.
 - (b) The maximum building height shall be 25 feet.
 - (c) The maximum total floor area of all structures shall not exceed 4,000 square feet, unless the Planning Board finds that a structure of greater size will not compromise the purposes of this § 220-13.1 or the conservation findings, and that special design features or other mitigating circumstances justify allowing an increased floor area. Such circumstances may include the grant of a conservation easement on land of conservation value substantially in excess of the minimum lot area requirement.
 - (d) No lot shall have more than 3% impervious surface coverage except in open space subdivisions.
 - (e) Subsections E(4)(c) and (d) above shall not apply to existing dwellings, but shall apply to additions to such dwellings in excess of 750 square feet of floor area.
- (5) For new subdivisions of land, the Planning Board may require an open space development based upon its conservation findings, as provided in Subsection F(1)(d) and (e) below. In such open space developments:
- (a) The requirements for lot area, setbacks, lot width, impervious surface coverage, and street frontage listed above and on Attachment F Editor's Note: The Table of Bulk Requirements is included at the end of this chapter. may be varied as provided in § 220-12.
 - (b) No units in an open space development may be built in the SP-3 Subdistrict, unless the entire parcel proposed for development is located within the SP-3 Subdistrict, as provided in § 220-13.1F(10).
 - (c) As provided in § 220-12F(1), the maximum impervious surface in an open space development in the SP District shall be 6%.
- (6) The minimum lot area for any preexisting lot which lies in more than one subdistrict and is not created as part of an open space development shall be the same as the minimum lot area for the SP-2 Subdistrict. In new subdivisions that are not open space developments, lots lying entirely in one subdistrict shall comply with the lot area requirements for that subdistrict. Lots that cross subdistrict boundaries shall comply with the lot area requirements for the subdistrict in which more than 50% of the land is located.
- F. Special resource protection design requirements for the SP District.
- (1) Purpose and applicability.
 - (a) All development requiring a special permit within the SP District that requires review by the Planning Board, Town Board, or Zoning Board of Appeals shall comply with the standards in this Subsection F. The intent of the design requirements is to ensure that development within the SP District creates no more than a minimal impact on the scenic and ecological resources of the district and the surrounding area, makes open space planning a central focus of any future development, and provides siting principles to help landowners and the Planning Board plan projects that fit into the scenic and rural countryside in the Shawangunk Ridge area.
 - (b) The Planning Board shall insert conditions on any approval, or deny approval, as necessary to satisfy the requirements of this Subsection F or any other part of this § 220-13.1. Such conditions shall include the requirement that permitted construction occur at the lowest feasible elevation on the property.
 - (c) As part of any application for a subdivision, special permit, or site plan approval in the SP District, the applicant shall prepare a conservation analysis as described in § 220-12A, except in the case of a minor subdivision located entirely within the SP-1 Subdistrict. The scope of such a conservation analysis shall be tailored to the size, scale and impact of the proposed development. For applications involving only individual single-family dwellings on lots which existed on January 1, 2005, and for minor subdivisions and uses other than single-family dwellings, the conservation analysis requirement shall apply only to the portion of the property where construction or land disturbance is proposed. For lots created after January 1, 2005, the conservation analysis shall be prepared as part of the subdivision application process by which the lot is created. At the time of application for a special permit for a specific lot, the Planning Board shall rely on the prior conservation analysis but may request that the conservation analysis be updated or further detailed if necessary for the Board to make an informed decision.
 - (d) Before making any decision on an application for a special permit or site plan approval, or for a subdivision sketch plan, the Planning Board shall make conservation findings as provided in § 220-12A(8) based upon this conservation analysis.

(e) In the case of applications for conventional subdivisions, unless the Planning Board determines that the conventional subdivision would have less impact on the fragile visual and ecological resources of the district than an open space development, it shall deny tentative approval for the sketch plan of the conventional subdivision application and require the applicant to submit an open space development sketch plan consistent with its conservation findings, as provided in § 220-12.

(f) In the event that an applicant files an application for an open space development, and the Planning Board determines that a conventional subdivision would have less impact on the fragile visual and ecological resources of the district, the Planning Board may deny tentative approval of the sketch plan for the open space development and require the applicant to submit a conventional subdivision sketch plan application.

(g) In determining the maximum number of dwelling units for an open space development under § 220-12B, the Planning Board may require an applicant for a subdivision in the SP District to prepare a yield plan, as provided in § 220-12B(2), where the Planning Board determines in its sole discretion that because of steep slopes and difficult access conditions, a yield plan may result in a significantly lower total unit count than would be permitted by using the density formula method. In such a case, the permitted maximum unit count shall be the lower number resulting from use of the two methods. Such a plan shall not be required to be submitted if the applicant proposes no more than 75% of the maximum allowable number of units using the density formula method.

(h) The provisions of this section shall not apply to farm operations which are located within agricultural districts established pursuant to New York State Agriculture and Markets Law.

(2) Guidance and consulting assistance.

(a) For guidance in applying the standards in this § 220-13.1, the Planning Board may refer to recommendations contained in the publications of the "Green Assets" program, referenced in the Comprehensive Plan, in which Gardiner is a participating Town, and "Gateway to the Shawangunks: Maintaining a Scenic Road Corridor" (1997), published by Mohonk Preserve, Inc. and Friends of the Shawangunks, as well as other design guidance documents which the Planning Board determines to be relevant to protecting the resources of the SP District.

(b) The Planning Board shall retain the services of qualified experts, including but not limited to landscape architects, ecologists, DEC-certified professional foresters, arborists, hydrologists, engineers, architects to the extent necessary to adequately review a conservation analysis and proposed open space development plan, and may charge the applicant for the reasonable costs of review by such experts. The level of required professional qualification of the experts shall be determined by the Planning Board and shall be commensurate with the scale and impact of the proposed development and the characteristics of the site. The Planning Board shall also refer all applications to the Town of Gardiner Environmental Conservation Commission (ECC) for comment, which must be received at or prior to the public hearing.

(3) Building envelopes. To ensure that the placement of structures and other improvements complies with the standards in this Subsection F and minimizes visibility and impacts on the ecological resources of the escarpment and ridge, the Planning Board shall limit permitted development to specified building envelopes showing acceptable building sites and areas of permitted clearing of vegetation and grading of land. Constructed improvements and cleared vegetation shall not differ more than 20 feet in any direction from site locations within building envelopes shown on approved subdivision and/or site plans. Such building envelopes shall:

(a) Be clearly designated on the approved subdivision plat and/or site plan.

(b) Be the minimum size necessary to accommodate the approved development and protect the remainder of a site from significant alterations.

(c) Comply with all provisions of this § 220-13.1, including the conservation findings.

(4) Regulation of land disturbance. The natural contours of the land and existing vegetation shall be maintained as much as possible. Any alterations to the natural landscape shall not adversely affect natural drainage or cause erosion or sedimentation. The following regulations apply to all development and other land-disturbing activities. For purposes of determining the location of steep slope areas, only slopes containing at least 3,000 square feet of contiguous steep slope area at least 10 feet in width shall be considered.

(a) Limitation of area disturbed. All land-disturbing activities, including but not limited to clearing, grading, excavation, building construction, construction of driveways and roads, cutting,

and filling, shall be limited to the minimum land area necessary to accommodate the proposed use or activity, and shall in no case be greater than 15,000 square feet plus land necessary for driveway access, unless a larger area is required by the County Health Department to accommodate a septic system, in which case that larger area shall be permitted to be disturbed.

(b) Disturbance of very steep slopes (greater than 20%).

[1] General prohibition on land disturbance. Land disturbing activities, including but not limited to clearing, excavation, grading, construction, reconstruction, and investigative land-disturbing activities such as test wells, are prohibited on slope areas greater than 20% except as allowed under Subsection F(4)(a)[2] below.

[2] Permitted uses and activities. The following are permitted on very steep slope areas, subject to applicable development standards:

[a] Passive recreation uses, including trails not exceeding 10 feet in width.

[b] Open space, forestry, and other conservation uses.

[c] Land surveying or study.

[d] Local distribution utilities, roads and driveways, provided that they comply with the standards set forth in Subsections F (4) (c) [3] and (g) below.

[3] Any such development and uses on very steep slope areas shall minimize disturbance to soil geology, hydrology, and environmental features.

(c) Disturbance of moderately steep slopes (between 12% and 20%).

[1] Permitted uses and activities. All uses and activities allowed in the zoning subdistrict shall be allowed on moderately steep slopes, subject to applicable review procedures and standards.

[2] Grading standards. The applicant shall preserve natural landforms and minimize grading and other land disturbance.

[3] Limits on changing natural grade. The original, natural grade of a lot shall not be raised or lowered more than four feet at any point for the construction of any structure or improvements, except that:

[a] The original grade of a lot may be raised or lowered a maximum of eight feet if retaining walls are used to reduce the steepness of man-made slopes, provided that the retaining walls comply with the requirements of this Subsection F(4).

[b] These standards limiting change of natural grade shall not apply to grading required to construct or excavate a foundation or basement.

[c] The Planning Board may approve modifications to these standards if it finds that such modifications would result in less total site disturbance and visual impact than would compliance with the maximum limits on changing natural grade stated in this subsection.

(d) Revegetation required. Any slope exposed or created in new development on very steep or moderately steep slope areas shall be revegetated or landscaped with noninvasive species as soon as possible after land disturbance occurs, and such landscaping shall be properly maintained to prevent erosion.

(e) Excavation and clear-cutting.

[1] To the maximum extent feasible, excavation for footings and foundations shall be limited to minimize site disturbance and ensure compatibility with sloped terrain.

[2] Unless performed pursuant to an approved site plan, special permit, subdivision, or building permit, or as a normal and customary activity in conjunction with an approved timber harvesting plan, excavation of any area and clear-cutting any area exceeding 2,000 square feet shall require a special permit from the Planning Board. If such excavation or clear-cutting occurs without a special permit, the Planning Board may refuse to issue an approval upon a subsequent application for a special permit, site plan, or subdivision for a period of two years. This subsection shall not apply to excavation done as part of the routine maintenance of existing roads, driveways, utilities, septic systems, or drainage ditches.

(f) Retaining walls and terraces. Use of retaining walls and terraces is encouraged to reduce the steepness of man-made slopes and to provide planting pockets conducive to vegetation, in accordance with the following standards:

[1] Retaining walls shall not exceed eight feet in height from the finished grade, except for:

[a] A structure's foundation or basement wall (i.e., a retaining wall may be part of a permitted dwelling unit).

[b] As necessary to construct a driveway from the street to a garage or parking area.

[c] As otherwise expressly allowed by this section.

[2] Retaining walls shall be faced with stone or earth-colored materials similar to the surrounding natural landscape.

[3] Terracing shall be limited to two tiers, except that the Planning Board may approve more than two tiers when a greater number of tiers will result in less land disturbance and less steep man-made slopes.

[4] The width of the terrace between any two vertical retaining walls shall be at least five horizontal feet.

[5] Terraces created between retaining walls shall be permanently landscaped or revegetated with noninvasive species.

[6] The Planning Board shall determine the final configuration of retaining walls and terraces based upon the conservation findings and visual assessment.

(g) Roads, driveways, and utilities.

[1] All roads and driveways shall follow natural contour lines to the maximum extent feasible.

[2] Roads shall not be constructed on slopes greater than 30% under any circumstances.

[3] Roads shall not be constructed on very steep slopes between 20% and 30%, unless no other alternative exists to access a legal lot of record approved prior to the effective date of this section.

[4] Driveways and utilities shall generally not be constructed or installed on very steep slopes greater than 20%. However, a short run of no more than 250 feet or 10% of the driveway and/or utility's entire length, whichever is less, shall be allowed on very steep slopes between 20% and 30%, based on geotechnical and visual impact studies and findings that:

[a] Such driveway or utility will not have significant adverse visual, environmental or safety impacts; and

[b] No alternative location for driveway or utility access is feasible.

[5] Cuts shall be no higher than eight feet, with a final slope on each cut no greater than 20%.

[6] Driveway grades shall not exceed 12%, as shown by profiles submitted with an application.

[7] In order to minimize land disturbance, driveways shall be no longer than necessary to provide access to a buildable homesite on a lot. Driveways shall not exceed 1,200 linear feet in length, unless the Planning Board finds that a longer driveway is necessary to make access feasible. Driveways exceeding 1,200 feet in length, which are not otherwise subject to a special permit requirement, shall require a special permit from the Planning Board. Any home accessed by a driveway exceeding 1,200 feet shall incorporate a fire suppression system that complies with the recommendations of the Chiefs of the Gardiner and Shawangunk Valley Fire Departments. No driveway shall exceed a total of 2,500 feet in length. Driveways shall also comply with applicable requirements of § 184-33 of the Town Code.

(5) Protection of water resources.

(a) There shall be no structures located within 100 feet of a watercourse, wetland or spring unless specifically authorized by the Planning Board, consistent with the conservation findings.

(b) There shall be no net increase in runoff, and pollution load shall not exceed the pre-development load of nutrients or sediment.

(c) Runoff from impervious surfaces shall be routed to detention ponds, cisterns, or infiltration structures. Any such ponds or structures shall be constructed in a manner that minimizes impacts on landscape character and ecological function.

- (d) Landowners shall bear full responsibility for the installation, construction, and maintenance of all erosion control measures required as a condition of approval.
 - (e) All development shall be done with appropriate soil erosion and stormwater and sediment control measures, prepared in accordance with the requirements of the New York State Department of Environmental Conservation for a Phase II Stormwater Pollution Prevention Plan, as well as the erosion control standards described in other manuals specified by the Town's engineer, including but not limited to the New York State Department of Environmental Conservation's "Reducing the Impacts of Stormwater Runoff from New Development." Soil erosion and stormwater and sediment control measures and facilities shall be properly maintained, and the landowner shall permit periodic inspection by the Town at reasonable intervals and after major storm events to ensure such maintenance.
- (6) Visual protection and landscaping.
- (a) No principal or accessory structure in the SP-2 and SP-3 Subdistricts shall exceed a building height of 25 feet.
 - (b) All structures shall be sited to avoid, to the greatest extent practical, occupying or obstructing public views of land that is located within the SP District. Public views shall be determined by conducting a viewshed analysis as required by SEQR using the SEQR Visual Environmental Assessment Form Addendum (V-EAF) contained in 6 NYCRR 617.20, Appendix B. Visibility shall be measured using a condition of no leaves on trees. Viewshed analyses shall be required only to the extent necessary to ensure compliance with this subsection.
 - (c) Existing vegetation shall be preserved to the maximum extent practical and shall be used as much as possible to buffer and screen new buildings.
 - (d) Noninvasive native vegetation shall be maintained or planted to screen structures and other improvements from public roads, parks, or other public places.
 - (e) Vegetation shall also be used as a backdrop to reduce the prominence of the structure.
 - (f) Views from a structure shall be opened up only by selective cutting of small trees and pruning lower branches of large trees, rather than by clearing large areas or removing mature trees.
 - (g) Clearing of vegetation shall be minimized at the edge of road shoulders, clearing only as much as is necessary to create a driveway entrance with adequate sight distance. Curves in the driveway shall be used to increase the screening of buildings. This shall not apply to roadside clearing to maintain views of the valley from existing Town, county, or state roads.
 - (h) Structures and other development, including drainage structures, shall blend in with natural surroundings through use of materials such as stone or natural wood siding and shall avoid the use of reflective materials and bright colors that contrast dramatically with the colors of the land and vegetation around them.
 - (i) Structures shall be constructed and maintained so that predominant exterior wall colors (including the colors of basement walls on the downhill side of the structure) and roof surfacing materials repeat the colors found most commonly in the land and vegetation around such structures.
- (7) Avoidance of forest fragmentation and protection of habitats.
- (a) Development of land, alteration of the landscape, and forestry activities shall be conducted in a manner that minimizes the fragmentation of contiguous forest habitats and other ecologically significant areas.
 - (b) For major subdivisions, determination of the location of such habitats or areas shall be made in consultation with a qualified ecologist, biologist, and/or forester, following any applicable guidelines or standards established by the State of New York, as identified by the Planning Board or its consultants.
 - (c) For major subdivisions in the SP-2 or SP-3 Subdistrict, the Planning Board shall refer the proposed plan to the New York Natural Heritage Program for its review and recommendations. The Planning Board may also refer the proposed plans to any other agencies or officials of the Town, county, state, or federal government as the Board may deem appropriate. If there is no response from any agency to which a referral is made within the time frame required for a decision, the Planning Board may proceed with its decision in the absence of a response.
- (8) Forest management. Timber harvests and clear-cutting in excess of 2,000 square feet of land per year are allowed only by special permit from the Planning Board, provided that:

(a) Such activities minimize clear-cutting and comply with the most recent versions of Timber Harvesting Guidelines for New York and Best Management Practices, as promulgated by the New York State Department of Environmental Conservation (DEC) and available from the Town's Building Department.

(b) Such cutting is part of a forest management or wildlife habitat improvement plan prepared by a DEC-certified forester and approved by the DEC or other professional or organization deemed acceptable by the Planning Board; and/or

(c) Such cutting is necessary to prevent an imminent threat to life, public safety or property; and/or

(d) Such cutting is necessary to ameliorate damage arising from severe natural occurrences, such as ice and wind damage.

(9) Lighting.

(a) Exterior lighting shall be controlled in both height and intensity so that the light level at any lot line shall not exceed 0.2 footcandle, measured at ground level.

(b) Floodlights shall not be used to light any portion of a principal or accessory structure facade, and all outdoor light sources mounted on poles or buildings or trees to illuminate driveways, sidewalks, walkways, parking lots, or other outdoor areas shall use fully shielded light fixtures pointed downward.

(c) For purposes of this section, a "fully shielded light fixture" is one in which no more than 2.5% of the total output is emitted at 90° from the vertical pole or building wall on which it is mounted. All such fixtures shall be installed or shielded so that no part of the light bulb or light source is visible beyond the property boundaries.

(10) Location of residential units outside of SP-3. No residential units may be built in the SP-3 Subdistrict, unless the entire parcel proposed for development is located within the SP-3 Subdistrict. For purposes of this Subsection F(10), the word "parcel" shall mean all contiguous land owned or controlled by the same person or entity, or by related persons or entities, regardless of tax parcel or existing lot or parcel boundaries.

(11) Water and sewer facilities.

(a) Sewage disposal facilities are permitted by special permit only within the SP-1 Subdistrict.

(b) Central sewage systems, water supply facilities, and central water systems are permitted only by special permit within the SP-1 and SP-2 Subdistricts.

(c) All such facilities shall comply with applicable requirements of state and county regulatory authorities and with the standards in this § 220-13.1. They shall be designed, sited, and constructed in a manner which does not produce odors and which minimizes land disturbance and excavation in environmentally sensitive areas.

(d) To the extent feasible, priority shall be given to the use of systems which recharge groundwater using subsurface discharge, and/or which contribute positively to the SP District's ecological and landscape character, such as the use of constructed wetlands. Facilities which are necessary and do not enhance landscape character shall be screened to the maximum extent practical.

(e) All water and sewer facilities described above shall be owned and operated by municipal water or sewer districts and shall not be owned or operated by transportation corporations.

G. Conservation easement.

(1) Except as provided in Subsection G(2) and (3) below, a conservation easement, as described in § 220-12.1C, shall be required by the Planning Board in connection with any approval in the SP-2 or SP-3 Subdistrict in order to ensure compliance with the requirements of this § 220-13.1, including the protection and buffering of views and significant habitats.

(2) This requirement of a conservation easement may be satisfied in an open space subdivision with the conservation easement required by § 220-12.1C. For minor subdivisions or special permits, a recorded declaration of covenants and restrictions enforceable by the Town may be substituted for a conservation easement if the Planning Board determines that a conservation easement is unnecessary.

(3) A conservation easement shall not be required in connection with a special permit for a single-family dwelling in the SP-2 Subdistrict.

H. Conflicts with other provisions. In case of any conflict between the requirements of this § 220-13.1 and any other provisions of the Town of Gardiner Zoning Law, Subdivision Law, or other local law, ordinance, or regulation, the requirements of this section shall control. The provisions of Article X, Nonconformities, shall be fully applicable in the SP District.

5. Township of Chestnuthill, Monroe County, Pennsylvania

Chapter 119: Zoning (Adopted 2000/Amended 2003)

No definition of “steep slope(s).”

Article III: Establishment and Regulation of Districts

§ 119-31. Steep slopes.

A. Regrading. Non-man-made slopes of over 15% shall not be regraded after the adoption of this chapter in such a manner that circumvents the requirements of this chapter. This section shall not regulate slopes that were clearly man-made prior to the adoption of this chapter.

B. Slopes over 25%. Any area with a slope over 25% shall not be counted towards the minimum lot area of a lot, for the purposes of determining compliance with any minimum lot area or any tract area requirements of this chapter.

C. Single-family dwellings and steep slopes.

(1) Any lot proposed to be used for a single-family detached dwelling shall include a proposed building area with a minimum of 5,000 square feet. Such building area shall not include land within the minimum principal building setbacks. Such building area shall contain the proposed location of the dwelling and any primary and alternate on-lot septic system locations.

(a) If such building area for each lot includes an average slope of greater than 15% and less than 25%, then the minimum lot area shall be two acres, unless a larger lot area is required by another section of this chapter.

(b) If such building area for each lot includes an average slope of 25% or greater, then the minimum lot area shall be five acres. This five acre minimum lot area may be calculated without deleting slopes over 25%.

(c) Through designations on the Township-approved site plan, an applicant may limit the area upon which new principal buildings are permitted. In such case, an applicant may provide that no new principal building shall be located on slopes of over 15% or slopes of 25% or greater, and thereby avoid the regulations of this section.

(2) Access. Each lot shall be accessible from an existing or proposed street by means of a driveway or private accessway with a maximum grade of 15%.

D. Steep slopes and other uses. A lot shall only be used for buildings for principal uses other than single-family detached dwellings if the proposed building area includes an average slope of less than 15%.

(1) For such uses, the building area shall include locations of all proposed buildings and parking areas and outdoor storage areas and an area 20 feet around buildings, parking and storage areas. Such building area shall also contain the proposed locations of any primary and alternate on-lot septic systems.

(2) Access. Each dwelling and each parking area shall have vehicle access from an existing or proposed street by means of a driveway or private accessway with a maximum grade of 10%.

E. Site plan and tree protection. If an applicant proposes to alter or build upon slopes of 15% or greater, then a site plan shall be submitted to the Zoning Officer. A separate site plan is not required if the same information was included in an approved subdivision or land development plan.

(1) Site plan. The site plan shall show:

(a) The proposed lot lines;

(b) The existing and proposed contours; and

(c) Existing and proposed building locations, and the outer perimeter of the proposed building area as described above.

(2) Mature trees. Where building or alteration is proposed on slopes of over 15%, the applicant shall prove to the satisfaction of the Zoning Officer that the removal of healthy trees with a trunk width of over six inches (measured at a height 3.5 feet above the ground level) and other attractive natural vegetation will be minimized. The Zoning Officer may ask for reviews by the Township Engineer or Planning Commission. The site plan shall show wooded areas to be removed or preserved, and methods to be used to make sure trees are protected by temporary fences or other measures during the construction process.

6. City of Scranton, Lackawanna County, Pennsylvania

Chapter 445: Zoning (*Adopted as City Ordinance in 1993/Formerly Chapter 36 of the 1979 Code*)

SLOPE — The vertical change of an area of land divided by the horizontal change, measured in percent.

Article V: Environmental Protection

§ 445-40. Steep slopes.

A. Site plan. If an area of a lot including slopes of 25% or greater is proposed for construction of buildings, streets or driveways or nonagricultural grading, then the applicant shall submit a steep slope site plan to the Zoning Officer. These submittal requirements may be met by including the required information on subdivision and land development plans.

B. Submission requirements. A steep slope site plan shall meet the following requirements:

- (1) Show detailed slope contours for all areas that potentially may be disturbed and/or constructed upon.
- (2) Identify all areas of greater than 25% slope.
- (3) Be to scale (such as one inch equals 50 feet).
- (4) Show substantial areas of trees and dense vegetation proposed to be removed or preserved prior to or during the development of the use.
- (5) Be stamped by a professional surveyor, professional engineer, engineer-in-training, registered landscape architect or registered architect.
- (6) Show proposed locations of principal buildings, streets, driveways, on-lot septic fields and other areas of soil disturbance. (If the exact location of these features is not definitely determined at the time of plan submittal, then the plan shall designate the outer limits of areas where such features may potentially be located. If different locations outside of the approved location would be proposed after approval of the site plan, then the applicant shall prove to the Zoning Officer that the revised location would still meet the requirements of this section.)
- (7) State the maximum slope of proposed driveways and streets.
- (8) Show an area of 20 feet around the proposed principal building locations.

C. Greater than 25% in R-1. If, within the R-1 District, a proposed principal building location and any areas within 20 feet of such location on the lot include more than 1,500 square feet with slopes greater than 25%, then the following regulations shall apply, unless more restrictive regulations are stated elsewhere in this chapter:

- (1) Minimum lot area: 30,000 square feet per dwelling unit or per principal nonresidential use.
- (2) Maximum impervious coverage: 15% on the lot.

D. Streets, driveways and septic systems. See applicable street and driveway slope standards in the City Subdivision and Land Development Ordinance. See also DEP regulations on slopes of on-lot septic systems.

E. Erosion. See § 445-47.

F. Grading. No grading shall occur in such a way that would circumvent the requirements of this chapter, such as prior to submittal for a zoning or building permit or subdivision or land development approval. The steep slope requirements shall apply based on the slope of land at the time of the adoption of this chapter.

G. Man-made slopes. This section shall not apply to man-made slopes that naturally were not 15% or greater slopes.

7. Township of Falls, Bucks County, Pennsylvania
Chapter 191: Subdivision and Land Management (*Adopted 1975/Amended 2001*)

STEEP SLOPE — A land grade equal to or in excess of 15%.

Article V: Design Standards

§ 191-52.1. Natural resource protection requirements.

(3) Steep slopes.

(a) Areas where the natural grade of land is equal to or exceeds 15%.

(b) Resource protection ratio for steep slopes:

[1] Fifteen-to-twenty-five-percent slope: 70% shall remain as resource-protected land. No more than 30% of the total of all such areas shall be developed and/or regraded or stripped of vegetation.

[2] Twenty-five percent or more slope: 85% shall remain as resource-protected land. No more than 15% of the total of all such areas shall be developed and/or regraded or stripped of vegetation.

(c) Exemptions for steep slopes.

[1] Areas of steep slope that are less than 3,000 square feet shall be exempted from these standards.

[2] Within the MPM Zoning District only, the lot or portion of a lot to be developed or used for marine port and terminal facilities, as permitted by § 209-30 of the Township Zoning Ordinance, may be exempted from the resource protection ratio for steep slopes in Subsection B(3)(b) above only if all the following conditions are met:

[a] The area to be exempt from the steep slope resource protection restrictions shall be limited to the area to be developed and occupied by the marine port and terminal facility and shall not extend to any other area of the lot or to other lots within the MPM District. 88

[b] The area to be exempt from the steep slope resource restrictions shall in addition be limited to a strip of land no greater than 100 feet in width along the Delaware River, which shall be measured perpendicular from the water's edge of the Delaware River and extending inland.

[c] The development of marine port and terminal facilities shall be subject to all requirements of the Pennsylvania Department of Environmental Protection, the United States Army Corps of Engineers and any other federal, state or county agencies with jurisdiction. The exemption from Township regulations of steep slopes shall in no way exempt the applicant from compliance with other agency requirements or other Township regulations.

8. Township of Bristol, Bucks County, Pennsylvania

Chapter 205: Zoning (Adopted 2002)

STEEP SLOPES — Areas where the average slope exceeds 8% which, because of this slope, are subject to high rates of stormwater runoff and, therefore, erosion and flooding.

Article XXII: General Performance Standards

§ 205-108. Environmental performance standards.

C. Steep slopes. In areas of steep slopes, the following standards shall apply:

(1) Fifteen percent to 25%: No more than 30% of such areas shall be altered, regarded, cleared or built upon.

(2) Twenty-five percent or steeper: No more than 15% of such areas shall be altered, regraded, cleared or built upon.

(3) Areas of steep slope that are less than 3,000 square feet shall be exempt from these standards.

Appendix E - Watercourse Protection Law Examples

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1. Town of Penfield, Monroe County, New York

Chapter 29: Zoning Ordinance

Article III—Zoning Districts

§ 3-15. EPOD (5) – Watercourse Protection District.

A. Purpose.

The purpose of the Watercourse Protection District regulations is to preserve and protect watercourses located within the Town of Penfield by regulating or controlling development in those areas and by requiring review and permit approval prior to commencement of any activity.

B. Delineation of District Boundaries.

The boundaries of the Watercourse Protection District shall be delineated on the “Official Town of Penfield EPOD Maps” and shall include all areas in the Town of Penfield as follows:

1. All those areas within seventy-five (75) feet of the centerline of a natural or man-made watercourse.

C. Regulated Activities.

No person shall conduct any of the following regulated activities within any Watercourse Protection District in the Town of Penfield unless such person has first applied for and obtained an EPOD development permit pursuant to the requirements of this Section:

1. Clearing or filling, dredging, excavating, depositing of natural or man-made materials or constructing on any land area which lies within the Watercourse District boundaries except that the following activities shall be exempted from the clearing regulations of this part:
 - a. Customary agricultural operations.
 - b. Watercourse maintenance activities.
2. The construction or placement of any septic tank or septic drainage field.
3. Any activity, which would alter the natural flow pattern of the watercourse.

D. Development Standards/Permit Conditions.

In granting, denying or conditioning any application for an EPOD development permit, the authorized official or the appropriate board shall consider the effect that the proposed regulated activity will have on the public health, safety and welfare and the protection and enhancement of watercourses within the Town.

Any applicant for a permit to undertake a regulated activity within a Watercourse Protection District in the Town of Penfield shall be required to adequately demonstrate to the authorized official or the appropriate board that the proposed activity will in no way at present or at any time in the future, adversely affect the following:

1. Water quality.
2. Watercourse flood carrying capacities.
3. Rate of sedimentation.
4. Rate/velocity of groundwater runoff.
5. Natural characteristics of the watercourse.

When altering the natural flow pattern of a natural or man-made watercourse, the applicant shall prove that the alteration:

1. Is necessary; and,
2. Will not impair the natural functions of the watercourse.

The applicant for a permit shall have the burden of demonstrating that the proposed regulated activity will be conducted in accordance with the standards and requirements listed above.

2. Town of Mendon, Monroe County, New York

Chapter 200: Zoning *(Adopted in 2000 with amendments)*

Article IV—Establishment and Designation of Zoning Districts

§ 200-26. EPOD 3 Watercourse Protection Overlay District.

A. Purpose and intent. The purpose of the Watercourse Protection Overlay District is to provide special controls to guide land development within the major waterway corridors in the town. The district regulations encourage planning and development of land that will protect and preserve these sensitive environmental areas. It is also the intent of these regulations to prevent soil erosion, sedimentation and slope failure due to removal of vegetation, dredging, filling, damming or channelization; prevent degradation or loss of scenic views and the natural character of the area; and prevent activities which degrade water quality.

B. Delineation of district boundaries. The boundaries of the Watercourse Protection Overlay District shall be delineated on the Official Town of Mendon EPOD Maps. These boundaries shall include the following areas: Irondequoit Creek, Honeoye Creek and all tributaries thereto located within the town; and for a distance of 75 feet from each bank or to the landward boundary of the area of special flood hazard (see EPOD 8 District regulations below in this article), whichever is greater.

C. Regulated activities. No person shall conduct any of the following regulated activities unless such person has first applied for and obtained an EPOD 3 development permit pursuant to the requirements of this section. Customary agricultural operations are not required to obtain an EPOD 3 development permit.

- (1) Construction of new buildings or structures or additions to or modifications of existing buildings or structures.
- (2) Construction or placement of any on-site septic or sewage disposal system.
- (3) Filling, cutting or excavation, either on land or within a watercourse or floodplain.
- (4) Removal of natural vegetation.
- (5) Discharge of stormwater and/or construction of a private commercial or municipal stormwater runoff system.
- (6) Outside storage of materials and equipment used in the conduct of a business.
- (7) Activities which would alter the natural flow pattern of any of the aforementioned watercourses.
- (8) Construction of public or private roads, trails and bridges.
- (9) Boat launching sites and fishing access parking areas.

D. Development standards and permits. In granting, denying or conditioning any application for an EPOD 3 development permit, the CCO or the Planning Board shall consider the effect that the proposed regulated activity shall have on the public health, safety and welfare and the protection of the major watercourses within the town.

(1) General regulations. Any applicant for a permit to undertake a regulated activity within a Watercourse Protection Overlay District shall be required to adequately demonstrate that the proposed activity will in no way at present or at any time in the future adversely affect the following:

- (a) Water quality.
- (b) Watercourse flood-carrying capacities.
- (c) Rate of sedimentation.
- (d) Rate/velocity of groundwater runoff.
- (e) Natural characteristics of the watercourse or floodplain.

(2) Specific standards. No permit to undertake a regulated activity within the district shall be issued by the CCO or the Planning Board unless it determines that the proposed project complies with the following standards: (a) The proposed activity provides adequate measures to prevent disruption and pollution of fish and wildlife habitats and freshwater wetlands, stormwater runoff, septic and sewage systems and any other activity on the site.

(b) A natural vegetative buffer of 100 feet from each bank shall be retained adjacent to the watercourses to absorb floodwaters, to trap sediments, to protect adjacent fish and wildlife habitats and to protect scenic qualities.

(c) Site preparation, including stripping of vegetative cover or grading, shall be undertaken so that the amount of time that disturbed ground surfaces are exposed to the energy of rainfall and runoff water is limited.

Disturbed soils shall be stabilized and revegetated before construction can begin. During the interim, erosion protection measures, including but not limited to vegetation, retention ponds, recharge basins, berming, silt traps and mulching, shall be used to ensure that sedimentation is minimized and mitigated.

(d) The project shall provide adequate measures to protect surface waters and groundwaters from direct or indirect pollution and from overuse.

(e) Fill shall not encroach on natural watercourses, constructed channels or floodway areas. All fill shall be compacted at a final angle or repose which provides stability for the material, minimizes erosion and prevents settlement.

(f) Roads, trails and walking paths along water bodies shall be sited and constructed so they are not a source of runoff and sedimentation. Such roads, trails and walking paths shall be constructed and sited in such a manner as to maximize the visual opportunities of a water body while maintaining the scenic qualities of the water body.

(g) No new dock, boat launching site or fishing access and parking area shall be constructed unless it is shown that it will not impede the natural flow of the streams to which this section applies. Said facilities shall be located and constructed so as to minimize their intrusion into the streams and avoid adverse environmental impact and unreasonable impacts upon public use of the waters.

(h) New structures, except for fences, bridges and fishing access parking areas, shall not be constructed within 75 feet of the bank of the stream.

(i) New structures shall be designed and constructed in accordance with erosion control standards and stormwater control standards contained in the Best Management Practices for Stormwater Runoff Management and Stormwater Management Guidelines for New Development, as found in Chapter 6 of the New York State Department of Environmental Conservation's Stream Corridor Management Manual.

3. Village of Skaneateles, Onondaga County, New York

Chapter 225: Zoning *(Adopted in 1975 with amendments)*

Article VI—Overzone Regulations

225-19. Skaneateles Creek SC-O Overzone.

A. Purpose. The Village places special value upon Skaneateles Creek as an environmental, scenic, and recreational resource and seeks to preserve this resource from development that would adversely affect its resource value and its potential use as a pedestrian trail corridor.

B. Boundaries. Until such time as the Village Board adopts a specific map identifying the SC-O Overzone, the boundaries of the SC-O Overzone shall be the same as those of the Floodway Fringe Overzone along Skaneateles Creek.

C. Property rights protection.

(1) Nothing in this § 225-19 shall give the Village or any other public entity the right to enter upon, use, or condemn any property in the Skaneateles Creek Overzone.

(2) Nothing in this section shall authorize the Village to require that land in the SC-O Overzone be dedicated to public use, except as may ordinarily occur in connection with laying out street rights-of-way, sidewalks, utility easements, and drainageways.

(3) The Village may negotiate with landowners for the voluntary sale or donation of land or interests in land (including conservation easements) and may require that land be reserved from development in connection with any land use approval, consistent with the requirements of the Fifth and Fourteenth Amendments of the United States Constitution, the New York State Constitution, and other applicable laws.

D. Planning considerations.

(1) In considering an application for any form of development, including a zoning permit, the reviewing board or official shall take into consideration the importance of protecting the Skaneateles Creek corridor as a water resource, wildlife and plant habitat, scenic area, and potential trail corridor and may require the applicant to locate structures and take other necessary measures to protect these resources. Such measures may include requiring a cluster subdivision.

(2) In order to fulfill the purposes of this § 225-19, the Planning Board, Village Board, Zoning Board of Appeals, or Code Enforcement Officer may modify front yard, side yard, or rear yard (not stream) setbacks.

(3) Within the SC-O Overzone, the reviewing board shall designate "no-build areas" on all subdivision plats and site plans, showing areas unacceptable for site disturbance and construction. Within such no-build areas, site disturbance may occur only as needed for trails or as minimally necessary for construction of driveways, utilities, and other structures that cannot practically be located elsewhere. Fences shall not be located in a manner that would hamper the future creation of a trail corridor or easement through the SC-O Overzone. Fences should generally be located parallel to the Skaneateles Creek outside the SC-O Overzone.

E. Conditions and findings.

(1) Before granting approval of any subdivision, special permit, site plan, variance, or zoning amendment that includes land wholly or partially located within the SC-O Overzone, the reviewing board shall impose appropriate conditions and make a written finding that the proposed development has been designed in a manner that minimizes damage to the Skaneateles Creek corridor and that does not hamper future use of the SC-O Overzone for trail purposes.

(2) Such conditions may include a requirement that a conservation easement (as provided in § 225-36D) be granted by the applicant to protect all or a portion of the land within the SC-O Overzone. Such conditions shall not deprive the applicant of economically viable use of the property.

F. Effect of overzone overlap. Where the FF-O and SC-O Districts overlap, the provisions of §§ 225-18 and 225-19 shall each operate independently, and if there is any conflict, the more restrictive provisions shall apply.

4. Town of Parma, Monroe County, New York

Chapter 165: Zoning *(Adopted in 1998 with amendments)*

Article VII—Environmental Protection Overlay Districts (EPOD's)

§ 165-52. EPOD (4) Stream Corridor Protection District.

A. Purpose and intent. The purpose of the Stream Corridor Protection District is to provide special controls to guide land development within the major waterway corridors in the Town of Parma. The district encourages planning and development of land so as to protect and preserve sensitive environmental areas, to prevent soil erosion, sedimentation and slope failure due to removal of vegetation, dredging, filling, damming or channelization; to prevent degradation or loss of scenic views and the natural character of the area; and to prevent activities which degrade water quality or fish and wildlife habitat.

B. Delineation of district boundaries. The boundaries of the Stream Corridor Protection District shall be based on a map with stream numbers prepared by the Conservation Board. The Stream Corridor Protection District shall extend a distance of 50 horizontal feet from the edge of each stream.

C. Activities regulated.

(1) All activities not otherwise exempted by § 165-47B shall be regulated.

(2) Additional exempt activities

(a) Construction of bridges.

(b) Construction of ponds.

(c) Thinning and clearing of trees and shrubs, if maintaining at least 60% perimeter coverage along the stream.

D. Standards for permit review.

(1) General regulations. Any applicant for a permit to undertake a regulated activity within a Stream Corridor Protection District shall be required to adequately demonstrate that the proposed activity shall in no way, at present or at any time in the future, adversely affect the following:

(a) Water quality.

(b) Watercourse flood-carrying capacities.

(c) Rate of sedimentation.

(d) Velocity of surface water runoff.

(e) Natural characteristics of the watercourse or floodplain.

(f) Soil stability.

(g) Fish and wildlife habitat

(2) Specific standards. No permit to undertake a regulated activity within the district shall be issued unless it is determined that the proposed project complies with the following additional standards:

(a) The proposed activity provides adequate measures to prevent disruption and pollution of fish and wildlife habitats and freshwater wetlands; change in water temperature due to removal of shade vegetation; or nonpoint sources of pollution due to stormwater runoff, septic systems or any other activity on the site.

(b) The project shall provide adequate measures to protect surface and ground waters from direct or indirect pollution and from overuse.

(c) Fill shall not encroach on natural watercourses, constructed channels or floodway areas.

(d) Roads, trails and walking paths along water bodies shall be sited and constructed so they are not a source of runoff and sedimentation. Such roads, trails and walking paths shall be constructed and sited in such a manner as to maximize the visual opportunities of a water body while maintaining the environmental features of the entire site.

(e) No new dock, boat launching site or fishing access and parking area shall be constructed unless it is shown that it shall not impede the natural flow of the streams to which this section applies and shall be located and constructed so as to minimize its intrusion into the streams and avoid adverse environmental impact and unreasonable impacts upon public use of the waters.

E. Additional procedures and conditions.

(1) A vegetative buffer of 25 feet shall be retained from each edge adjacent to the watercourses to absorb floodwaters, to trap sediments, to protect adjacent fish and wildlife habitats and to protect scenic qualities. Wherever possible, the buffer shall retain natural vegetation.

(2) Site preparation, including the stripping of vegetative cover or grading, shall be undertaken so that the amount of time that disturbed ground surfaces are exposed to the energy of rainfall and runoff water is limited. Disturbed soils shall be stabilized and revegetated within 14 days of disturbance. During the interim period, erosion protection measures, including but not limited to vegetation, retention ponds, recharge basins, berming, silt traps and mulching, shall be used to ensure that sedimentation is minimized and mitigated.

(3) All fill shall be compacted at a final angle of repose which provides stability for the material, minimizes erosion and prevents settlement.

(4) New structures, except for fences, bridges and fishing access parking areas, shall not be constructed within 25 feet of the bank of the stream.

(5) New structures shall be designed and constructed in accordance with erosion control standards and stormwater control standards contained in the Best Management Practices for Storm Water Management Guidelines for New Development, as found in Chapter 6 of the New York State Department of Environmental Conservation's Stream Corridor Management Manual.

5. Town of Manchester, Ontario County, New York
Chapter 325: Zoning (*Adopted in 1989 with amendments*)

Article V—Supplementary Use Regulations.
§ 325-32. Drainage strips.

In all districts, no permanent structures shall be permitted within 50 feet of any stream or existing natural drainage channel.

6. Town of Victor, Ontario County, New York
Chapter 211: Zoning (*Adopted in 1992 with amendments*)

Article IV—Provisions Applicable To All Districts

§ 211-30. Environmentally sensitive land.

A. No construction or impervious surface shall be permitted within 100 feet of the boundary of a wetland or within 75 feet of the center line of any stream having year-round flow as delineated on a United States Geological Survey Map.

B. Environmental reviews pursuant to NYCRR 617 (SEQR) or other applicable laws shall be completed prior to any project approvals.

Editor's Note: Former Subsection C, Wellhead Protection Environmental Overlay District, added 2-28-1994 by L.L. No. 2-1994, which immediately followed this subsection, was repealed 7-27-1998 by L.L. No. 4-1998.

7. Village of New Paltz, Ulster County, New York
Chapter 212: Zoning (*Adopted in 1977 with amendments*)

Article IV—Supplementary Lot, Height and Yard Regulations
§ 212-19. Yard requirements. [*Amended by L.L. No. 9-1995*]

G. Setbacks from streams. Notwithstanding any other provision of this chapter, lots adjacent to any watercourse or stream containing water for at least two months of the year shall provide a twenty-foot width from the mean high water mark of said watercourse or stream. This twenty-foot width may be computed as part of any yard requirement or buffer area but no parking areas, driveways or structures may be constructed in this strip.

8. U.S. EPA Model Ordinance to Protect Local Resources: Aquatic Buffers

Section 1 - Purpose

To protect the unique landscape of the Finger Lakes, it is the intent of the Town of _____ to preserve watercourses to the greatest extent possible and to regulate their use to protect the public interest by minimizing the detrimental effects of disturbance and development adjacent to these watercourses. This law is intended to protect the public from the potential negative impacts of the erosion, siltation, pollution of water supplies, increase in downstream runoff, alteration of scenic views, and destruction of potentially significant habitat, which may result from disturbance of land adjacent to watercourses.

Section 2 - Findings

A. Watercourses and wetlands have been and 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 in the Town of _____ is an environmentally sensitive area and valuable natural resource, which is of benefit to the entire Town and surrounding 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 and lacustrine wildlife habitat and furnish scenic value and recreational opportunity.

B. Watercourses and their adjacent lands require specific development controls, above and beyond standard development regulations due their sensitive environment but also due to the unique development pressure exerted on these areas. Land near lakes and streams is often very desirable for residential development due to scenic views.

C. Protection of watercourses is a matter of concern to the entire Town of _____. The establishment of regulatory and conservational practices in this critical area is needed to protect the public health, safety, and general welfare. Experience has demonstrated that effective protection of watercourses requires preservation wherever possible. Experience has further demonstrated that where watercourses have to be disturbed, careful review and regulation, including stringent mitigation measures, are required.

D. The Town of _____'s experience with past development has shown that improper development can aggravate erosion and sedimentation beyond rates experienced in the natural geomorphological processes. Erosion and sedimentation often include the loss of topsoil, a valuable natural resource, and can result in the disturbance of habitats, the degradation of the quality of surface water, including the Finger Lakes, the silting of wetlands, the alteration of drainage patterns, obstruction of drainage structures, and the intensification of flooding.

E. The Town of _____'s experience with past development has shown that improper development can lead to accelerated erosion, damage to the natural environment, threats to man-made structures and personal safety, and the degradation of aesthetics.

F. Watercourses are important environmental features that contribute to the character of the Town. Overdevelopment or improperly managed disturbances are detrimental to the character of the Town and can result in public and private expenditures for corrective measures.

G. Regulation of development adjacent to watercourses is consistent with the legitimate interest of landowners to make reasonable use of their land. Regulation can prohibit the degradation of watercourses and allow reasonable use of private property by encouraging flexible design of development so as to avoid disturbance of sensitive lands.

H. Regulation of development adjacent to watercourses will not preclude the Town from continuing to meet its social, economic and other essential responsibilities.

I. These regulations are enacted with the intent of providing reasonable balance between the rights of the individual property owner to the fair use of his or her property and the rights of the public at large, both presently and in future generations. Therefore, this law recognizes the rights of owners of property adjacent to watercourses to use their

property for reasonable purposes consistent with other regulations and controls, provided that such use, in the judgment of the appropriate agencies or officials of the Town, does not result in a significant loss or degradation of watercourses or a loss of visual or open space benefits which these lands have been found to provide.

J. It is declared to be the intent of the Town of _____ to preserve watercourses and their adjacent land to the greatest extent possible and to regulate their use within the Town to protect the public interest by ensuring the preservation of watercourses and by ensuring the minimization of detrimental effects as set forth in this law.

Section 3 - Definitions

See Schedule A for definitions of terms used in this law.

Section 4 - Applications

A. This law shall apply to all proposed development except for:

- (1) Agricultural activity as defined in this local law.
- (2) Logging activity undertaken pursuant to an approved timber management plan prepared or approved by the County Soil & Water Conservation District or the New York State Department of Environmental Conservation, except that landing areas and log haul roads are subject to this law.
- (3) Routine maintenance activities that disturb less than five acres and are performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility.
- (4) Repairs to any stormwater management practice or facility deemed necessary by the Code Enforcement Officer and/or Town Engineer.
- (5) Any part of a subdivision if a plat for the subdivision has been approved by the Town of _____ on or before the effective date of this law.
- (6) Land development activities for which a building permit has been approved on or before the effective date of this law.
- (7) Cemetery graves.
- (8) Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles.
- (9) Emergency activity immediately necessary to protect life, property or natural resources.
- (10) Activities of an individual engaging in home gardening by growing flowers, vegetable and other plants primarily for use by that person and his or her family.
- (11) Landscaping and horticultural activities in connection with an existing structure.

<i>Need to consider exemptions</i>

Section 5 – Design Standards for Buffers

A. A forest buffer for a stream system shall consist of a forested strip of land extending along both sides of a stream and its adjacent wetlands, floodplains or slopes. The forest buffer width shall 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.

B. The forest buffer shall begin at the edge of the stream bank of the active channel.

C. The required width for all forest buffers (i.e., the base width) shall be a minimum of one hundred feet, with the requirement to expand the buffer depending on stream order, percent slope, 100-year floodplain, and wetlands or other critical natural resource(s).

- (1) in third order and higher streams, add twenty five (25) feet to the base width.
- (2) forest buffer width shall be modified if there are steep slopes which are within close proximity to the stream and drain into the stream system. In those cases, the forest buffer width can be adjusted according to the following chart:

Percent Slope	Buffer Width
15%-17%	add 10 feet
18%-20%	add 30 feet
21%-23%	add 50 feet
24%-25%	add 60 feet

(3) forest buffers shall be extended to encompass the entire 100-year floodplain and a zone with a minimum width of 25 feet beyond the edge of the floodplain.

(4) when wetland or critical areas extend beyond the edge of the required buffer width, the buffer shall be adjusted so that the buffer consists of the extent of the wetland plus a 25-foot-wide zone extending beyond the wetland edge.

D. The forest buffer shall be composed of three distinct zones, with each zone having its own set of allowable uses and vegetative targets as specified in this ordinance.

(1) Zone 1 Streamside Zone

a) The function of the streamside zone is to protect the physical and ecological integrity of the stream ecosystem.

b) The streamside zone will begin at the edge of the stream bank of the active channel and extend a minimum of 25 feet from the top of the bank.

c) Allowable uses within this zone are highly restricted to:

- i) flood control structures
- ii) utility rights of way
- iii) footpaths
- iv) road crossings, where permitted.

d) The vegetative target for the streamside zone is undisturbed native vegetation.

(2) Zone 2 Middle Zone

a) 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.

b) The middle zone will begin at the outer edge of the streamside zone and extend a minimum of 50 plus any additional buffer width as specified in Section VI C.

c) Allowable uses within the middle zone are restricted to:

- i) Biking or hiking paths
- ii) Stormwater management facilities, with the approval of *(local agency responsible for stormwater)*.
- iii) Recreational uses as approved by Town of _____.
- iv) Limited tree clearing with approval from *(Forestry Agency or Planning Agency)*.

d) The vegetative target for the middle zone is mature native vegetation adapted to the region.

(3) Zone 3 Outer Zone

a) The function of the outer zone is to prevent encroachment into the forest buffer and to filter runoff from residential and commercial development.

b) The outer zone will begin at the outward edge of the middle zone and provide a minimum width of 25 feet between Zone 2 and the nearest permanent structure.

c) There shall be no septic systems, permanent structures or impervious cover, with the exception of paths, within the outer zone.

d) 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.

Section D above may be too detailed for some municipalities; it may be deleted.

Section 6 - Buffer Regulations

A. The forest buffer, including wetlands and floodplains, shall 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 are 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 nonpermanent 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 approved by the Town of _____.

B. The following structures, practices, and activities are permitted in the forest buffer, with specific design or maintenance features, subject to the review of the Town of _____:

- (1) Roads, bridges, paths, and utilities:
 - a) an analysis needs to be conducted to ensure that no alternative is available.
 - b) the right of way should be the minimum width needed to allow for maintenance access and installation.
 - c) the angle of the crossing shall be perpendicular to the stream or buffer in order to minimize clearing requirements
 - d) the minimum number of vehicular road crossings should be used within each subdivision, and no more than one crossing is allowed for every 1,000 feet of buffer. This shall not be construed to limit pedestrian pathway crossings of the buffer.
- (2) Stormwater management:
 - a) an analysis needs to be conducted to ensure that no economically feasible alternative is available, and that the project is either necessary for flood control, or significantly improves the water quality or habitat in the stream.
 - b) in new developments, on-site and non-structural alternatives will be preferred over larger facilities within the stream buffer.
 - c) when constructing stormwater management facilities (i.e., BMPs), the area cleared will be limited to the area required for construction, and adequate maintenance access.
 - d) material dredged or otherwise removed from a BMP shall be stored outside the buffer.
- (3) Stream restoration projects, facilities and activities approved by are permitted within the forest buffer.
- (4) Water quality monitoring and stream gauging are permitted within the forest buffer, as approved by _____ (*local, state and/or federal agency*).
- (5) Individual trees within the forest buffer may be removed which are in danger of falling causing damage to dwellings or other structures, or causing blockage of the stream.
- (6) Other timber cutting techniques approved by the agency may be undertaken within the forest buffer under the advice and guidance of (*State or Federal Forestry Agency*), if necessary to preserve the forest from extensive pest infestation, disease infestation, or threat from fire.

C. All subdivision plats and site plans prepared for review and/or recording shall clearly:

- 1) Show the extent of any forest buffer on the subject property
- 2) Label the forest buffer
- 3) Provide a note to reference any forest buffer stating: "There shall be no clearing, grading, construction or disturbance of vegetation."

Section 7 - Penalties for offenses

A. Every person who shall fail to comply with a violation order issued by the enforcement officer within the time limit stated thereon shall be deemed to have committed an offense against this law and also shall be liable for any such violation for the penalty therefore.

B. A violation of this law is hereby declared to be an offense, punishable by a fine not exceeding \$350 or imprisonment for a period not to exceed six months, or both, for conviction of a first offense; for conviction of a second offense, both of which were committed within a period of five years, punishable by a fine not less than \$350 nor more than \$700 or imprisonment for a period not to exceed six months, or both; and upon conviction for a third or subsequent offense, all of which were committed within a period of five years, punishable by a fine not less than \$700 nor more than \$1,000 or imprisonment for a period not to exceed six months, or both. However, for the purpose of conferring jurisdiction upon courts and judicial officers generally, violations of this law shall be deemed misdemeanors, and, for such purposes only, all provisions of law relating to misdemeanors shall apply to such violations. Each week's continued violations shall constitute a separate additional violation.

C. Any person violating this law shall be subject to a civil penalty enforceable and collectible by the Town. Such penalty shall be collectible by and in the name of the Town for each week that such violation shall continue.

D. In addition to the above-provided penalties and punishment, the Town Board may also maintain an action or proceeding in the name of the Town in a court of competent jurisdiction to compel compliance with or to restrain by injunction the violation of this law.

E. The enforcement responsibility, procedures and fines shall be coordinated with zoning enforcement and flood damage control law provisions so that any instance where multiple violations occur because of the same set of facts can be effectively and efficiently prosecuted.

Section 8 - Relief from decisions

Any person or persons jointly or severally aggrieved by any decision of the Planning Board, and/or the Town Board, and/or the Zoning Board of Appeals, and/or the Town Engineer and/or their duly authorized representative under this article may apply to the Supreme Court of the State of New York for relief through a proceeding under Article 78 of the Civil Practice Law and Rules of the State of New York. Such proceeding shall be governed by the specific provisions of Article 78, except that the action must be commenced within 30 days after the filing of the decision of the Planning Board, or of the Zoning Board of Appeals, or of the Town Engineer, or of such duly authorized representative, as the case may be, in the office of the Town Clerk in accordance with applicable provisions of New York State Town Law.

Section 9 - Conflict With Other Regulations

Where the standards and management requirements of this buffer ordinance are in conflict with other laws, regulations, and policies regarding streams, steep slopes, erodible soils, wetlands, floodplains, timber harvesting, land disturbance activities or other environmental protective measures, the more restrictive shall apply.

Schedule A – Definitions

As used in this local law, the following terms shall have the meanings indicated:

ACTIVE CHANNEL – The area of the stream channel that is subject to frequent flows (approximately once per one and a half years) and that includes the portion of the channel below the floodplain.

BEST MANAGEMENT PRACTICES (BMPs) – Conservation practices or management measures that control soil loss and reduce water quality degradation caused by nutrients, animal wastes, toxics, sediment, and runoff.

BUFFER – A vegetated area, including trees, shrubs, and herbaceous vegetation, that exists or is established to protect a stream system, lake, reservoir, or coastal estuarine area. Alteration of this natural area is strictly limited.

DEVELOPMENT –

1. The improvement of property for any purpose involving building
2. Subdivision of a tract or parcel of land into two or more parcels
3. The combination of any two or more lots, tracts, or parcels of property for any purpose
4. The preparation of land for any of the above purposes

LACUSTRINE – Of or pertaining to a lake.

NONPOINT SOURCE POLLUTION – Pollution which is generated by various land use activities rather than from an identifiable or discrete source, and is conveyed to waterways through natural processes, such as rainfall, storm runoff, or ground water seepage rather than direct discharge.

ONE HUNDRED YEAR FLOODPLAIN – The area of land adjacent to a stream that is subject to inundation during a storm floodplain event that has a recurrence interval of 100 years.

POLLUTION – Any contamination or alteration of the physical, chemical, or biological properties of any waters that will render the waters harmful or detrimental to:

1. Public health, safety, or welfare
2. Domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses
3. Livestock, wild animals, or birds
4. Fish or other aquatic life

RIPARIAN – Of or pertaining to a river or stream.

STREAM CHANNEL – Part of a watercourse either naturally or artificially created that contains an intermittent or perennial base flow of groundwater origin. Base flows of groundwater origin can be distinguished by any of the following physical indicators:

1. Hydrophytic vegetation, hydric soil, or other hydrologic indicators in the area(s) where groundwater enters the stream channel in the vicinity of the stream headwaters, channel bed, or channel banks
2. Flowing water not directly related to a storm event
3. Historical records of a local high groundwater table, such as well and stream gauge records.

STREAM ORDER – A classification system for streams based on stream hierarchy. The smaller the stream, the lower its numerical classification. For example, a first-order stream does not have tributaries and normally originates from springs and/or seeps.

STREAM SYSTEM – A stream channel together with one or both of the following:

- 100-year floodplain
- Hydrologically related nontidal wetland

STREAMS – Perennial and intermittent watercourses identified through United States Geological Survey (USGS) maps. Perennial streams are those which are depicted on a USGS map with a solid blue line. Intermittent streams are those which are depicted on a USGS map with a dotted blue line.

Defining the term “stream” is perhaps the most contentious issue in the definition of stream buffers. This term determines the origin, and the length of the stream buffer. While some jurisdictions restrict the buffer to perennial or “blue line” streams, others include both perennial and intermittent streams in the stream buffer program. Some communities do not rely on USGS maps, and instead prepare local maps of all stream systems that require a buffer.

STRUCTURES, PERMANENT – Anything constructed or erected with a fixed location on the ground above grade and having subsurface foundations, piers, or pilings, or having a connection to any public or private (including on-site) water source and wastewater treatment system. Permanent structures shall not include poles, lines, cables, or other transmission or distribution facilities of public utilities.

STRUCTURES, NONPERMANENT – Anything constructed or erected on the ground above grade without any subsurface foundations, piers, or pilings.

WATERCOURSE – A definite channel with bed and banks within which concentrated water flows continuously, frequently or infrequently.

WETLAND – Those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Appendix F - Stormwater Management and Erosion and Sediment Control Model Law

Note: If municipalities have existing requirements for erosion and sediment control, then they should retain them if they are at least as stringent as this New York State Model Law.

A local law to amend the (Zoning Law/Subdivision Law/Site Plan Review Law/Erosion and Sediment Control Law) of the Town of _____, Local law Number _____ of the Year _____.

Be it enacted by the Town Board of the Town of _____ as follows:

Article 1. General Provisions

Section 1. Findings of Fact

It is hereby determined that:

- 1.1 Land development activities and associated increases in site impervious cover often alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, or sediment transport and deposition;
- 1.2 This stormwater runoff contributes to increased quantities of water-borne pollutants, including siltation of aquatic habitat for fish and other desirable species;
- 1.3 Clearing and grading during construction tends to increase soil erosion and add to the loss of native vegetation necessary for terrestrial and aquatic habitat;
- 1.4 Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff thereby increasing stream bank erosion and sedimentation;
- 1.5 Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream baseflow;
- 1.6 Substantial economic losses can result from these adverse impacts on the waters of the municipality;
- 1.7 Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activities;
- 1.8 The regulation of stormwater runoff discharges from land development activities in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff is in the public interest and will minimize threats to public health and safety.
- 1.9 Regulation of land development activities by means of performance standards governing stormwater management and site design will produce development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of erosion and sedimentation from development.

Section 2. Purpose

The purpose of this local law is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in Section 1 hereof. This local law seeks to meet those purposes by achieving the following objectives:

- 2.1 Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit no. GP-02-02 or as amended or revised;
- 2.2 Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01 or as amended or revised;

- 2.3 Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;
- 2.4 Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;
- 2.5 Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and
- 2.6 Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.

Section 3. Statutory Authority

In accordance with Article 10 of the Municipal Home Rule Law of the State of New York, the Town Board of _____ has the authority to enact local laws and amend local laws and for the purpose of promoting the health, safety or general welfare of the Town of _____ and for the protection and enhancement of its physical environment. The Town Board of _____ may include in any such local law provisions for the appointment of any municipal officer, employees, or independent contractor to effectuate, administer and enforce such local law.

Section 4. Applicability

- 4.1 This local law shall be applicable to all land development activities as defined in this local law.
- 4.2 The municipality shall designate a Stormwater Management Officer who shall accept and review all stormwater pollution prevention plans and forward such plans to the applicable municipal board. The Stormwater Management Officer may (1) review the plans, (2) upon approval by the Town Board of the Town of _____, engage the services of a registered professional engineer to review the plans, specifications and related documents at a cost not to exceed a fee schedule established by said governing board, or (3) accept the certification of a licensed professional that the plans conform to the requirements of this law.
- 4.3 All land development activities subject to review and approval by the Planning Board or Zoning Board of Appeals of the Town of _____ under subdivision, site plan, and/or special permit regulations shall be reviewed subject to the standards contained in this local law
- 4.4 All other land development activities not subject to review as stated in section 4.3 shall be required to submit a Stormwater Pollution Prevention Plan (SWPPP) to the Stormwater Management Officer who shall approve the SWPPP if it complies with the requirements of this law.

Section 5. Exemptions

The following activities may be exempt from review under this law.

- 5.1 Agricultural activity as defined in this local law.
- 5.2 Logging activity undertaken pursuant to an approved timber management plan prepared or approved by the County Soil & Water Conservation District or the New York State Department of Environmental Conservation, except that landing areas and log haul roads are subject to this law.
- 5.3 Routine maintenance activities that disturb less than five acres and are performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility.
- 5.4 Repairs to any stormwater management practice or facility deemed necessary by the Stormwater Management Officer.
- 5.5 Any part of a subdivision if a plat for the subdivision has been approved by the Town of _____ on or before the effective date of this law.
- 5.6 Land development activities for which a building permit has been approved on or before the effective date of this law.
- 5.7 Cemetery graves.
- 5.8 Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles.
- 5.9 Emergency activity immediately necessary to protect life, property or natural resources.

- 5.10 Activities of an individual engaging in home gardening by growing flowers, vegetable and other plants primarily for use by that person and his or her family.
- 5.11 Landscaping and horticultural activities in connection with an existing structure.

Article 2. Zoning Law Amendment

The Zoning Law is hereby amended to include Article ____, a new supplemental regulation titled Stormwater Control.

Section 1. Definitions

The terms used in this local law or in documents prepared or reviewed under this local law shall have the meaning as set forth in Schedule A of this Local Law.

Section 2. Stormwater Pollution Prevention Plans

2.1. Stormwater Pollution Prevention Plan Requirement

No application for approval of a land development activity shall be reviewed until the appropriate board has received a Stormwater Pollution Prevention Plan (SWPPP) prepared in accordance with the specifications in this local law.

2.2 Contents of Stormwater Pollution Prevention Plans

2.2.1 All SWPPPs shall provide the following background information and erosion and sediment controls:

1. Background information about the scope of the project, including location, type and size of project.
2. Site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map should show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); wetlands and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and location(s) of the stormwater discharges(s);

[Site map should be at a scale no smaller than 1"=100' (e.g. 1"=500" is smaller than 1"=100")]
3. Description of the soil(s) present at the site;
4. Construction phasing plan describing the intended sequence of construction activities, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance. Consistent with, and in addition to, the New York Standards and Specifications for Erosion and Sediment Control (Erosion Control Manual), not more than five (5) acres shall be disturbed at any one time unless pursuant to an approved SWPPP.
5. Description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in stormwater runoff;
6. Description of construction and waste materials expected to be stored on-site with updates as appropriate, and a description of controls to reduce pollutants from these materials including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response;
7. Temporary and permanent structural and vegetative measures to be used for soil stabilization, runoff control and sediment control for each stage of the project from initial land clearing and grubbing to project close-out;
8. A site map/construction drawing(s) specifying the location(s), size(s) and length(s) of each erosion and sediment control practice;
9. Dimensions, material specifications and installation details for all erosion and sediment control practices, including the siting and sizing of any temporary sediment basins;

10. Temporary practices that will be converted to permanent control measures;
11. Implementation schedule for staging temporary erosion and sediment control practices, including the timing of initial placement and duration that each practice should remain in place;
12. Maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practice;
13. Name(s) of the receiving water(s);
14. Delineation of SWPPP implementation responsibilities for each part of the site;
15. Description of structural practices designed to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable; and
16. Any existing data that describes the stormwater runoff at the site.

2.2.2 Land development activities meeting Condition “A”, “B” or “C” below shall also include water quantity and water quality controls (post-construction stormwater runoff controls) as set forth in Section 2.2.3 below as applicable:

1. Condition A - Stormwater runoff from land development activities discharging a pollutant of concern to either an impaired water identified on the Department’s 303(d) list of impaired waters or a Total Maximum Daily Load (TMDL) designated watershed for which pollutants in stormwater have been identified as a source of the impairment.
2. Condition B - Stormwater runoff from land development activities disturbing five (5) or more acres.
3. Condition C - Stormwater runoff from construction activity disturbing between one (1) acre and five (5) acres of land during the course of the project, exclusive of the construction of single family residences and construction activities at agricultural properties.

2.2.3 SWPPP Requirements for Condition A, B and C:

1. All information in Section 2.2 .1 of this local law
2. Description of each post-construction stormwater management practice;
3. Site map/construction drawing(s) showing the specific location(s) and size(s) of each post-construction stormwater management practice;
4. Hydrologic and hydraulic analysis for all structural components of the stormwater management system for the applicable design storms
5. Comparison of post-development stormwater runoff conditions with pre-development conditions
6. Dimensions, material specifications and installation details for each post-construction stormwater management practice;
7. Maintenance schedule to ensure continuous and effective operation of each post-construction stormwater management practice.

Maintenance easements to ensure access to all stormwater management practices at the site for the purpose of inspection and repair. Easements shall be recorded on the plan and shall remain in effect with transfer of title to the property.

9. Inspection and maintenance agreement binding on all subsequent landowners served by the on-site stormwater management measures in accordance with Article 2, Section 4 of this local law.

2.3 Plan Certification

The SWPPP shall be prepared by a landscape architect, certified professional or professional engineer and must be signed by a the professional preparing the plan, who shall certify that the design of all stormwater management practices meet the requirements in this local law.

2.4 Other Environmental Permits

The applicant shall assure that all other applicable environmental permits have been or will be acquired for the land development activity prior to approval of the final stormwater design plan.

2.5 Contractor Certification

2.5.1 Each contractor and subcontractor identified in the SWPPP who will be involved in soil disturbance and/or stormwater management practice installation shall sign and date a copy of the following certification statement before undertaking any land development activity : “I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Stormwater Pollution Prevention Plan. I also understand that it is unlawful for any person to cause or contribute to a violation of water quality standards.”

2.5.2 The certification must include the name and title of the person providing the signature, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

2.5.3 The certification statement(s) shall become part of the SWPPP for the land development activity.

2.6 A copy of the SWPPP shall be retained at the site of the land development activity during construction from the date of initiation of construction activities to the date of final stabilization.

Section 3. Performance and Design Criteria for Stormwater Management and Erosion and Sediment Control

All land development activities shall be subject to the following performance and design criteria:

3.1 Technical Standards

For the purpose of this local law, the following documents shall serve as the official guides and specifications for stormwater management. Stormwater management practices that are designed and constructed in accordance with these technical documents shall be presumed to meet the standards imposed by this law:

3.1.1 The New York State Stormwater Management Design Manual (New York State Department of Environmental Conservation, most current version or its successor, hereafter referred to as the Design Manual)

3.1.2 New York Standards and Specifications for Erosion and Sediment Control, (Empire State Chapter of the Soil and Water Conservation Society, 2004, most current version or its successor, hereafter referred to as the Erosion Control Manual).

3.2 Water Quality Standards

3.2.1 Any land development activity shall not cause an increase in turbidity that will result in substantial visible contrast to natural conditions in surface waters of the state of New York.

Section 4. Maintenance and Repair of Stormwater Facilities

4.1 Maintenance During Construction

4.1.1 The applicant or developer of the land development activity shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the applicant or developer to achieve compliance with the conditions of this local law. Sediment shall be removed from sediment traps or sediment ponds whenever their design capacity has been reduced by fifty (50) percent.

4.1.2 The applicant or developer or their representative shall be on site at all times when construction or grading activity takes place and shall inspect and document the effectiveness of all erosion and sediment control practices. Inspection reports shall be completed every 7 days and within 24 hours of any storm event producing 0.5 inches of precipitation or more. The reports shall be delivered to the Stormwater Management Officer and also copied to the site log book.

4.2 Maintenance Easement(s)

Prior to the issuance of any approval that has a stormwater management facility as one of the requirements, the applicant or developer must execute a maintenance easement agreement that shall be binding on all subsequent landowners served by the stormwater management facility. The easement shall provide for access to the facility at reasonable times for periodic inspection by the Town of _____ to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this local law. The easement shall be recorded by the grantor in the office of the County Clerk after approval by the counsel for the Town of _____.

4.3 Maintenance after Construction

The owner or operator of permanent stormwater management practices installed in accordance with this law shall be operated and maintained to achieve the goals of this law. Proper operation and maintenance also includes as a minimum, the following:

4.3.1 A preventive/corrective maintenance program for all critical facilities and systems of treatment and control (or related appurtenances) which are installed or used by the owner or operator to achieve the goals of this law.

4.3.2 Written procedures for operation and maintenance and training new maintenance personnel.

4.3.3 Discharges from the SMPs shall not exceed design criteria or cause or contribute to water quality standard violations in accordance with Article 2, section 3.2.

4.4 Maintenance Agreements

The Town of _____ shall approve a formal maintenance agreement for stormwater management facilities binding on all subsequent landowners and recorded in the office of the County Clerk as a deed restriction on the property prior to final plan approval. The maintenance agreement shall be consistent with the terms and conditions of Schedule C of this local law entitled Sample Stormwater Control Facility Maintenance Agreement. The Town of _____, in lieu of a maintenance agreement, at its sole discretion may accept dedication of any existing or future stormwater management facility, provided such facility meets all the requirements of this local law and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

Section 5. Severability and Effective Date

5.1 Severability

If the provisions of any article, section, subsection, paragraph, subdivision or clause of this local law shall be judged invalid by a court of competent jurisdiction, such order of judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this local law.

5.2 Effective Date

This Local Law shall be effective upon filing with the office of the Secretary of State.

Approved by: _____ Date _____

Article 3. Subdivision Regulation Amendment

Sections ____ and ____ of the Subdivision Regulations of the Town of _____ are hereby amended by adding the following to the information requirements:

A. For Preliminary Subdivision Plat add: Stormwater Pollution Prevention Plan: A Stormwater Pollution Prevention Plan (SWPPP) consistent with the requirements of Article 1 and 2 of this local law shall be required for Preliminary Subdivision Plat approval. The SWPPP shall meet the performance and design criteria and standards in Article 2 of this local law. The approved Preliminary Subdivision Plat shall be consistent with the provisions of this local law.

B. For Final Subdivision Plat approval add: Stormwater Pollution Prevention Plan: A Stormwater Pollution Prevention Plan consistent with the requirements of Article 1 and 2 of this local law and with the terms of preliminary plan approval shall be required for Final Subdivision Plat approval. The SWPPP shall meet the performance and design criteria and standards in Article 2 of this local law. The approved Final Subdivision Plat shall be consistent with the provisions of this local law.

Article 4. Site Plan Review Regulation Amendment

Sections ____ and ____ of the Site Plan Review regulations of the Town of _____ are hereby amended by adding the following to the information requirements:

For Site Plan Approval add: Stormwater Pollution Prevention Plan: A Stormwater Pollution Prevention Plan consistent with the requirements of Article 1 and 2 of this local law shall be required for Site Plan Approval. The SWPPP shall meet the performance and design criteria and standards in Article 2 of this local law. The approved Site Plan shall be consistent with the provisions of this local law.

Article 5. Erosion & Sediment Control Law Amendment

Section _____ of the Erosion & Sediment Control Law of the Town of _____ is hereby amended by adding the following clause: Stormwater Pollution Prevention Plan: A Stormwater Pollution Prevention Plan consistent with the requirements of Article 1 and 2 of this local law shall be required. The SWPPP shall meet the performance and design criteria and standards in Article 2 of this local law. The approved erosion control permit shall be consistent with the provisions of this local law.

Article 6. Administration and Enforcement

Section 1. Construction Inspection

1.1 Erosion and Sediment Control Inspection

The Town of _____ Stormwater Management Officer may require such inspections as necessary to determine compliance with this law and may either approve that portion of the work completed or notify the applicant wherein the work fails to comply with the requirements of this law and the stormwater pollution prevention plan (SWPPP) as approved. To obtain inspections, the applicant shall notify the Town of _____ enforcement official at least 48 hours before any of the following as required by the Stormwater Management Officer:

- 1.1.1 Start of construction
- 1.1.2 Installation of sediment and erosion control measures
- 1.1.3 Completion of site clearing
- 1.1.4 Completion of rough grading
- 1.1.5 Completion of final grading
- 1.1.6 Close of the construction season
- 1.1.7 Completion of final landscaping

1.1.8 Successful establishment of landscaping in public areas.

If any violations are found, the applicant and developer shall be notified in writing of the nature of the violation and the required corrective actions. No further work shall be conducted except for site stabilization until any violations are corrected and all work previously completed has received approval by the Stormwater Management Officer.

1.2 Stormwater Management Practice Inspections

The Town of _____ Stormwater Management Officer, is responsible for conducting inspections of stormwater management practices (SMPs). All applicants are required to submit “as built” plans for any stormwater management practices located on-site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be certified by a professional engineer.

1.3 Inspection of Stormwater Facilities After Project Completion

Inspection programs shall be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of state or federal water or sediment quality standards or the SPDES stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other stormwater management practices.

1.4 Submission of Reports

The Town of _____ Stormwater Management Officer may require monitoring and reporting from entities subject to this law as are necessary to determine compliance with this law.

1.5 Right-of-Entry for Inspection

When any new stormwater management facility is installed on private property or when any new connection is made between private property and the public storm water system, the landowner shall grant to the Town of _____ the right to enter the property at reasonable times and in a reasonable manner for the purpose of inspection as specified in paragraph 1.3.

Section 2. Performance Guarantee

2.1 Construction Completion Guarantee

In order to ensure the full and faithful completion of all land development activities related to compliance with all conditions set forth by the Town of _____ in its approval of the Stormwater Pollution Prevention Plan, the Town of _____ may require the applicant or developer to provide, prior to construction, a performance bond, cash escrow, or irrevocable letter of credit from an appropriate financial or surety institution which guarantees satisfactory completion of the project and names the Town of _____ as the beneficiary. The security shall be in an amount to be determined by the Town of _____ based on submission of final design plans, with reference to actual construction and landscaping costs. The performance guarantee shall remain in force until the surety is released from liability by the Town of _____, provided that such period shall not be less than one year from the date of final acceptance or such other certification that the facility(ies) have been constructed in accordance with the approved plans and specifications and that a one year inspection has been conducted and the facilities have been found to be acceptable to the Town of _____. Per annum interest on cash escrow deposits shall be reinvested in the account until the surety is released from liability.

2.2 Maintenance Guarantee

Where stormwater management and erosion and sediment control facilities are to be operated and maintained by the developer or by a corporation that owns or manages a commercial or industrial facility, the developer, prior to construction, may be required to provide the Town of _____ with an irrevocable letter of credit from an

approved financial institution or surety to ensure proper operation and maintenance of all stormwater management and erosion control facilities both during and after construction, and until the facilities are removed from operation. If the developer or landowner fails to properly operate and maintain stormwater management and erosion and sediment control facilities, the Town of _____ may draw upon the account to cover the costs of proper operation and maintenance, including engineering and inspection costs.

2.3 Recordkeeping

The Town of _____ may require entities subject to this law to maintain records demonstrating compliance with this law.

Section 3. Enforcement and Penalties

3.1 Notice of Violation.

When the Town of _____ determines that a land development activity is not being carried out in accordance with the requirements of this local law, it may issue a written notice of violation to the landowner. The notice of violation shall contain :

3.1.1 the name and address of the landowner, developer or applicant;

3.1.2 the address when available or a description of the building, structure or land upon which the violation is occurring;

3.1.3 a statement specifying the nature of the violation;

3.1.4 a description of the remedial measures necessary to bring the land development activity into compliance with this local law and a time schedule for the completion of such remedial action;

3.1.5 a statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed;

3.1.6 a statement that the determination of violation may be appealed to the municipality by filing a written notice of appeal within fifteen (15) days of service of notice of violation.

3.2 Stop Work Orders

The Town of _____ may issue a stop work order for violations of this law. Persons receiving a stop work order shall be required to halt all land development activities, except those activities that address the violations leading to the stop work order. The stop work order shall be in effect until the Town of _____ confirms that the land development activity is in compliance and the violation has been satisfactorily addressed. Failure to address a stop work order in a timely manner may result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this local law.

3.3 Violations

Any land development that is commenced or is conducted contrary to this local law, may be restrained by injunction or otherwise abated in a manner provided by law.

3.4 Penalties

In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this local law shall be guilty of a violation punishable by a fine not exceeding three hundred fifty dollars (\$350) or imprisonment for a period not to exceed six months, or both for conviction of a first offense; for conviction of a second offense both of which were committed within a period of five years, punishable by a fine not less than three hundred fifty dollars nor more than seven hundred dollars (\$700) or imprisonment for a period not to exceed six months, or both; and upon conviction for a third or subsequent offense all of which were committed within a period of five years, punishable by a fine not less than seven hundred dollars nor more than one thousand dollars (\$1000) or imprisonment for a period not to exceed six months, or both. However, for the purposes of conferring jurisdiction upon courts and judicial officers generally, violations of this local law shall be deemed misdemeanors and for such purpose only all provisions of law relating to misdemeanors shall apply to such violations. Each week's continued violation shall constitute a separate additional violation.

3.5 Withholding of Certificate of Occupancy

If any building or land development activity is installed or conducted in violation of this local law the Stormwater Management Officer may prevent the occupancy of said building or land.

3.6 Restoration of lands

Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, the Town of _____ may take necessary corrective action, the cost of which shall become a lien upon the property until paid.

Section 4. Fees for Services

The Town of _____ may require any person undertaking land development activities regulated by this law to pay reasonable costs at prevailing rates for review of SWPPPs, inspections, or SMP maintenance performed by the Town of _____ or performed by a third party for the Town of _____

Appendix G – City of Canandaigua Stormwater Management and Erosion and Sediment Control Ordinance

CITY OF CANANDAIGUA MUNICIPAL CODE CHAPTER 3.24 STORMWATER MANAGEMENT AND EROSION CONTROL ORDINANCE 3/12/2007

3.24.009ART ARTICLE I GENERAL PROVISIONS

3.24.010 Short Title.

This Ordinance shall be known as the "Stormwater Management and Erosion Control Ordinance".

3.24.020 Findings of Fact.

The City of Canandaigua finds that uncontrolled drainage and runoff associated with land development has a significant impact upon the health, safety and welfare of the community. Specifically,

1. The City's stormwater drainage system is currently stressed during heavy rain events;
2. Land development activities and associated increases in site impervious cover often alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, or sediment transport and deposition;
3. This stormwater runoff contributes to increased quantities of water-borne pollutants, including nutrients, pathogens and siltation of aquatic habitat for fish and other desirable species;
4. Clearing and grading during construction tends to increase soil erosion and add to the loss of native vegetation necessary for terrestrial and aquatic habitat;
5. Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff thereby increasing stream bank erosion and sedimentation;
6. Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream baseflow;
7. Substantial economic losses can result from these adverse impacts on the waters of the municipality;
8. Stormwater runoff, soil erosion phosphorus loading and other nonpoint source pollutants can be controlled and minimized through the regulation of stormwater runoff from land development activities;
9. The regulation of stormwater runoff discharges from land development activities in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, phosphorus loading and other nonpoint source pollutants associated with stormwater runoff is in the public interest and will minimize threats to public health and safety.

10. Regulation of land development activities by means of performance standards governing stormwater management and site design will produce development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of erosion and sedimentation from development.

3.24.030 Purpose and Objective.

It is the purpose of this ordinance to protect, maintain and enhance both the immediate and the long-term health, safety and general welfare of the citizens of the City of Canandaigua, by regulating site preparation and construction activities, including excavation, filling, grading, stripping, and paving, in order to prevent problems related to erosion, flooding, sedimentation, or drainage. In relation to this purpose, this ordinance has the following objectives:

1. Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit no. GP-02-02 or as amended or revised;
2. Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01 or as amended or revised, and additional requirements in this ordinance and the Enhanced Phosphorus Removal Supplement (Chapter 10 New York State Stormwater Management Design Manual);
3. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;
4. Minimize increases in pollution (especially phosphorus) caused by stormwater runoff from land development activities which would otherwise degrade local water quality;
5. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to pre-development conditions; and
6. Reduce stormwater runoff rates and volumes, soil erosion and phosphorus and other nonpoint source pollutants, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.

3.24.040 Authority

In accordance with Article 2 A of the General City Law of the State of New York, the City of Canandaigua has the authority to enact ordinances for the purpose of promoting the health, safety or general welfare of the City of Canandaigua, including the protection of the property of its inhabitants. By the same authority, the City of Canandaigua may include in any such ordinance provision for the appointment of any municipal officer or employees to effectuate and administer such ordinance.

3.24.050 Severability or Conflict

- A. SEVERABILITY - if any section, subsection, sentence, clause, phrase, or portion of these regulations is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such provision or such holding shall not affect the validity of the remaining portions of these regulations.
- B. CONFLICT - the provisions of this ordinance shall be held to be the minimum requirements adopted for the promotion of the public health, safety, and welfare. Whenever the requirements of this chapter are at variance with the requirements of any other lawfully adopted rules, regulations, or ordinances, the most restrictive, or that imposing the higher standards, shall govern.

3.24.060 Definitions

Unless specifically defined below, words or phrases shall be interpreted so as to give them the meaning they have in common usage and to give this Ordinance it's most effective application. The definition of words used in the singular shall include the plural and the plural the singular; words used in the present tense shall include the future tense. The word "shall" connotes mandatory and not discretionary; the word "may" is permissive.

Agricultural Activity - the activity of an active farm including grazing and watering livestock, irrigating crops, harvesting crops, using land for growing agricultural products, and cutting timber for sale, but shall not include the operation of a dude ranch or similar operation, or the construction of new structures associated with agricultural activities.

Applicant - a property owner or agent of a property owner who has filed an application for a land development activity.

Building - any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal, or property, and occupying more than 100 square feet of area.

Channel - a natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

Clearing - any activity that removes the vegetative surface cover.

Concentrated Flow Path: Flowing water that has been accumulated into a single fairly narrow stream

Dedication - the deliberate appropriation of property by its owner for general public use.

Department - the New York State Department of Environmental Conservation

Design Manual - the New York State Stormwater Management Design Manual, most recent version including applicable updates, that serves as the official guide for stormwater management principles, methods and practices.

Developer - a person who undertakes land development activities.

Erosion Control Manual - the most recent version of the "New York Standards and Specifications for Erosion and Sediment Control" manual, commonly known as the "Blue Book".

Grading - excavation or fill of material, including the resulting conditions thereof.

Impervious Cover - those surfaces, improvements and structures that cannot effectively infiltrate rainfall, snow melt and water (e.g., building rooftops, pavement, sidewalks, driveways, etc).

Industrial Stormwater Permit - a State Pollutant Discharge Elimination System permit issued to a commercial industry or group of industries which regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

Infiltration - the process of percolating stormwater into the subsoil.

Jurisdictional Wetland - an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

Land Development Activity - construction activity including clearing, grading, excavating, soil disturbance or placement of fill that results in land disturbance.

Landowner - the legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights in the land.

Maintenance Agreement - a legally recorded document that acts as a property deed restriction, and which provides for long-term maintenance of stormwater management practices.

Nonpoint Source Pollution - pollution from any source other than from any discernible, confined, and discrete conveyances, and shall include, but not be limited to, pollutants from agricultural, silvicultural, mining, construction, subsurface disposal and urban runoff sources.

Phasing - clearing a parcel of land in distinct pieces or parts, with the stabilization of each piece completed before the clearing of the next.

Pollutants of Concern – phosphorus and sediment or a water quality measurement that addresses sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the land development activity.

Project - land development activity

Recharge - the replenishment of underground water reserves.

Sediment Control - measures that prevent eroded sediment from leaving the site.

Sensitive Areas - cold water fisheries, shellfish beds, swimming beaches, groundwater recharge areas, water supply reservoirs, habitats for threatened, endangered or special concern species.

SPDES General Permit for Construction Activities GP-02-01 - A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to developers of construction activities to regulate disturbance of one or more acres of land.

SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems GP-02-02 - A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to municipalities to regulate discharges from municipal separate storm sewers for compliance with EPA established water quality standards and/or to specify stormwater control standards

Stabilization - the use of practices that prevent exposed soil from eroding.

Stop Work Order - an order issued which requires that all construction activity on a site be stopped.

Stormwater - rainwater, surface runoff, snowmelt and drainage

Stormwater Hotspot - a land use or activity that generates higher concentrations of hydrocarbons, trace metals or toxicants than are found in typical stormwater runoff, based on monitoring studies.

Stormwater Management - the use of structural or non-structural practices that are designed to reduce stormwater runoff and mitigate its adverse impacts on property, natural resources and the environment.

Stormwater Management Facility - one or a series of stormwater management practices installed, stabilized and operating for the purpose of controlling stormwater runoff.

Stormwater Management Officer - an employee or officer designated by the municipality to accept and review

stormwater pollution prevention plans, forward the plans to the applicable municipal board and inspect stormwater management practices

Stormwater Management Practices (SMPs) - measures, either structural or nonstructural, that are determined to be the most effective, practical means of preventing flood damage and preventing or reducing point source or nonpoint source pollution inputs to stormwater runoff and water bodies.

Stormwater Pollution Prevention Plan (SWPPP) - a plan for controlling stormwater runoff and pollutants from a site during and after construction activities. SWPPPs are broken down into two categories (Basic and Full) based on site and watershed conditions. The Basic SWPPP focuses on Erosion and Sediment Control and the Full SWPPP includes all the components of the Basic along with post construction stormwater quality and quantity

Stormwater Runoff - flow on the surface of the ground, resulting from precipitation

Surface Waters of the State of New York - lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction. Storm sewers and waste treatment systems, including treatment ponds or lagoons which also meet the criteria of this definition are not waters of the state. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the state (such as a disposal area in wetlands) nor resulted from impoundment of waters of the state.

Watercourse - a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.

Waterway - a channel that directs surface runoff to a watercourse or to the public storm drain. Section 2.
Stormwater Pollution Prevention Plans

3.24.069 ARTICLE II PROCEDURES

3.24.070 Jurisdiction and Applicability

- A. Upon approval of this Ordinance by The City Council of the City of Canandaigua, all site preparation and construction activities requiring approval under the Ordinance shall be in conformance with the provisions set forth herein.
- B. No person, corporation, organization, or public agency may, on or after the effective date of this ordinance:
 - 1. Initiate any land clearing, land grading, filling or earth moving, or other land disturbing activities;
 - 2. Initiate a development project of construction activity;
 - 3. Pave an area with impervious surface; or
 - 4. Alter any drainage system

Without first preparing and submitting a Stormwater Pollution Prevention Plan and obtaining approval of said plan as required by this Ordinance, or obtaining a variance or waiver from this Ordinance, unless such activity is exempted by Section 3.24.100 of this Ordinance.

3.24.80 Development Permits

- A. A Development Permit shall be required for any land disturbing activity which is subject to this Ordinance and which is undertaken independently of any development activity which is otherwise subject to City review and approval. No separate Development Permit shall be required for any land disturbing activity which is subject to review and approval through the City Subdivision Regulations, Site Plan Review, Special Use Permit, or Building Permit processes, nor for any City sponsored land disturbing or development activity.
- B. No Development permit shall be issued until a Stormwater Management and Erosion Control plan has been submitted to and approved by the City, unless the land-disturbing activity which is the subject of the application is specifically exempted by this Ordinance.
- C. The Code Enforcement Officer shall have authority to issue Development Permits for land-disturbing activities, upon his determination that the issuance of such Development Permit is in compliance with the provisions of this Ordinance.

3.24.090 Authority to Approve

- A. The Planning Commission of the City of Canandaigua shall have the authority to review and approve, with modifications, approve conditionally, disapprove, or grant variances and waivers for, all Stormwater Management and Erosion Control Plans for any projects which are otherwise subject to Planning Commission approval.
 - 1. The Planning Commission shall transmit copies of all proposed Stormwater Management and Erosion Control plans to the City Director of Public Works and to the Code Enforcement Officer for review and comment prior to acting to approve or disapprove such Plans.
 - 2. The Planning Commission, City Director of Public Works and Code Enforcement Officer may, upon its discretion, refer any proposed Stormwater Management and Erosion Control Plans to other agencies and officials, including outside consultants and experts, for review and comment thereon, prior to acting to approve or disapprove such Plans.
 - 3. Prior to approving such Plan, the Planning Commission shall determine that the Plan is in compliance with the performance standards and design criteria set forth in this ordinance.

- B. The Director of Public Works shall review all Stormwater Management and Erosion Control Plans for construction activities to be directly undertaken by the labor force of the City of Canandaigua, and shall determine that said Plan is in compliance with the performance standards and design criteria set forth in this Ordinance, prior to the commencement of any land-disturbing construction activity.
 - 1. The Director of Public Works may, at his discretion, refer such Plans to other agencies and officials, including outside consultants and experts, for review and comment thereon.
- C. The City Code Enforcement Officer shall review all Stormwater Management and Erosion Control Plans for all construction activities which are not subject to Planning Commission or City Council review and approval but for which a Building Permit is required.
 - 1. The Code Enforcement Officer may, at his discretion, refer copies of such Plans to the Director of Public Works or other agencies and officials, including outside consultants and experts, for review and comment prior to the issuance of said Building Permit.
 - 2. The Code Enforcement Officer shall determine that said Plan is in compliance with the performance standards and design criteria set forth in this Ordinance, prior to the issuance of said Building Permit.
- D. The City Council of the City of Canandaigua shall have the authority to review and approve, approve with modifications, disapprove, or grant variances and waivers for, all Stormwater Management and Erosion Control Plans for any development projects submitted under the Planned Unit Development Ordinance, according to the procedures set forth therein, and shall determine that said Plan is in compliance with the performance standards and design criteria set forth in this Ordinance, prior to granting approval for the commencement of any land disturbing activity.
 - 1. The City Council may, at its discretion, refer copies of such Plans to the Director of Public Works or other agencies and officials, including outside consultants and experts, for review and comment prior to acting to approve or disapprove such Plans.
- E. Land-disturbing activities and construction activities undertaken for projects which are not otherwise subject to City review and approval, and for which no building permit is otherwise required, shall not be commenced until a Development Permit has been issued by the Code Enforcement Officer.
 - 1. The Code Enforcement Officer may, at his discretion, refer copies of such Plans to the Director of Public Works or other agencies and officials, including outside consultants and experts, for review and comment prior to the issuance of said Development Permit.
 - 2. The Code Enforcement Officer shall determine that said Plan is in compliance with the performance standards and design criteria set forth in this Ordinance, prior to the issuance of said Development Permit.

3.24.100 Exemptions

The following activities are exempt from the Stormwater Management and Erosion Control Plan requirement:

- A. Agricultural activities, including household gardening and household landscape maintenance on existing developed lots;
- B. Any maintenance, alteration, use or improvements to an existing structure not changing the quality, rate, volume or location of surface water discharge or the area of impervious surface;
- C. Resurfacing or repair of an existing paved surface which does not decrease the permeability of the paved surface, nor expand the area of pavement;
- D. Construction of minor accessory structures not requiring excavation or grading and are not in a concentrated flow path;
- E. Projects which are emergency in nature that are necessary to protect life or property such as bridge, culvert, or pipe repairs and electrical service, gas line, or public utility restoration. The City Department of Public Works shall be notified within 48 hours of the initiation of such emergency activity. The Director of Public Works shall determine and approve of the emergency nature of such a project.

3.24.110 Waivers

- A. A waiver of the Stormwater Management and Erosion Control Plan requirement may be obtained by submitting an application. The application for waiver shall contain:
1. The name, address and telephone number of the developer and owner;
 2. A description and drawing of the proposed development;
 3. The location of the development;
 4. The reason for, and/or justification of the waiver;
 5. Any other information requested by the City that is reasonable and necessary to evaluate the proposed development and potential runoff impacts.
- B. The City may grant a waiver if it determines that the development is not likely to:
1. Increase or decrease the rate or volume of surface water runoff;
 2. Have any adverse impact on a wetland, water course or waterbody;
 3. Contribute to the degradation of water quality;
 4. Adversely impact neighboring properties.
- C. The following types of development shall not be eligible to receive a full waiver but the Code Enforcement Officer may waive certain requirements of the basic Stormwater Pollution Prevention Plan:
1. Land clearing or earth moving and land grading projects involving;
 - a. an area of 5,000 sq. ft. or greater,
 - b. site preparation, construction activity, or other land disturbing activity 1,000 sq. ft. or greater within 100 feet of a wetland, an open watercourse, or Canandaigua Lake,
 - c. site preparation on slopes which exceed 1 1/2 feet of vertical rise to 10 feet of horizontal distance (or site preparation in the areas of severe erosion potential where such areas have been mapped),
 - d. site preparation within the 100 year flood plain of any water course delineated on the U.S. Department of Housing and Urban Development (HUD) Flood Hazard Maps,
 - e. excavating or filling which exceeds a total of 100 yards of material within any parcel or contiguous parcel.
 2. The installation of impervious surfaces 2,000 square feet or greater in area;
 3. Any new paving within 2 feet of a property line.

3.24.120 Variances

The Zoning Board of Appeals may grant a written variance from any requirement of these regulations in those cases wherein the Planning Commission or the Code Enforcement Officer have the authority under Section 3.24.090, if there are exceptional circumstances applicable to the site such that strict adherence to the provisions of these regulations will result in unnecessary hardship and not fulfill the intent of these regulations. A written request for variance shall be provided to the Zoning Board of Appeals and shall state the specific variances sought and the reasons for their granting. The Zoning Board of Appeals shall not grant a variance unless and until sufficient specific reasons justifying the variance are provided by the applicant.

3.24.130 City-sponsored construction activity

All construction activities and/or other land-disturbing activities undertaken by or on behalf of the City of Canandaigua shall comply with the performance standards and design criteria set forth in this ordinance, but shall not require the issuance of a development permit. Such projects which are to be undertaken by a private contractor on behalf of the City of Canandaigua shall include a Stormwater Management and Erosion Control Plan as part of the project design documents.

3.24.140 Application Procedures.

Stormwater Management and Erosion Control Plan application forms and supporting information shall be submitted to the City agency having authority to approve such Plan under Section 3.24.090 of this Ordinance, according to the following timetables and procedures:

- A. Planning Commission:
 - 1. Plans shall be submitted to the Director of Development and Planning at least two weeks prior to the date of any regularly scheduled Planning Commission meeting at which the Plan is to be considered.
 - 2. The Planning Commission shall determine whether the Plan is complete or whether any additional information or data is required, within two weeks of the date of its regularly scheduled meeting following the submittal of the application.
 - 3. The Planning Commission shall act to approve or disapprove Stormwater and Erosion Control Plans within the time frames set forth for the other approvals under its jurisdiction to which the development project is subject, or within sixty (60) days of the date upon which the Plan is determined to be complete.
- B. City Council:
 - 1. Stormwater and Erosion Control Plans submitted for a Planned Unit Development project shall be submitted to the City Manager, who shall coordinate staff review, and schedule review by City Council or a committee thereof according to the timetables set forth in the PUD Ordinance.
 - 2. Stormwater and Erosion Control Plans for a City-sponsored construction activity which is being undertaken by a private contractor on behalf of the City shall be submitted to the Director of Public Works, who will conduct a staff review and transmit the Plan, if deemed complete, to the City Manager, who will schedule a review by the City Council or a committee thereof.
- C. Code Enforcement Officer :
 - 1. Stormwater Management and Erosion Control Plans submitted pursuant to the issuance of a Building Permit or a Development Permit for a land-disturbing activity other than a City-sponsored construction activity shall be submitted to the Code Enforcement Officer, who shall determine whether the Plan is complete or whether any additional data or information is required within two (2) weeks of the date of submittal.
 - 2. The Code Enforcement Officer shall issue any Development Permit within two (2) working days of his own determination that the Plan meets the performance standards and design criteria of this Ordinance or of the approval of the Plan by the City Council when the City Council has such authority under Section 3.24.090(D).

3.24.150 Contents of the Stormwater Pollution Prevention Plan (SWPPP)

- A. SWPPPs are broken down into two levels (basic and full) based on the site and watershed conditions. Conditions necessitating a full SWPPP can be seen in section 3.24.150 B. All SWPPPs shall provide the following background information on erosion and sediment controls:
 - 1. Background information about the scope of the project, including location, type and size of project.
 - 2. Site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map should show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); wetlands and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and location(s) of the stormwater discharges(s); Site map will be at a scale no smaller than 1"=50'.
 - 3. Description of the soil(s) present at the site;
 - 4. Construction phasing plan describing the intended sequence of construction activities, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance. Consistent with the New York Standards and Specifications for Erosion and Sediment Control (Erosion Control Manual), not more than five (5) acres shall be disturbed at any one time unless pursuant to an approved SWPPP.

5. Description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in stormwater runoff;
6. Description of construction and waste materials expected to be stored on-site with updates as appropriate, and a description of controls to reduce pollutants from these materials including storage practices to minimize exposure of the materials to stormwater, and spill -prevention and response;
7. Temporary and permanent structural and vegetative measures to be used for soil stabilization, runoff control and sediment control for each stage of the project from initial land clearing and grubbing to project close-out;
8. A site map/construction drawing(s) specifying the location(s), size(s) and length(s) of each erosion and sediment control practice;
9. Dimensions, material specifications and installation details for all erosion and sediment control practices, including the siting and sizing of any temporary sediment basins;
10. Temporary practices that will be converted to permanent control measures;
11. Implementation schedule for staging temporary erosion and sediment control practices, including the timing of initial placement and duration that each practice should remain in place;
12. Maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practice;
13. Name(s) of the receiving water(s);
14. Delineation of SWPPP implementation responsibilities for each part of the site;
15. Description of structural practices designed to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable; and
16. Any existing data that describes the stormwater runoff at the site.

B Full SWPPP conditions:

Land development activities as defined in Section 1 of this Article and meeting Condition “A”, “B” or “C” below shall complete a full SWPPP that also includes water quantity and water quality controls (post-construction stormwater runoff controls) as set forth in 3.24.150 C below as applicable :

Condition A - Stormwater runoff from land development activities discharging a pollutant of concern to either an impaired water identified on the Department’s 303(d) list of impaired waters or a Total Maximum Daily Load (TMDL) designated watershed for which pollutants in stormwater have been identified as a source of the impairment. There are no 303(d) or TMDL waterbodies within the City of Canandaigua as of the adoption of this law, but this information may change in the future.

Condition B - Stormwater runoff from land development activities disturbing two (2) or more acres.

Condition C - Stormwater runoff from land development activity disturbing between one (5,000 sq ft) and two (2) acres of land during the course of the project, exclusive of the construction of single family residences and construction activities at agricultural properties.

C SWPPP Requirements for Condition A, B and C:

1. All information in Section 3.24.150 A . of this ordinance;

2. Description of each post-construction stormwater management practice;
3. Site map/construction drawing(s) showing the specific location(s) and size(s) of each post-construction stormwater management practice;
4. Hydrologic and hydraulic analysis for all structural components of the stormwater management system for the applicable design storms
5. Comparison of post-development stormwater runoff conditions with pre-development conditions
6. Demonstrate that the overall stormwater management practice meets the requirements of Chapter 10 of the New York State Stormwater Management Design Manual: Enhanced Phosphorus Removal Supplement.
7. Dimensions, material specifications and installation details for each post-construction stormwater management practice;
8. Maintenance schedule to ensure continuous and effective operation of each post-construction stormwater management practice.
9. Maintenance easements to ensure access to all stormwater management practices at the site for the purpose of inspection and repair. Easements shall be recorded on the plan and shall remain in effect with transfer of title to the property.
10. Inspection and maintenance agreement binding on all subsequent landowners served by the on-site stormwater management measures in accordance with 3.24.200 of this ordinance.

D Plan Certification

Land development activities that meet conditions A, B or C of Section 3.24.150 B shall have the SWPPP prepared by a landscape architect, certified professional or professional engineer and must be signed by the professional preparing the plan, who shall certify that the design of all stormwater management practices meet the requirements in this ordinance.

E Other Environmental Permits

The applicant shall assure that all other applicable environmental permits have been or will be acquired for the land development activity prior to approval of the final stormwater design plan.

F Contractor Certification

1. Each contractor and subcontractor identified in the SWPPP who will be involved in soil disturbance and/or stormwater management practice installation shall sign and date a copy of the following certification statement before undertaking any land development activity: "I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Stormwater Pollution Prevention Plan. I also understand that it is unlawful for any person to cause or contribute to a violation of water quality standards."
2. The certification must include the name and title of the person providing the signature, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.
3. The certification statement(s) shall become part of the SWPPP for the land development activity.

G A copy of the SWPPP shall be retained at the site of the land development activity during construction from the date of initiation of construction activities to the date of final stabilization.

3.24.160 Plan Review and Approval Process.

- A. The SWPPP shall be reviewed by the following process:
 - 1. During the SEQR process, preceding or coterminous with the preliminary review phase, information to the standards and design criteria as set forth in Sections 3.24.170 and 3.24.180 of this Ordinance will be set forth during the submission of the overall plan.
 - 2. The City will review the information as submitted and, because it is preliminary action and not final, City action shall be given as conceptual approval, with modification, or disapproval.
 - 3. If preliminary approval, or approval with modification is given, the next step can be submission of a final application wherein requested modifications shall be satisfied.
 - 4. Preliminary approval may be waived by the City if the project is small in scope and all required information is provided and deemed adequate.
- B. The SWPPP shall be consistent with the purposes and objectives of this Ordinance.
- C. No SWPPP will be approved without certification by the owner or developer, that all work will be accomplished pursuant to the plan, and of the right of the City to conduct on-site inspections before, during and at the conclusion of construction activities.
- D. The City may attach to its approval of any SWPPP any conditions which it deems necessary to assure compliance with the terms of this Ordinance, to prevent the creation of a nuisance to public health and safety or a dangerous condition, or to avoid unwarranted sediment accumulation or water pollution.
- E. Approved plans shall remain valid for one year from the date of approval. This time period may be extended by the City at its discretion.
- F. Major modifications of the terms and conditions of approved Plans shall follow the same application, review, and approval procedures set forth in this section for the original approval.

3.24.170 SWPPP Inspections

A. Erosion and Sediment Control Inspections

The City of Canandaigua Code Enforcement Officer may require such inspections as necessary to determine compliance with this ordinance and may either approve that portion of the work completed or notify the applicant wherein the work fails to comply with the requirements of this law and the stormwater pollution prevention plan (SWPPP) as approved. To obtain inspections, the applicant shall notify the City of Canandaigua enforcement official at least 48 hours before any of the following as required by the Stormwater Management Officer:

- 1. An initial inspection prior to final approval of the Plan.
- 2. Installation of sediment and erosion control measures
- 3. Start of construction
- 4. Completion of site clearing
- 5. Completion of rough grading
- 6. Inspections of an underground drainage or stormwater conveyance prior to backfilling
- 7. Completion of final grading
- 8. Close of the construction season
- 9. Completion of final landscaping
- 10. Successful establishment of landscaping in public areas.

11. A final inspection of all sediment and stormwater management structures and facilities when work on these facilities has been completed.

If any violations are found, the applicant and developer shall be notified either in writing or verbally of the nature of the violation and the required corrective actions. No further work shall be conducted except for site stabilization until any violations are corrected and all work previously completed has received approval by the Stormwater Management Officer.

B. Stormwater Management Practice Inspections

The City of Canandaigua Stormwater Management Officer, is responsible for conducting inspections of stormwater management practices (SMPs). All applicants are required to submit “as built” plans for any stormwater management practices located on-site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be certified by a professional engineer.

C. Inspection of Stormwater Facilities After Project Completion

Inspection programs shall be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of state or federal water or sediment quality standards or the SPDES stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other stormwater management practices.

- D. In addition to the required inspections, designated inspectors may inspect sites as frequently as necessary to assure compliance with the provisions of this ordinance and any conditions attached to Plan approval.
- E. The inspections specified by subsections 3.24.170(A-D) may be performed by any of the following, at the City's discretion on a case-by-case basis:
 1. Designated City Department of Public Works personnel.
 2. Designated City Code Enforcement Department personnel.
 3. Engineering firms or other outside consultants under contract to the City of Canandaigua to perform such inspections.
 4. Engineering firms or other outside consultants under contract to a contractor employed by the City of Canandaigua for the City-sponsored construction activity.
 5. Engineering firms or other outside consultants employed by a developer.
- F. Engineering firms performing the inspections required by subsection 3.24.160(D) shall certify to the City by the submission of reproducible (mylar) "as built" plans that construction of stormwater management facilities and structures conforms to the approved Plan.

G. Submission of Reports

The City of Canandaigua Stormwater Management Officer may require monitoring and reporting from entities subject to this law as are necessary to determine compliance with this law.

H. Right-of-Entry for Inspection

When any new stormwater management facility is installed on private property or when any new connection is made between private property and the public storm water system, the landowner shall grant to the City of Canandaigua the right to enter the property at reasonable times and in a reasonable manner for the purpose of inspection as specified in paragraph 1.3.

3.24.180 STANDARDS AND CRITERIA

All land development activities shall be subject to the following performance and design criteria:

A. Technical Standards

For the purpose of this local law, the following documents shall serve as the official standards and specifications for stormwater management. Stormwater management practices that are designed and constructed in accordance with these technical documents shall be presumed to meet the standards imposed by this law:

1. The New York State Stormwater Management Design Manual (New York State Department of Environmental Conservation, most current version or its successor, hereafter referred to as the Design Manual) including Chapter 10 Enhanced Phosphorus Removal Supplement.
2. New York Standards and Specifications for Erosion and Sediment Control, (Empire State Chapter of the Soil and Water Conservation Society, 2004, most current version or its successor, hereafter referred to as the Erosion Control Manual).

B Equivalence to Technical Standards

Where stormwater management practices are not in accordance with technical standards, the applicant or developer must demonstrate equivalence to the technical standards set forth in Article 2, Section 3.1 and the SWPPP shall be prepared by a licensed professional.

C Water Quality Standards

Any land development activity shall not cause an increase in turbidity that will result in substantial visible contrast to natural conditions in surface waters of the state of New York.

3.24.190 Off-Site Drainage

- A. The City may allow stormwater runoff into existing off-site facilities upon request by the owner or developer to use said facilities, and all related information shall be made part of the Stormwater Management and Erosion Plan.
- B. The City may allow stormwater runoff, into existing off-site facilities, that is otherwise of unacceptable quality or which would be discharged in volumes or rates in excess of those otherwise allowed by this Ordinance, provided that all of the following conditions are met;
 1. It is not practical to completely manage runoff on the site in a manner that meets the Performance Standards and Design Criteria.
 2. There are off-site drainage facilities that are designed constructed and maintained in accordance with the requirements of this Ordinance.
 3. The adverse environmental impacts on the site will be minimized by the utilization of off-site drainage facilities.

3.24.200 Maintenance

A Maintenance and Inspection During Construction

The applicant or developer of the land development activity or their representative shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the applicant or developer to achieve compliance with the conditions of this local law. Sediment shall be removed from sediment traps or sediment ponds whenever their design capacity has been reduced by thirty three (33) percent.

The applicant or developer or their representative shall be on site at all times when construction or grading activity takes place and shall inspect and document the effectiveness of all erosion and sediment control practices

For land development activities as defined in Section 1 of this Article and meeting Condition A, B or C in Section 2.2.2, the applicant shall have a qualified professional conduct site inspections and document the effectiveness of all erosion and sediment control practices every 7 days and within 24 hours of any storm event producing 0.5 inches of precipitation or more. Inspection reports shall be maintained in a site log book.

B Maintenance Easement(s)

Prior to the issuance of any approval that has a stormwater management facility as one of the requirements, the applicant or developer must execute a maintenance easement agreement that shall be binding on all subsequent landowners served by the stormwater management facility. The easement shall provide for access to the facility at reasonable times for periodic inspection by the City of Canandaigua to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this local law. The easement shall be recorded by the grantor in the office of the County Clerk after approval by the counsel for the City of Canandaigua.

C Maintenance after Construction

The owner or operator of permanent stormwater management practices installed in accordance with this law shall ensure they are operated and maintained to achieve the goals of this law. Proper operation and maintenance also includes as a minimum, the following:

1. A preventive/corrective maintenance program for all critical facilities and systems of treatment and control (or related appurtenances) which are installed or used by the owner or operator to achieve the goals of this law.
2. Written procedures for operation and maintenance and training new maintenance personnel.
3. Discharges from the SMPs shall not exceed design criteria or cause or contribute to water quality standard violations in accordance with Article 2, section 3.3.

D Maintenance Agreements

The City of Canandaigua shall approve a formal maintenance agreement for stormwater management facilities binding on all subsequent landowners and recorded in the office of the County Clerk as a deed restriction on the property prior to final plan approval. The maintenance agreement shall be consistent with the terms and conditions of Schedule B of this local law entitled Sample Stormwater Control Facility Maintenance Agreement. The City of Canandaigua, in lieu of a maintenance agreement, at its sole discretion may accept dedication of any existing or future stormwater management facility, provided such facility meets all the requirements of this local law and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

3.24.210 Performance Guarantee

A Construction Completion Guarantee

In order to ensure the full and faithful completion of all land development activities related to compliance with all conditions set forth by the City of Canandaigua in its approval of the Stormwater Pollution Prevention Plan, the City of Canandaigua may require the applicant or developer to provide, prior to construction, a performance bond, cash escrow, or irrevocable letter of credit from an appropriate financial or surety institution which guarantees satisfactory completion of the project and names the City of Canandaigua as the beneficiary. The security shall be in an amount to be determined by the City of Canandaigua based on submission of final design plans, with reference to actual construction and landscaping costs. The performance guarantee shall remain in force until the surety is released from liability by the City of

Canandaigua, provided that such period shall not be less than one year from the date of final acceptance or such other certification that the facility (ies) have been constructed in accordance with the approved plans and specifications and that a one year inspection has been conducted and the facilities have been found to be acceptable to the City of Canandaigua. Per annum interest on cash escrow deposits shall be reinvested in the account until the surety is released from liability.

B Maintenance Guarantee

Where stormwater management and erosion and sediment control facilities are to be operated and maintained by the developer or by a corporation that owns or manages a commercial or industrial facility, the developer, prior to construction, may be required to provide the City of Canandaigua with an irrevocable letter of credit renewed annually from an approved financial institution or surety to ensure proper operation and maintenance of all stormwater management and erosion control facilities both during and after construction, and until the facilities are removed from operation. If the developer or landowner fails to properly operate and maintain stormwater management and erosion and sediment control facilities, the City of Canandaigua may draw upon the account to cover the costs of proper operation and maintenance, including engineering and inspection costs.

C Recordkeeping

The City of Canandaigua may require entities subject to this law to maintain records demonstrating compliance with this law.

3.24.220 Violations and Enforcement

- A. Any development activity that is commenced without prior approval of a SWPPP shall be deemed a public nuisance and may be restrained by injunction or otherwise abated in a manner provided by law. Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, the City may take necessary corrective action, the actual cost of which, plus 50% for inspection and other additional costs in connection therewith, shall become a lien upon the property until paid.
- B. Plan approval and/or a Development Permit or Building Permit issued may be suspended or revoked by the City after written notice is given to the owner or developer for any of the following reasons:
 - 1. Violation(s) of the conditions of the SWPPP.
 - 2. Construction not in accordance with approved plans.
 - 3. Charges in any circumstances which were the basis for the granting of a waiver or variance.
 - 4. Noncompliance with a correction notice in relation to the construction of control practices or management facilities.
- C. The City may withhold a Certificate of Occupancy on the basis of failure to meet any substantial component on this ordinance or submit "as built" plans, when required, at completion of the project.
- D. If there is any damage due to a violation of this Ordinance or if any soil, liquid or other material is caused to be deposited upon or to roll, flow or wash upon any public property, private property, watercourse or right-of-way in violation of this Ordinance, the person, firm, partnership, corporation, or other party responsible shall be notified and shall cause the same to be removed from such property or way within thirty-six (36) hours of notice. In the event of an immediate danger to the public health or safety, notice shall be given by the most expeditious means and the violation shall be remedied immediately. In the event it is not so remedied, the City shall cause such remedy as necessary and the cost of such by the City shall be paid to the City by the party who failed to so remedy and shall be a debt owed to the City above and beyond the approved performance guarantee.
- E. Any person, firm, partnership, corporation, or other party who violates any provision of this Ordinance shall be guilty of a misdemeanor and subject to a fine of not less than three hundred fifty dollars (\$350) nor more than

one thousand dollars (\$1,000) or imprisonment not exceeding 15 days for the first offense. Any subsequent violation of the provision of this Ordinance shall be a misdemeanor and upon conviction, such person shall be subject to a fine of not less than seven hundred and fifty dollars (\$750) nor more than one thousand dollars (\$1,000) or imprisonment not exceeding six (6) months, or both such fine and imprisonment. The imposition of any such penalty for the violation of this Ordinance shall not excuse such violation nor permit the continuance thereof. The application of the above penalty or penalties for a violation of the provision of this Ordinance shall not be held to prevent the removal of conditions prohibited by this Ordinance by such legal means as may be proper.

- F. The continuation of an offense against the provisions of this Ordinance shall constitute, for each week the offense is continued, a separate and distinct offense hereunder.
- G. The Code Enforcement Officer shall have the authority to issue appearance tickets when the provisions of this code are deemed to be in violation.

3.24.230 Fees for Services

The City of Canandaigua may require any person undertaking land development activities regulated by this law to pay reasonable costs at prevailing rates for review of SWPPPs, inspections, or SMP maintenance performed by the City of Canandaigua or performed by a third party for the City of Canandaigua.

3.24.240 Amendments

The City Council may from time to time on its own motion, or on petition, or on recommendation of the Planning Commission, and in accordance with the laws of the State of New York, amend, supplement, or repeal the regulations or provisions of this Ordinance.

3.24.1000 HISTORICAL NOTE

The original version of this Chapter was adopted by Ordinance #91-27 on December 12, 1991.

Appendix H – Summary of Land Use Regulations in the Canandaigua Lake Watershed

(Developed by Ontario County Planning Department.)

Municipality	% of Watershed	Zoning	Site Plan Review	Subdivision Review	CEO Full or Part Time	Town Engineer	Other Support	Site Plan for Single Family Residential?	Inspection of on Site Septic?	Threshold for Subdivision Review?	Required Approval for Site Grading?
City of Canandaigua	1.4	YES	YES	YES							
Town of Bristol	0.3	YES	YES	YES	FULL			NO		Any alteration of lot lines.	Prohibition on stripping and excavating topsoil for use off site except in connection with building construction Steep Slopes Local Law also regulates grading and excavation.
Town of Canandaigua	16.0	YES	YES	YES	FULL	YES	Zoning Officer + clerical.	Anything >1,000sf in the RLD and SUP's in other residential zones.	YES	2 or more parcels	
Town of Gorham	17.3	YES	YES	YES	FULL				YES		YES. Areas >15 000sf Chapter 35
Town of Hopewell	1.8	YES	YES	YES	FULL						
Town of Italy	9.5	NO	NO	NO					YES		
Town of Middlesex	18.2	YES	YES	NO				No. However, two-family, multi-family, and townhouses do require site plan.		N/A	Covered under separate SW & EC ordinance.
Town of Naples	19.2	YES	YES	YES	FULL	Clark Patterson		YES in areas of steep slopes and floodplains. Otherwise, no.		All divisions of land excepting those resulting in lots of > 20 acres.	In steep slope areas (SUP) and for "site development activities." (undefined) in non SFR zones.

Town of Potter	3.3	YES	YES	YES				No. However multifamily does and steep slope development requires a special use permit pursuant to Section 5.80.		Everything except resulting lots of > 20 acres.	In steep slope areas (SUP).
Town of South Bristol	9.9	YES	YES	YES				No. However multi family and additional SFR's on the same lot are subject to site plan.		More than three lots or division of land less than 5 acres.	
Village of Naples	0.8	YES	YES	NO							YES
Village of Rushville	0.4	YES	YES	YES				NO		N/A	N/A
Town of Cohocton	0.8	-	-	-	-	-	-	-	-	-	-
Town of Prattsburg	1.1	-	-	-	-	-	-	-	-	-	-
Town of Springwater	0.2	-	-	-	-	-	-	-	-	-	-

	SITE PLAN - ZONING						SUBDIVISION					
Municipality	Steep Slope Protection	Stream Protection	Wetland Protection	Stormwater & Erosion Control	Flood Hazard	Waiver Authority	Steep Slope Protection	Stream Protection	Wetland Protection	Stormwater & Erosion Control	Flood Hazard	Waiver Authority
City of Canandaigua												
Town of Bristol	Separate Local Law applying to slopes between 15-50%. Prohibition on development for areas > 50%.	No structure within 25' of a stream carrying water 6 months out of the year (Article 6, Section II).	Identification of State and County permits required (Section V, W). No additional standards.	Submission requirement. No reference to SPDES. However, Steep Slopes Local Law does reference SPDES requirements.	General reference to adequacy of structures in areas susceptible to flooding (Section VII H). No additional standards.	Broad authority, no specific restrictions, findings required (Section XII).	Separate Local Law applying to slopes between 15-50%. Prohibition on development for areas > 50%.	Reference to 25' buffer in zoning.	General statement about preservation of natural features, no specific standards or reference to State or Federal regs.	Submission requirement. No reference to SPDES. However, Steep Slopes Local Law does reference SPDES requirements.	Statement to strongly discourage dev. on land subject to flooding (Section 3, Purpose).	Broad authority, no specific restrictions, findings required (Section 15).

Town of Canandaigua	10% or Greater Limited Development Overlay District Permit Recommendation by Planning Board with final approval by CEO.	For Horse Farms a 35' grass buffer is required. Some protection in the LDO District.	Limited Development Overlay District Permit Recommendation by Planning Board with final approval by CEO .	Chapter 85: Soil Erosion and Sedimentation Control Law.	Limited Development Overlay District. Permit Recommendation by Planning Board with final approval by CEO (+ Separate Chapter 54).	Broad authority, no specific restrictions (Article VII 105-700, E).	10% or Greater Limited Development Overlay District. Permit Recommendation by Planning Board with final approval by CEO.	Alteration of natural surface water allowed at discretion of Planning Board (Article III Section 17 part B).	Chapter 85: Soil Erosion and Sedimentation Control Law.	Limited Development Overlay District Permit Recommendation by Planning Board with final approval by CEO (+ Separate Chapter 54).	Limited Dev. Overlay District Permit Recommendation by Planning Board with final approval by CEO.	Broad authority, no specific restrictions (Article V).
Town of Gorham	Erosion control plan required for >800sf of site disturbance within the Limited Development Overlay (LDO) District. Includes 15% slopes on one acre lots and most of the CLWS (31.19).		Nothing specific.	Chapter 35: Soil & Erosion Control Site Plan. Submission requirements.	Chapter 45: Flood Damage Prevention & Flood Plain Overlay District (31.18). No real limits on development	Broad authority with no specific restrictions (31.77, G).	Erosion control plan required for >800sf of site disturbance within the Limited Development Overlay (LDO) District. Includes 15% slopes on one acre lots and most of the CLWS (31.19).	Alteration of natural surface water allowed at discretion of NYSDEC and Planning Board (Article IV 32.91,E 3).	Reference to NYSDEC Req's (35-8, B).	Chapter 35: Soil & Erosion Control.	Chapter 45: Flood Damage Prev.	Broad authority, no specific restrictions Article V (Article IV 32.91,H).

Town of Hopewell	No	50' buffer from streams carrying water more than 6 months. Article III, 302.1 though alteration of watercourse is permitted with DEC and Planning Board approval (805.2F, 3 & 904.3-4).	Nothing specific. submission requirement to identify other required State and Federal permits.	"grading and drainage plan" required (805.2C).	NO structures allowed on lands subject to periodic overflow (Article III, 302.1 & Article 9).	Preliminary shall include information "as "determined necessary by the Planning Board..." (805.2C).	"desirable natural contours....shall be preserved if possible" (Article V Part F, 4).	50' buffer from streams carrying water more than 6 months (Article III, 302.1 though alteration of watercourse is permitted with DEC approval (904.3-4).	Nothing specific.	General requirement to provide for stormwater management capable of handling a ten yr storm. Erosion control related statements are scattered. Nothing specific No reference to SPDES.	No structures allowed on lands subject to periodic overflow (Article III, 302.1 & Article 9 & Article V Section 1, B & Article VII Section 2).	Board authority with no specific limitations (Article 1 Section 14).
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Town of Italy	-	-	-	-	-	-	-	-	-	-	-	-
Town of Middlesex	General requirement to minimize impact using SW&EC standards (700.10)	Some protections through-out code. No specific section that establishes buffer or additional protections for all uses.	General reference to all applicable local and State regs (702.00).	Separate SW&EC ordinance covering all construction and development (705.00).	Development allowed. Specific standards covering all structures, facilities, and landfills (701.00).	Broad authority to modify review (700.18).	-	-	-	-	-	-
Town of Naples	15%=SUP and prohibition on slopes > 50% (Section 132-30).	100' buffer for structures from streams carrying water > 6 mo/yr (not mapped).	General reference to any required State Permits as part of site plan submission (132-44, U).	It's a submission requirement along with a general reference to any required State Permits as part of site plan submission (132-44, U).	132-23 & 132-40 & Site Plan 132-44 D.	Broad authority to modify review (132-43, B).	Reference to standards in zoning for minor (sketch), but not for major subdivisions.	Realignment allowed at discretion of Planning Board and NYS Law 116-21, E (3). No reference to standards in zoning.	Submission requirement under 116-3. No additional standards.	Submission requirement for both major and minor NYSDEC. Standards are referenced.	Statement to strongly discourage residential development on "land subject to flooding" (116-20, B).	Broad based authority to modify review (116-21, H "Modification of Standards").
Town of Potter	15%=SUP and Prohibition on slopes >50% Section 5.80 Farming activities exempted	NO	NO	NO	Development allowed. Specific standards covering all structures (3.13). Site Plan required.	NO	Submission requirement but no reference to standards in zoning.	Realignment allowed at discretion of Planning Board and NYS Law (4.2, E, 3).	NO	Submission requirement for major and minor subdivisions (6.3, I & 6.4, J & 6.6, E). Reference to SPDES requirements (6.6, E, 4, j and k).	Submission requirement but no reference to standards in zoning (4.2, F).	Broad Based authority to modify review (4.2, H).

Town of South Bristol	NO	50' buffer from streams carrying water more than 6 months (170-63). Regs applicable to all districts.	General statement about maintaining "existing natural features" (170-63).	General submission requirement no reference to SPDES or additional standards (170-94 E, 1, e).	All permitted uses are allowed by special use permit and subject to regulations in Chapter 88 of local law (170-19).	Not specifically 170-94 E "...review of a preliminary site plan shall include, as appropriate, but is not limited to the following."	Not specifically. General statement about preserving "desirable natural contours (Article IV, Section 2 E, 4).	50' buffer from streams carrying water more than 6 months (170-63). Regs applicable to all districts. Article IV, Sect. 2 E, 3 appears to allow altering natural watercourses at discretion of Planning Board.	NO	General statement about conserving topsoil (Article IV, Section 2 E, 1) & preventing soil erosion F3 (Flood Hazard Prevention)	170-19 All permitted uses are allowed by special use permit and subject to regulations in Chapter 88 of local law.	Broad Based authority to modify review (Article IV Section 2, H).
Village of Naples	NO, possibly through the LC (Land Conservation District).	100' buffer (structures) around streams carrying water more than 6 months of the year. Alteration appears to be an option.	NO	Submission requirement (18.1, 18.2). No additional standards.	LC District - Non residential allowed by special use permit by ZBA with limited requirements.	Broad authority with no specific limits (18.2, J).	N/A	N/A	N/A	N/A	N/A	N/A
*Village of Rushville	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

* - The Planning Board does not appear to have the authority to review either site plans or subdivisions. Regardless, no standards exist to guide review.

**Initial Recommendations to the Canandaigua Lake Watershed Council
from the Land Use Regulation Committee:
A Land Use Regulation Strategy for Protecting Water Quality
Throughout the Watershed**

April 28th, 2006

Prepared by Tim Jensen, Ontario County Planning Department

The following is a summary of issues and recommendations raised by an updated inventory of municipal land use regulations for the Canandaigua Lake Watershed. It is the intention of the committee to develop more specific recommendations based on feedback from the council.

The inventory (attached) provides a more complete look at current regulations than what is included in the CLWS Management Plan and it points out where strategies for protecting water quality can be strengthened.

A strategy to provide reliable and long term protection must include not only development standards but also a consistent process for review, decision making and enforcement. To that end, the inventory describes existing standards for areas that have a direct impact on water quality; flood zones, steep slopes, streams, and wetlands. It also looks at key procedural issues such as the authority to waive review requirements, thresholds for subdivision review, and local review of single family residential development. Standards are the measures needed for adequate protection. Strengthened procedures ensure consistent application of those standards.

The inventory also showed a need for an updated inventory of environmental features in the watershed. This could be built from existing datasets such as the recently completed plant community mapping and would serve as a critical reference for subsequent regulations.

Procedural Issues

Waiver Authority – Most municipalities have given their planning board very broad authority to waive review requirements for subdivision and site plan review. Strong consideration should be given to modify this in a way that makes it more difficult to waive requirements related to water quality protection.

Review of Single Family Residential Development – For most of the watershed, single family residential is the primary type of development. In a few municipalities some type of additional review is required in environmentally sensitive areas. In the remainder it is unclear how potential impacts of home construction are being addressed. It would be worthwhile to devise a strategy to require review of new homes to address a broader range of potential water quality impacts. Incorporating protections, such as stream setbacks, into a simple administrative review by the CEO or other official would be preferable.

Existing Standards

Steep Slopes – The inventory shows a wide range of standards addressing steep slopes protection. Most of contain additional standards for development in areas between 15-50% with a prohibition on development in areas over 50%. Some municipalities have

given permit authority to the CEO. Although most have at least basic standards few incorporate them directly into site development review by cross reference.

Recommendations

1. Create a steep slopes inventory (map) for the watershed using the most recent elevation data available.
2. Based on that, draft model standards for protecting steep slopes. They should be designed to be inserted into a variety of regulation schemes both as a part of zoning and as a stand alone local law. Provisions to ensure standards are incorporated into local reviews (site plan, special use permit, subdivision, etc) will also be essential.

Streams – They are usually defined as carrying water more than 6 months out of the year and levels of protection vary significantly. A few municipalities prohibit construction within a specified buffer area ranging from 25-100'. A few municipalities have adopted a timber harvesting law that establishes a 15' buffer for logging operations. Most municipalities allow modification of surface water with NYDEC and planning board approval.

Recommendations

1. An adopted inventory of “streams” and other important drainage features is a key part of any protection strategy. Mapping the location and extent of “streams” will resolve most debate of what qualifies for protection.
2. Standards for protection are needed watershed wide. In addition to a standard distance, buffers should also be drawn to include adjacent features such as wetlands and flood prone areas that are a direct part of the streams ecosystem. Existing datasets including the recently completed plant communities maps should be used.
3. Reasonable limits on altering surface water features are also recommended.
4. To encourage use by the various municipalities standards should be written as a stand alone local law but with an eye towards incorporation into existing local reviews.

Flood Zones – Flood zones for the different municipalities were initially mapped 30+ yrs ago with corrections made sporadically. The level of information shown on the maps also varied. NYS has recently agreed to take on significant responsibility for administering the flood zone programs. NYS DEC will be overseeing statewide updates for the maps. The plan is to have them finished sometime in 2008.

The regulations adopted focused on minimizing damage to structures within the flood prone areas. Very little was done to redirect development or otherwise address impacts to water quality.

Recommendations

1. Support development of updated flood zone maps for the watershed communities. The remapping process will involve input from each municipality being remapped. Recently gathered elevation data will need to be formally certified for accuracy before it can be used to produce updated flood zone maps. Thought should be given to how the Yates and Ontario County portions can be mapped within a similar time frame.
2. Use updated flood zone maps as the basis for development standards that directly address water quality issues within flood prone areas. As with the other areas they should be written to allow for adoption as a stand alone law or insertion into existing review procedures.

Wetlands – The NYSDEC and Federal Government have established comprehensive regulations for protecting wetlands. NYSDEC regulates wetlands >12ac the majority of which are clearly mapped. Federal regulations are mostly unmapped and cover far smaller wetlands that meet delineation guidelines. Some of the municipalities surveyed provide protection of wetlands through subdivision clustering and other means. In general however municipalities seemed content to defer to state and federal regulations.

Recommendations

1. Explore options to map all potential wetlands areas using existing state and federal mapping and other data sets such as updated soils information, and the recently completed plant community mapping.
2. Draft language that would ensure local reviews include verification that state and federal standards for wetlands protection are being met.

Storm Water and Erosion Control – NYSDEC has established standards for development impacting >1acre. A few municipalities have also adopted separate SW&EC ordinances as well. Almost all have some requirement that grading and drainage be addressed through site plan and subdivision. Most do not reference the SPDES permitting process.

Recommendations

1. Develop a model local law that builds on existing state standards and assists with local implementation of the SPDES permitting process. Thresholds for what requires SW&EC measures should be based not only on the amount of land area disturbed. They should also take into account issues such as percent lot coverage and proximity to sensitive environmental features.
2. Standards should be written so they can be inserted into a variety of regulatory schemes for municipalities that may not have zoning, subdivision review or both.

Lakefront Development – We all understand the difficulty with lakefront development. There is a vested interest by landowners and developers to build out each lakefront lot as much as possible. This is regardless of whether or not the lot is substandard or if public services such as sewer and water are available. In addition, experience has shown that lakefront housing gets far more intensive use, albeit seasonally, and as such presents unique challenges when addressing issues of water quality. For example many of the homes have public water and an on site septic that often fails, despite that fact they meets current NYSDOH standards.

The presence of hundreds much larger homes densely developed in such close proximity to the lake begs the question: Should we be doing more to reduce lot coverage and in other ways address impacts to surface runoff for this type of single family residential?

Recommendations

1. In development of standards impacting water quality, give special consideration to lakefront development. Additional standards to address demonstrated impacts are needed.

Appendix I – Summary of Erosion and Sediment Control Laws in the Canandaigua Lake Watershed

(Developed by the Canandaigua Lake Watershed Council.)

ZONING LAW AMENDMENT: STORMWATER CONTROL								
	STANDARDS AND MAINTENANCE							
	Technical Standards	Water Quality/ Quantity Standards	List of Standards or Stormwater Management Practices for Water Quality	Inspection Reports	Maintenance During Construction	Maintenance after Construction	Maintenance easement(s)	Maintenance Agreement
Sample Local Law	YES, "NYS SW Management Design Manual" and "NYS Standards and Specifications for Erosion and Sediment Control."	YES, no increase in turbidity.	YES	YES, applicant or developer or their representative shall inspect and document the effectiveness of all erosion and sediment control practices. Inspection reports shall be completed every 7 days and within 24 hours of any storm event producing 0.5 inches or precipitation or more. Reports shall be delivered to the Stormwater Management Officer.	YES, applicant or developer shall at all times properly operate and maintain all facilities of treatment and control. Sediment removed when design capacity is reduced by fifty (50) percent.	YES, permanent SW management practices shall be operated and maintained to achieve the goals of the law.	YES, for periodic inspection by municipality.	YES, legally recorded document that acts as a property deed restriction, and which provides for long-term maintenance of stormwater management practices.
City of Canandaigua	YES, "NYSDEC Stormwater Management Handbook" and old "NY Guidelines for Urban Erosion and Sediment Control."	YES, quality and quantity of runoff after development not substantially altered from pre-development conditions.	YES, detailed explanations of erosion control practices.	NO	YES, Stormwater Management and Erosion Control shall be a continuous process undertaken as necessary prior to, during, and after site preparation and construction.	YES, see "maintenance during construction."	YES, to permit the City to inspect, and if necessary, to take corrective action should the owner fail to properly maintain the system.	NO

Town of Canandaigua	YES, Old "NY Guidelines for Urban Erosion and Sediment Control."	NO	NO	NO	YES, the control of erosion and sediment shall be a continuous process undertaken as necessary prior to, during, and after site preparation and construction.	YES, see "maintenance during construction."	NO	NO
Town of Middlesex	YES, Old "NY Guidelines for Urban Erosion and Sediment Control" and "Reducing the Impacts of Stormwater Run-off."	YES, quality and quantity of runoff after development not substantially altered from pre-development conditions.	NO	NO	NO	YES, the Town shall determine whether stormwater management facilities are to be maintained by the developer/owner, a homeowner's association, or by the Town.	YES, in order to permit the Town Code Enforcement Officer to inspect and, if necessary, to take corrective action should the owner fail to properly maintain the system.	NO
Town of Gorham	NO	NO	YES, somewhat detailed explanations of erosion control practices.	NO	YES, the control of erosion and sediment shall be a continuous process undertaken as necessary prior to, during, and after site preparation and construction.	YES, erosion or sediment control devices shall be maintained as necessary to provide adequate protection against erosion and sediment and to insure long term performance.	NO	NO

Appendix J – Other Resources

Ontario County Soil and Water Conservation District

480 North Main Street
Canandaigua, NY 14424
Phone: (585) 396-1450
Fax: (585) 396-0137
Thomas DeRue, Senior Manager
Email: ontswcd1@rochester.rr.com

Soil and Water Conservation Districts (SWCD) are created through an act of the County Legislature or Board of Supervisors. Their role is mainly in making rules and guidelines for the monitoring and assessment of public and private water and soil quality, along with mitigation plans. SWCD often collaborate with local and state agencies. They play an important role in watershed, recreation and conservation planning, management, stewardship and education and outreach activities.

SWCD can plan and implement programs to protect watersheds. They receive funding from grants and other sources for the use of their programs. Programs can range from outreach and education to mitigation activities. These districts also can advise local governments in regards to decisions affecting water resources.

Ontario County Planning Department

20 Ontario Street
Canandaigua, NY 14424
Phone: (585) 396-4455
Fax: (585) 393-2960
Website: <http://www.co.ontario.ny.us/planning/>
Kristen Hughes, Director
Email: Kristen.hughes@co.ontario.ny.us

Ontario County Planning attempts to provide information to their clients, be involved in issue identification and problem solving of local importance, and advocate planning and research as tools in strategy formation. The Planning Department coordinates local agencies that deal with the areas of planning, grants, environmental issues, economic development, transportation, agriculture, and watershed planning.

The department has experience with areas that relate to watershed planning, including hazard mitigation planning, docking and mooring laws, the watershed districts, and connections to the SWCD. Their connections with local agencies and experience in watershed management would be beneficial.

Ontario County Cornell Cooperative Extension

480 North Main Street
Canandaigua, NY 14424
Phone: (585) 394-3977
Fax: (585) 394-0377
Email: Ontario@cornell.edu
Website: <http://counties.cce.cornell.edu/ontario/>
Pat Pavelsky, Executive Director
Phone: (585) 394-3977 Ext. 410
Email: pkp3@cornell.edu

Cornell Cooperative Extension (CCE) of Ontario County is a community-based, not-for-profit education organization. They have connections with Cornell University, which allow them to bring current and research-based information to the residents with the goal of improving their communities. CCE focuses on agriculture, horticulture, the environment, and community development. Their environmental activities include a focus on land use and water quality.

CCE of Ontario County can provide their knowledge and research on land use and water issues. They can also involve citizens and other local agencies. CCE also provides programs, activities, and resources that could relate to watershed management.

Yates County Soil and Water Conservation District

Address: 417 Liberty Street
Penn Yan, NY 14527
Phone: (315) 536-5188
Fax: (315) 536-5136
Email: yceswcd@adelphia.net
James Balyszak, Dist. Mgr.

Soil and Water Conservation Districts (SWCD) are created through an act of the County Legislature or Board of Supervisors. Their role is mainly in making rules and guidelines for the monitoring and assessment of public and private water and soil quality, along with mitigation plans. SWCD often collaborate with local and state agencies. They play an important role in watershed, recreation and conservation planning, management, stewardship and education and outreach activities.

SWCD can plan and implement programs to protect watersheds. They receive funding from grants and other sources for the use of their programs. Programs can range from outreach and education to mitigation activities. These districts also can advise local governments in regards to decisions affecting water resources.

Yates County Planning Department

Yates County Planning Department

417 Liberty Street

Penn Yan, New York 14527

Phone: (315) 536-5153

Email: ycplanning@yatescounty.org

Website: http://www.yatescounty.org/display_page.asp?PID=594

Yates County Planning works in a variety of arenas, such as zoning, environmental planning, economic development, and so on. The department also provides information to the community and is involved in issue identification and problem solving. The Planning Department coordinates local agencies that deal with relevant concerns.

The department has experience with environmental planning, including planning relating to water. Their connections with local agencies would be beneficial.

Yates County Cornell Cooperative Extension

417 Liberty Street

Penn Yan, NY 14527

Phone: (315) 536-5123

Fax: (315) 536-5117

Email: yates@cornell.edu

Website: <http://counties.cce.cornell.edu/yates/>

Peter Landre, Executive Director

Email: ptl2@cornell.edu

The mission of Cornell Cooperative Extension (CCE) is to improve the lives of people in Yates County through partnerships that put experience and research knowledge to work. They use teamwork and collaboration to meet their customer's needs. Their methods include: mutual respect and trust for others, positive communication, a willingness to work with others, and an appreciation of each other. CCE is a community-based, not-for-profit education organization. They have connections with Cornell University, which allow them to bring current and research-based information to the residents with the goal of improving their communities. Their environmental activities include a focus on land use and water quality.

CCE of Yates County can provide their knowledge and research on land use and water issues. They can also involve citizens and other local agencies. CCE also provides programs, activities, and resources that could relate to watershed management.

Canandaigua Lake Watershed Council

205 Saltonstall Street

Canandaigua, NY 14424

Phone: (585) 396-3630

Fax: (585) 396-3630

Website: <http://www.canandaigualake.org/>

Kevin Olvany, Watershed Program Manager

Email: Kevin.Olvany@CanandaiguaNewYork.gov

The Canandaigua Lake Watershed Council consists of one representative from each of the fourteen (14) Canandaigua Lake Watershed municipalities: City of Canandaigua, Town of Bristol, Town of Canandaigua, Town of Gorham, Town of Hopewell, Town of Italy, Town of Middlesex, Town of Naples, Town of Potter, Town of South Bristol, Village of Naples, Village of Newark, Village of Palmyra, and Village of Rushville. The Council is the lead entity in coordinating efforts to protect the watershed.

The Council provides a forum for the communities to voice their individual interests and needs. The Council's goal of "maintaining and enhancing the high water quality of the watershed" is achieved in four ways through "education, research, restoration/protection and, if necessary, regulation." The Council is charged with implementing the Canandaigua Lake Watershed Management Plan. They strive to work with the citizen groups along with county and state agencies to foster collaboration.

Canandaigua Lake Watershed Commission

480 North Main Street

Canandaigua, New York 14424

Phone: (585) 396-9716

George Barden, Watershed Commission Manager

ontswcd6@rochester.rr.com

The Canandaigua Lake Watershed Commission is an organization enabled by NYS Public Health Law (1954). The Commission is made up of five (5) water purveying municipalities. These municipalities distribute by selling Canandaigua Lake water for public consumption. The five "purveyors" are: the City of Canandaigua, the Villages of Newark, Palmyra, and Rushville, and the Town of Gorham. Each of these municipalities has a pipe that extends directly into the lake for removal and transport of water. The five purveyors sell water to their own residents and also sell water to other municipalities.

Genesee/Finger Lakes Regional Planning Council (G/FLRPC)

50 West Main Street, Suite 8107

Rochester, New York 14614

Phone: (585) 454-0190

Fax: (585) 454-0191

Website: <http://www.gflrpc.org/>

Dave Zorn, Executive Director

Phone: (585) 454-0190 Ext. 14

Email: dave.zorn@gflrpc.org

The Genesee/Finger Lakes Regional Planning Council (G/FLRPC) identifies, defines, and informs its nine member counties of issues and opportunities relating to the physical, economic, and social health of the region. G/FLRPC provides forums for discussion, debate, and consensus building, and develops and implements a focused action plan with clearly defined outcomes, which include programs, personnel, and funding. The primary functions of G/FLRPC include local, regional, and water resources planning; economic development; strategic planning; program and grant development; surveys; and a data, technology, and resource center.

G/FLRPC has extensive interest in the area of watershed and water resources planning, including hazard mitigation planning, watershed management planning, and other projects related to the various water resources in the region. The agency also has ties with various agencies in the counties and municipalities that it serves.