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Protecting Water Resources through Local Controls and Practices:

An Assessment Manual for New York Municipalities

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Prepared by:

Genesee/Finger Lakes Regional Planning Council 50 West Main Street, Suite 8107 Rochester, NY 14614

Website: www.gflrpc.org Email: gflrpc@gflrpc.org Telephone: 585-454-0190

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Introduction

Who Should Read this Manual?

This manual is designed to assist local government officials, elected leaders, municipal staff, and boards, such as Planning Boards and Zoning Boards of Appeal. It will help them in recognizing the roles that municipalities can play in the protection of water resources, in assessing local capacity and effectiveness of controlling nonpoint source pollution, and will guide them in implementing new or revised local laws or practices to achieve that protection.

About this Manual.

Local governments can refer to this manual when assessing their capacity to protect water quality and water related resources. It offers a methodology for identifying local controls and other practices that can be used to protect water quality, a way to assess their effectiveness, and suggestions for setting priorities

for filling gaps deemed by local governments to be most significant. The manual is based largely on the experiences and efforts of other local governments in New York State who have gone through the assessment process.

Section 1

Water and Land: A Background

Abundant clean water is one of New York State's greatest resources. Every citizen of New York benefits from clean water and every citizen has a responsibility to protect this resource. Protecting water quality

involves many types of actions from many organizations and individuals. Local governments play an especially key role in watershed protection, having day-to-day contact with residents, businesses, and visitors, and a clear view of activities on the ground. Local governments recognize that efforts such as public education, municipal road de-icing techniques, stormwater management improvements, sediment and erosion control regu-

lations, and enforcement of existing local development controls all contribute to the protection of water resources.

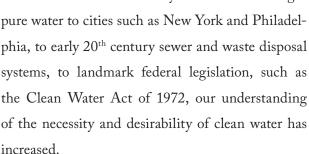
A. Water Pollution

Water is one of the most important of all natural resources. Biological processes necessary for all living organisms require water. Although we have recognized the importance of water to both the environment and society, we have often disregarded

its value by polluting rivers, lakes, oceans, and groundwater. By our actions, we have altered natural processes to the point where many organisms can no longer exist, once-reliable sources of drinking water

can no longer be used, and our ability to use water for recreational purposes has been impaired. To combat pollution, we must understand the nature of the problem and select and implement practices that reduce our impact upon this natural resource.

Thankfully, our understanding of the problem has grown over the past several hundred years. From the construction of the first public water systems in the early 1800s that brought



As direct (or "point source") pollution from sewage and industry has decreased, thanks in large part to State and Federal environmental regulations, attention has turned to other sources of water pollu-



Waterfalls, Clark's Gully. Town of Italy, Yates County.

tion. Rainwater and melting snow flowing off of roofs, parking lots, streets, lawn, agricultural land, and construction-sites remains a primary source of pollution. This type of diffuse pollution is known as "nonpoint source" pollution. While regulations such as the State Pollution Discharge Elimination System (SPDES) Phase II are meant to address these types of pollution, there is much that municipalities can do to protect water resources. Much of the pollution described above comes from buildings, streets, and development sites, all of which are activities that municipalities, especially in New York State, have a great deal of control over.

B. Causes of Water Pollution: Point and Nonpoint Sources

Water resource pollution can be defined as the introduction of substances into a body of water that adversely affects its intended use. In general, two types of water pollution exist, defined according to the pathway of contamination.

- *Point sources* of pollution occur when harmful substances are introduced directly into a body of water, such as from sewage treatment plants, industrial facilities, or an accidental spill. Point sources are often thought of as "end-of-pipe" sources of pollution.
- *Nonpoint sources* deliver pollutants indirectly through environmental processes, like runoff flowing over surfaces such as pavement, roofs, agricultural land, and construction-sites. Nonpoint sources are often thought of as "diffuse" sources of pollution.

Point sources of pollution can be more easily monitored and regulated using existing technologies because pollutants enter the environment at a specific location. Nonpoint sources are more difficult to evaluate and regulate because pollutants enter the environment over a broad area. With nonpoint source pollution, the underlying sources and systems that contribute to the pollution must be controlled, rather than just the "end of the pipe." The United States Environmental Protection Agency has proclaimed nonpoint source pollution to be the greatest cause of water quality degradation in the United States, thereby highlighting the importance of its abatement.

Water pollution occurs from a variety of activities. Human practices are often responsible for the contamination of water bodies. Rain water flowing over land, for example, picks up a wide array of contaminants ranging from salt used for de-icing roads, to leaked motor oil and gasoline on driveways and parking lots, to agricultural and lawn chemicals, to large amounts of silt from open constructionsites. The streams, ponds, lakes and wetlands that are polluted by runoff can subsequently suffer from salinization (abnormally high levels of dissolved salts), eutrophication (excessive nutrient levels), and siltation (large deposits of silt). Eutrophication results from water that has received high levels of phosphorus and nitrogen, often from animal wastes in agricultural areas or untreated sewage in urban areas. Higher nutrient levels induce the prolific growth of aquatic plants and algae. When these plants die and are consumed by bacteria, oxygen is used, resulting in lower levels of dissolved oxygen in

the water. The depletion of oxygen kills the small aquatic invertebrates consumed by fish.

C. Classifying Pollutants

Regardless of the manner in which they enter the water, pollutants can be classified according to their properties:

- Toxic
- Sediment
- Nutrient
- Bacterial

Toxic pollution includes chemicals that poison and kill organisms in and near streams, rivers, and lakes. When a body of water has a high level of toxic pollution taken up by fish and accumulating in fish tissue, fishing for the purpose of human consumption is banned to protect human health. Even low levels of toxicity can be lethal over

time when the chemicals accumulate in predators that consume large amounts of slightly poisoned organisms. This build up is known as "bio-accumulation." Examples of toxic pollutants include pesticides and herbicides; gasoline, oil, and other automotive products; household cleaning products; paints and solvents; battery acid; industrial waste chemicals; and some substances in car exhaust and solid waste incinerator smoke.

Sediment pollution includes soil, sand, silt, clay, and minerals eroded from the land surface and washed into water. Sediment is typically derived from areas with exposed soils. Without a cover of vegetation,

rainwater flows quickly off the land surface, picking up particles of soil, rather than slowly soaking into the ground. In addition, hard surfaces (also known as impervious surfaces) such as roofs, streets, and parking lots, prevent rainwater from slowly soaking ("infiltrating") into the ground. In many cases, the rain is channeled through gutters and drains to a



 $Example\ of\ runoff from\ impervious\ surface.\ Village\ of\ Waterloo,\ Seneca\ County.$

nearby stream or ditch. Unless appropriate practices are put in place to slow the flow and dissipate the energy, this sudden increase in water quantity and speed of water can erode the banks of a previously healthy and stable watercourse.

Sediment overload causes a number of problems for aquatic organisms. Because fine sediment particulates are suspended in water, the resulting cloudiness decreases the amount of sunlight that can reach aquatic plants that provide food and oxygen for aquatic animals. As sediment settles, it fills the voids between rocks, destroying habitat used by many

invertebrates. Sediment also clogs the gills of fish, crayfish, and other underwater organisms. Sediment can bury fish and insect eggs, and prevent them from hatching. Sediment particles also often pick up other forms of pollution such as toxic substances, nutrients, or bacteria. These pollutants are washed with the sediment into a water bodies.

Nutrient pollution results from an overabundance of elements in water, such as nitrogen and phosphorus. All organisms require nutrients to survive, but high levels can be detrimental by stimulating excessive aquatic plant growth, particularly algae and vascular plants. A water surface that has been clouded by "algal blooms" blocks sunlight from reaching deeper levels of the water column, effectively retarding plant growth in these zones. When large quantities of algae die, bacterial decomposition uses dissolved oxygen, depriving aquatic organisms of oxygen needed for survival. This "feeding" or fertilizing of surface vegetation also makes water related recreation, such as swimming or fishing difficult. Sources of nutrient pollution can include effluent from sewage treatment plants, leakage from improperly maintained on-site wastewater treatment (septic) systems, industrial discharges, and agricultural and home lawn-care fertilizers.

Bacterial pollution occurs when an excess of harmful bacteria is present in a water body. Although there are several species of benign and beneficial bacteria in water, larger concentrations of certain types can be lethal to animals (including humans) that drink or accidentally ingest contaminated water. Sources of bacterial pollution include sewage treatment effluent, leakage from improperly maintained on-site waste-

water treatment systems, animal wastes (including excessive and invasive waterfowl), and discharge from watercraft toilets.

D. The Watershed Approach to Planning

What is a Watershed?

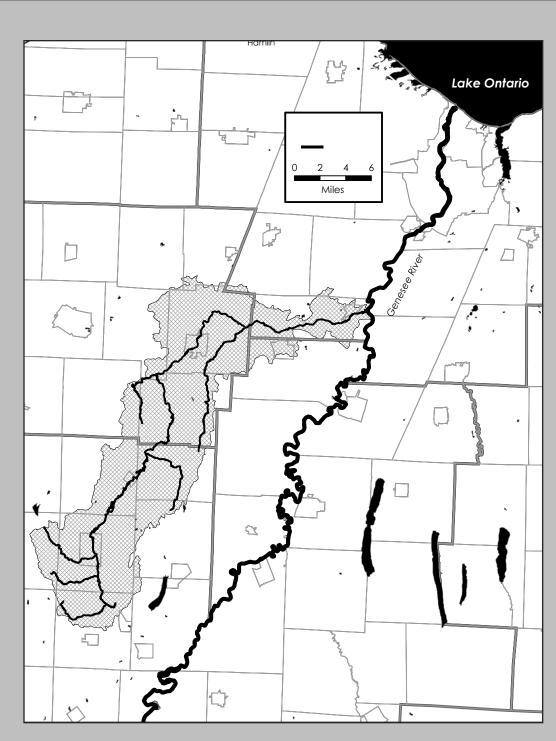
A watershed is an area of land that drains into a body of water.

There is a growing emphasis to plan for and manage surface and ground waters on a watershed basis, rather than the traditional administrative political unit. The use of political boundaries in natural resource management has worked effectively when dealing with remediation of point source pollution, since easily-identified discharge points (i.e. the outfall pipe) usually fall exclusively within an administrative boundary, such as a city, town, or village.

However, combating nonpoint source pollution within the framework of the individual municipality is considerably less efficient due to:

- multiple diffuse origins of the pollution
- multiple points-of-entry of the pollution
- sometimes considerable distances between pollution source and the affected water bodies

Because water does not recognize political boundaries, a watershed-level, inter-municipal effort can be most effective to successfully manage nonpoint source pollution. Local governments' role in regu-



The map above shows an example of a watershed. The Oatka Creek watershed is located in Western New York and Oatka Creek is a major tributary to the Genesee River. The Oatka and other water courses that flow into the Genesee River together make up the much larger Genesee River watershed, which in turn forms a portion of the even larger Lake Ontario watershed.

Even though the length of Oatka Creek itself is only 58 miles long, the watershed covers approximately 215 square miles in four counties: Wyoming, Genesee, Monroe, and Livingston. Within those four counties, the Oatka Creek watershed covers land in 23 separate municipalities. One can easily see how activities in one location in the watershed can affect other areas of the watershed,

and even further downstream in the larger receiving water body, in this case, Lake Ontario. One can also easily see that with 23 individual local governments (all of which regulate many land use and development activities), addressing issues on a watershedwide basis, even in a relatively small watershed such as the Oatka, can be a challenge.

lating activities that affect water resources (land and water use and development patterns), makes them a critical part of this cooperative effort. In New York State, with its tradition of "home rule," municipalities have a great deal of control over development. With this authority, though, comes responsibility. In order to protect the water resources of the State, municipalities need to follow good planning processes and adopt and enforce responsible land use regulations. Local governments can also protect water quality by establishing guidance and oversight that ensures the implementation of best management practices (BMPs) for municipal activities, such as road maintenance and de-icing, and municipal construction activities.

E. Local, State, and Federal Entities Involved in Water Resource Protection

For a more detailed list of agencies and programs, please see Appendix A.

Local Agencies

- 1. Local Government Programs: In New York State, municipalities have significant land use powers that can be used to effectively address a wide variety of environmental issues. The comprehensive plan, zoning, and a host of tools such as site plan review, subdivision regulation, erosion and sediment control ordinances, and special use permits can be used separately or in combination to produce the desired environmental outcomes of a community.
- County Planning Departments/County Planning Boards: Counties also affect land use regula-

tion on a more limited basis through the review of certain municipal zoning and development actions. These reviews, conducted pursuant to Section 239 of New York State General Municipal Law, are often referred to as "239 reviews." County planning departments also assist local governments with land use issues.

- 3. Water Quality Coordinating Committees: Water Quality Coordinating Committees (WQCC) represent municipalities, agencies, and organizations that conduct planning, education, regulation or operations that affect water quality within each county.
- 4. Soil and Water Conservation Districts: County Soil and Water Conservation Districts (SWCD) are created through an act by the county governing body. SWCDs play a pivotal role in watershed, recreation and conservation planning, management, stewardship and education and outreach activities across New York State. SWCDs often work with the agricultural community on voluntary programs, such as Agricultural Environmental Management (AEM).
- 5. County Health Departments: County Health Departments manage and regulate county sanitary codes and are responsible for on-site wastewater treatment systems.
- 6. Regional Planning Boards: Also called "Regional Planning and Development Boards," or "Regional Planning Councils," these are established pursuant to New York State General Municipal Law to address regional issues and assist with local planning efforts Water resource protection,

especially at the watershed level, is a key regional issue that many Regional Planning Boards already address.

State Agencies

- 1. New York State Department of State (NYSDOS), Division of Coastal Resources: The Division of Coastal Resources helps protect and enhance coastal and inland water resources and encourage appropriate land use. The Division also works in partnership with local governments in preparation of Local Waterfront Revitalization Programs, which serve as comprehensive land and water use plans, as well as intermunicipal watershed management plans which identify problems and threats and opportunities for achieving long lasting improvements in water quality and establish priorities for action. Financial assistance for the preparation and implementation of such programs and plans is available through the Environmental Protection Fund (EPF).
- 2. New York State Department of Environmental Conservation (NYSDEC): The Department of Conservation works to reduce water pollution through technical assistance for prevention, education, and monitoring. The NYSDEC also provides financial assistance to local governments for a variety of water quality projects. The Department has extensive regulatory authority through its administration of the New York State Environmental Conservation Law (ECL).
- 3. New York State Department of Agriculture and Markets: The Department of Agriculture and Markets provides administrative support to the State Soil and Water Conservation Committee

- (SWCC), which in turn provides guidance to the county Soil and Water Conservation Districts (SWCD). In addition the Department of Agriculture and Markets oversees many aspects of farming that cannot be regulated by municipalities.
- 4. New York State Department of Health (NYSDOH): The Department of Health monitors impacts of nonpoint source pollution through water quality monitoring and reporting programs. New York Public Health Law contains statutes regulating the protection of public water supplies from contamination due to source and nonpoint source pollution.

Federal Agencies

- 1. US Environmental Protection Agency: The mission of the EPA is to protect human health and the environment. Developing and enforcing environmental regulations, providing financial assistance, performing environmental research, sponsoring and promoting partnerships and programs, and monitoring hazardous materials and reporting related information to the public are several of the duties of the EPA. The EPA provides funding to be used by the responsible State agencies for enforcement and implementation of policies outlined in the federal laws and regulations.
- 2. Natural Resource Conservation Service: The Natural Resource Conservation Service (NRCS) is a U.S. Department of Agriculture (USDA) agency that assists private land owners with conserving soil, water and other natural resources.

- 3. Army Corps of Engineers (US Department of Defense): The US Army Corps of Engineers (USACE) is responsible for flood control, navigation, shore protection, environmental restoration, hazardous, toxic and radiological waste site management, and water resource management and regulation.
- 4. Fish and Wildlife Service (US Department of the Interior): The US Fish and Wildlife Service (USFWS) mission is to conserve, protect and enhance fish, wildlife and plants and their habitats for the continuing benefit of the American people.
- 5. United States Geologic Survey: The USGS offers an array of services and data related to hydrologic research and development, wildlife and fisheries management, invasive species, geographic information systems, mapping, costal management and watershed planning.
- 6. *National Oceanic and Atmospheric Administra- tion* (NOAA): NOAA has several roles directly related to watershed protection including its role in the stewardship of coastal waters.

Section 2

Nonpoint Assessment and Gap Analysis

A. Municipal Nonpoint Assessment Background

Following the steps outlined in this manual, the Genesee/Finger Lakes Regional Planning Council conducted an assessment of local laws, regulations and practices of 56 watershed communities surrounding Canandaigua, Cayuga, and Conesus Lakes to determine practices in place for protecting water quality. A smaller number of municipalities subsequently participated in more in-depth assessments which led to detailed identification of needed changes.

Assessments of other geographic areas in New York State (the Long Island South Shore Estuary Reserve and the Lake George watershed) were conducted through separate efforts, each following the Municipal Nonpoint Assessement (MNA) methodology. New York's coastal nonpoint area encompasses the State's coastal watersheds, including those of the Great Lakes and the Finger Lakes.

Watershed management plans were previously completed for each of the three noted Finger Lakes watersheds, the Lake George watershed, and various watersheds comprising the Long Island South Shore Estuary Reserve with funding and technical assistance from the New York State Department of State, Division of Coastal Resources. The plans serve to establish a consensus between local and State governments on priorities for protecting water quality. In each of these plans, regulatory management is specifically cited as an important

tool that can be used to affect the overall physical development of a municipality. In doing so, local government can have a significant influence over the manner by which growth and development impact water quality. The need to effectively guide overall development patterns, to better manage and oversee construction activities, to strengthen protection of sensitive lands, and to enhance training of municipal decision makers on land-use regulations and controls are examples of recommendations common to these management plans.

The assessment and gap analysis of local laws and practices, therefore, evolved from this recognition of the need to strengthen local controls. While many communities across New York State recognize that water resources are important, and nonpoint water pollution remains a huge threat to those resources, it can be a daunting task to review local laws and practices to evaluate their ability to protect water quality.

B. Assessment Tools

The Municipal Nonpoint Assessment (MNA) consists of a series of charts developed by the Division of Coastal Resources and based largely on the *Guidance Specifying Measures for Sources of Nonpoint Pollution in Coastal Waters* (EPA, 1993). Please see Appendix F for a copy of the Municipal Nonpoint Assessment. The MNA guides the identification and evaluation of a municipality's (county, town, village, city) programs and practices, including land and water use controls, capital improvement

programs, routine operation and maintenance practices, education and outreach programs, and professional training for avoiding and reducing nonpoint source pollution.

Focus is on a municipality's ability to control NPS pollution from existing and new sources, e.g., development of private and public property, road, highway and bridge runoff systems; hydrologic modification (such as channelization of streams); marinas and recreational boating; and onsite wastewater treatment systems. Assessment charts present the range of management practices that a municipality could be implementing; completing the charts involves assessing the degree to which any given practice is applicable in and implemented by the municipality. Outcomes include the identification of strengths and gaps in a municipality's ability to effectively manage pollution, as related to local regulations, routine operation and maintenance practices, training and outreach programs. The tool facilitates better articulation of priorities and establishment of a set of recommendations for continuing improvement.

Completing the assessment places a municipality in a stronger position to complete and implement watershed management plans addressing a full range of sources of pollution, including stormwater runoff. It aids in focusing limited available resources on strategies most likely to lead to improvements in protection and restoration of water quality. An emphasis is placed on water resource protection best management practices, in part because preventing problems is more cost effective then trying to repair damage done.

What is a Best Management Practice (BMP)?

- 1. A method for preventing or reducing the pollution resulting from an activity. The term originated from rules and regulation in Section 208 of the Federal Clean Water Act. Specific BMPs are defined for each pollution source.
- 2. Methods that have been determined to be the most effective, practical means of preventing or reducing pollution.

The process begins with identifying existing local laws and practices and continues with a thorough analysis of strengths and opportunities for improvements. A search is conducted to identify each municipality's local laws that could relate to water quality protection, environmental conservation, and land use regulation. Copies of local laws are compiled and notation is made in the Municipal Nonpoint Assessment (MNA). The MNA represents a standardized menu of recognized best management practices to control the various categories of pollution-causing activities. The MNA also serves as the basis for evaluating a municipality's capacity to control pollution from each category.

A comprehensive assessment of local controls and practices cannot be limited to regulations dealing solely with water resources. A number of land use

regulations can have significant impacts on water quality. Zoning laws, subdivision laws, and site plan review procedures, when developed and implemented with water quality in mind, can go a long way toward controlling nonpoint source pollution. Furthermore, a best management practice (BMP) does not have to be mandated by legislation to be effective. For example, the operation procedures of a municipal highway department can integrate many BMPs into everyday activities.

After the documents are compiled and notations made in the Municipal Nonpoint Assessment, local officials and municipal staff members should be contacted to confirm and enhance the data. It is essential to involve representatives from the various departments within a municipality in the process to ensure a thorough assessment.

Once all information is gathered and noted in the Municipal Nonpoint Assessment, the data should be analyzed to identify gaps and overlaps in water quality protection. This will help set priorities for revision existing laws and practices or establishing new controls that would fill meaningful gaps.

With the advent of Phase II Stormwater Regulations in 2003, some of the activities traditionally considered nonpoint sources now face greater scrutiny and regulation. The practices for controlling stormwater pollution remain largely the same. An assessment tool that is more narrowly focused on Phase II Regulations is the *Stormwater Management Gap Analysis Workbook for Local Officials*, developed by the New York State Department of Environmental

Conservation and the New York State Department of State. This document specifies code language that should be present somewhere in a municipality's local laws. It is important to note that municipalities havingdesignated urbanized areas are required to comply with certain stormwater regulations by 2008 and should use the entire Stormwater Management Gap Analysis Workbook for Local Officials. Non-urbanized municipalities can greatly benefit by completing the "Preliminary Local Codes Assessment Worksheet" in the Stormwater Management Gap Analysis Workbook for Local Officials. To determine if your municipality is required to comply with Phase II Stormwater Regulations and to obtain copies of the Stormwater Management Gap Analysis Workbook for Local Officials, contact the New York State Department of Environmental Conservation, your county planning department, or your regional planning council.

C. Defining the Area and Organizing a Local Contact Database

Given the multiple layers of jurisdiction and organization that typically exist across most watersheds, the organization of a comprehensive database of relevant officials is an important step towards completing an assessment.

Municipal Contacts

Municipal officials typically involved or knowledgeable about development controls and practices include:

- Municipal Clerk
- Highway Superintendent/Director of Public Works
- Code Enforcement/Zoning Enforcement Officer

- Planning Board Chair (if applicable; not every municipality has a Planning Board)
- Professional Planner (if applicable; relatively few small or rural municipalities have professional planners on staff)

Other Contacts

Even though the home rule tradition in New York State provides municipalities with extensive responsibilities for most land use regulations, some authority can, at times, belong to county, regional, or State-level agencies or organizations. In some instances, quasi-governmental or non-governmental organizations have emerged to perform certain tasks (public education and outreach, for example) across a large area, such as a watershed, county or region.

Activities that are undertaken and implemented by county, watershed, regional or State entities should also be assessed. Therefore, it may be important to involve others, such as:

- County and Regional Planning Agencies
- County Soil and Water Conservation District
- County Cornell Cooperative Extension
- County or regional office of the State Health Department
- County Highway Department
- Watershed Inspector
- Watershed Council/Intergovernmental Organization (these go by several different names are typically funded and overseen by the municipalities within the watershed)

- Watershed Associations (these also go by several different names, but tend to be privately funded, citizen-based organizations)
- Municipal Conservation Boards or Advisory Councils
- New York State Department of Environmental Conservation, Regional Office
- New York State Department of Transportation, Regional Office

D. Using the Municipal Nonpoint Assessment Form



New residential development. Town of Gorham, Ontario County.

The Municipal Nonpoint Assessment (MNA) has broad applicability to all of New York State. Given that, the range of practices should be considered the starting point to address local conditions. Caution should be taken in modifying the form to fit a particular community. There is great utility

in having a form consistent within a region, and certainly consistent within a watershed. Only those practices that are known to be irrelevant should be excluded from the MNA. The Municipal Nonpoint Assessment used for the Finger Lakes Region was tailored, for example, to reflect regional water quality issues. The practices were regrouped into six distinct topics applicable to the region. Grouping issues can be helpful in dividing up work responsibilities where a team is involved in conducting the assessment.

1. Development

- a. Existing Development
- b. New Development and Substantial Redevelopment
- 2. Forestry and Agriculture
 - a. Forestry
 - b. Agriculture
- 3. Waterways and Wetlands
 - a. Modified Waterways
 - b. Wetlands and Riparian Area Management and Restoration
- 4. Marinas
 - a. Existing Marinas
 - b. New Marinas
 - c. All Marinas
- 5. Roads and Bridges
 - a. Existing Roads and Bridges
 - b. New Roads and Bridges
 - c. All Roads and Bridges (existing and new)
- 6. On-site Wastewater Treatment Systems (OWTS)

The presence of other concerns should be iden-

tified and included based on regional or watershed conditions and goals. To that end, collaboration with neighboring municipalities and regional groups is strongly encouraged. Examples that can be added include management practices performed within recreation areas, such as golf courses, ski resorts, or extensive park or trail systems (e.g. greenways). Specific types of development, such as mobile home parks, industrial parks, or brownfield redevelopment areas may also merit special consideration. Municipal codes should be reviewed with regard to SPDES Phase II Stormwater Regulations. Here there is some complementary overlap between the minimum control measures and the above practices, particularly practices for roads and bridges, and existing and new development.

Finally, identify and distinguish between the predominant aquatic features of the region in order to address specific threats to these areas. These geographic features can range widely, including: sensitive coastal areas (beaches, bluffs, etc.); lakes; wetlands; estuaries; bays; riparian areas; and navigation channels and canals.

It is not sufficient to proceed mechanically with the assessment without thought to real, on the ground conditions, and the relative magnitude of threats, as well as the predominant causes of these threats. It is important that the assessment remain practical, while accurately addressing the issues and needs of the study area.

Conducting the Assessment

As municipal laws and practices are evaluated, two scenarios are likely to become apparent: laws will not always completely satisfy the parameters of a best management practice or one law may meet the requirements of several best management practices.

In the first instance, it is important to consider the intent of the law. Whether the law actually meets its intended purpose is a point that must be considered during the assessment, and one which should be kept in mind when conducting interviews with municipal officials and staff. These interviews are a great opportunity to gather local knowledge that will later be essential in setting priorities for filling gaps.

In the second instance, when a single law covers several best management practices, it is important to cite the specific section of the law explicitly so that it can be easily referred to and evaluated at a later point in time.

Law vs. Practice

The legislative process is viewed as a reliable means of implementing a BMP within a municipality. What has been noted, however, is that enforcement is inconsistent. As the duties of code enforcement officials have increased over time, and as municipal codes have become more complex, resources may not always be available for adequate code enforcement.

However, a BMP does not have to be mandated by a law or ordinance for it to be implemented. Certain municipal departments, residents or contractors may be voluntarily using BMPs or "good housekeeping" practices that are not mandated by State or local authorities. For these reasons, it is important to involve local officials – such as code enforcement officers and highway superintendents – in an effort to find out which BMPs are voluntarily being imple-

mented in the field.

Measuring the Degree of Implementation

The ability of local controls and practices to implement each applicable best management practice can be summarized as follows:

2 – Full Implementation: If a law, it must fully address the associated BMP without question or variance. As the law is written, the wording should bear a clear and reasonable resemblance to the BMP as it is written in the assessment form. The defined jurisdiction of the law should be considered thoroughly. For example, BMPs mentioned in local laws that are mandated within mobile home parks cannot, by definition, be applied throughout a municipality and should not be given a ranking of '2'. For practices, the identified practice must clearly relate to the BMP. Personal conversation with relevant local officials or actual observance in the field must be made to determine whether the BMP is being fully implemented.

1 – Partial Implementation: If a law, the BMP may be considered to be "partially implemented" if the language of the law is close to, or related to the language of the BMP assessment form. Or, the law may be written to address only a specific geographical area of the town, such as a mobile home park or environmental protection overlay district. If a practice, the BMP may be considered to be partially implemented if it is a general practice applied across a regional or local jurisdiction without thorough oversight or not applied comprehensively. In some cases, this applies to activities undertaken by independent organizations, such as a watershed group, academic institution or SWCD. Furthermore, recommendations put forth within a Master Plan that have not yet been implemented

may be rated as Partial Implementation.

0 – Not at all: No evidence has been found that the BMP listed in the assessment form is being implemented to any degree within the municipality or jurisdiction.

N/A – Not applicable: The particular practice is not applicable to the municipality.

Four general options exist for confirming the level of BMP implementation: face-to-face interviews; phone interviews; municipal self-evaluations; and field observations.

Final Assessment/Gap Analysis

When the assessment of local controls and practices is completed, the information compiled will have to be analyzed to identify critical gaps. In some instances, gaps will be obvious, particularly in the absence of any significant regulations pertaining to environmental protection or erosion and sediment control. In most instances, however, the analysis may yield results that are not entirely definitive. Results that show BMPs with no or partial implementation deserve significant attention from a municipality, particularly if not implemented by State or other authorities. Are there laws on the books that are not being adequately enforced, resulting in repeated instances of "partial implementation" of a BMP? What steps will be necessary to address this enforcement issue? Is a local law warranted, or can a simple review of departmental operation and maintenance practices address the gap? Furthermore, training, education and outreach may be an adequate means of addressing local concerns.

When reviewing the results of the Municipal Nonpoint Assessment (MNA), it is important to consider local priorities, as well as the gaps in BMPs. For example, the MNA may show that a municipality has few or no BMPs in the area of boating and marinas. This would indicate a significant gap. However, it may be that boating and marinas are relatively minor activities. As the case studies in Section 4 of this manual show, gaps in the BMPs must be weighed against what the collective administrative, political, and civic will in the community may be. Ultimately, best management practices (BMPs), whether included in a local law or as a revised municipal practice or procedure, must be adopted willingly by the municipality.

Section 3

What Can be Done at the Local Level: Tools You Can Use

Assessing a municipality's existing laws and practices and any gaps that exist is one step towards protecting water quality. Determining how to fill the gaps is another step.

A. Municipal Land Use Tools

That Can Address Water Related Issues

Land Use Building Blocks

- 1. Comprehensive Plan
- 2. Zoning
 - a. Site Plan Review
 - b. Environmental Protection Overlay Districts (EPODs)
- 3. Subdivision Regulation
- 4. Stand-alone or targeted local laws or ordinances, see Subsection B of this Section

Comprehensive plans, zoning laws, and subdivision regulations establish a community's overall vision and means for its implementation. These tools can address a multitude of issues, and since they all deal with land use and development, the tools also affect water quality.

Comprehensive plans, zoning laws, and subdivision regulations are considered the "building blocks" of municipal land use regulation in New York State, and are the basis for many other activities that a municipality carries out. While common in many

areas of New York State, it should not be assumed that these building blocks exist in every community, or are always as up-to-date or as well-crafted as they should be. In terms of developing local laws to protect water quality, determining whether these three building blocks are present and current is the first task.

1. Comprehensive Plan

Comprehensive plans set out the broad goals and vision of a community. They should be developed with widespread citizen input, and used by the land use decision makers in a community (planning board, zoning board of appeals, conservation board, code enforcement officer, planner,

TOWN OF ITALY

COMPREHENSIVE PLAN







JUNE 2004

AMENDED JULY 2005

Prepared for the Town by
The Italy Zoning Commission

With the assistance of Genesee/Finger Lakes Regional Planning Council

municipal board, and elected officials). The plan should reflect current conditions and issues of the municipality, where the community would like to be, and how to reach those goals. Specifically, it should identify the type and intensity of development to be accommodated. A comprehensive plan which is too generalized may not serve to effectively guide future development.

The comprehensive plan is often best thought of as a strategic document that contains actions and notes responsible entities to implement actions. According to a 2003 survey by the New York State Legislative Commission on Rural Resources, 90% of cities, 64% of towns and 62% of villages in New York had adopted written comprehensive plans.



Zoning regulates the use, density of use, siting, and form of development on individual land parcels. It accomplishes this by dividing the municipality into districts and establishes regulations within such districts.

To help make the leap from comprehensive plan to zoning to implementation and enforcement,

the zoning law should be written in a way that is concise and easy to understand. Including graphics to illustrate concepts, and simple things such as page numbers and tables of contents help make zoning easier to use and understand.

There are two important sub-sections that are usually (but not always) included in zoning that merit further discussion. These are site plan review and environmental

protection overlay districts (EPODs).

2. Zoning

Zoning is the most common and extensively used local technique for regulating land use and development. Zoning also serves as an important means for implementing the comprehensive plan. According to a 2003 survey by the New York State Legislative Commission on Rural Resources, 100% of cities, 79% of towns and 88% of villages in New York had adopted zoning laws or ordinances.

a. Site Plan Review

Site plan review addresses the layout and design of development on a single parcel of land. The site plan review process is one of several means of plan implementation that communities may use. Site plan review is a process of greater municipal scrutiny and review for certain uses and/or structures. It is commonly considered

supplemental to other land development guidance controls and is usually included within a community's zoning law. It may, however, be a stand-alone law, especially in communities without zoning.

b. Environmental Protection Overlay Districts (EPODs)

An overlay zoning district can be delineated by a municipality for a geographic area to provide

additional regulations to address a topic of particular concern, such as an environmentally sensitive area, a floodplain, or an historic district. An overlay zone, as the name suggests, overlaps other, underlying zoning districts, and does not affect the uses allowed within such underlying zones. With respect to water quality, an Environmental Protection Overlay District (EPOD) can be an effective control.

municipality's land use objectives are met.

Aspects of subdivision regulation that many municipalities find useful include: distinction between major and minor subdivision; timeline for subdivision of land; a three stage process (conceptual plan, preliminary plan, final plan) for review;

parcels of land. Subdivision regulations ensure that

when development occurs, streets, lots, open space

and infrastructure are adequately designed and the



New residential development. Town of Gorham, Ontario County.

Many communities have adopted overlay zoning districts to protect natural resources and water quality. One example is the Town of Irondequoit in Monroe County. Another example is the Town of Ulysses, in Tompkins County, which has an overlay district pending adoption.

3. Subdivision Regulation

One of the most common land use activities is the subdivision of land. Subdivision regulations control the manner by which land is divided into smaller and the ability for the municipality to charge the applicant for expenses incurred as a result of retaining outside consultants. These and other features should be integrated into a concise, easyto-understand subdivision law. Used correctly, the subdivision law is a key tool used to implement the objectives of the comprehensive plan.

4. Stand Alone or Targeted Laws

In addition to the three "building blocks" of land use control, municipalities can also adopt stand-

Enforcement

Municipal land use controls, whether a basic building block such as a zoning law, or a more finely tailored regulation, such as a forest management law, lack value unless there is adequate, fair, and consistent enforcement. Having enough resources for enforcement is probably the single largest gap in municipal law administration.

Many municipalities simply do not have, or do not allocate enough resources to adequately do the job. With the required training, necessary knowledge of hundreds of pages of code, and dealing with property owners, the job of code enforcement is full time. In larger municipalities, it may require one or more full time staff. Many municipalities however, enforce codes with a part-time position. Without rigorous enforcement, even the best written codes meant to protect water quality are worthless. Code enforcement can be a great opportunity for intermunicipal cooperation and sharing of services, and provide a greater degree of consistency within a region.

alone local laws to address issues that impact quality. There are many different laws of this type; a few examples include timber harvesting laws, sediment and erosion control laws, and junk storage laws. Stand alone laws are explained in greater detail in the following "Subsection B: Water Related Issues" sections.

B. Water Related Issues

Why and how they can be addressed by municipalities

- 1. Open Space Preservation
- 2. Sewer and Water Infrastructure
- 3. Onsite Wastewater
- 4. Flood Plain Management

- 5. Environmentally Sensitive Areas: Wetlands and Riparian Areas
- 6. Erosion and Sediment Control
- 7. Stormwater Management and Drainage
- 8. Road Maintenance
- 9. Junkyards
- 10. Waste Storage
- 11. Mining, Drilling (wells)
- 12. Agriculture
- 13. Forest Management
- 14. Boating/Marinas

Issues and Background

1. Open Space Preservation

Open space is often valued by community residents for its aesthetic qualities. In addition, open space can serve important water quality and natural resource goals by limiting development

sensitive areas. Publicly accessible open space adjacent to lakes and streams is an important community amenity and tourism benefit, as well as an indirect water quality "outreach" tool. If the public has access to the water, they are more apt to develop connections to the water and care about water

FIRST OFFERING IN OVER 100 YEARS
Approx. 450 feet lake front, 650 feet road front with 72 view acres. Large estate home maintained in original character plus guest house.
Last large estate on beautiful Canandaigua Lake. Ideal for Retirement Housing with Golf Course & Marina or Development or Winery

The potential for waterfront open space preservation exists, but

The potential for waterfront open space preservation exists, but often does not come cheaply in high demand areas. Recent real estate advertisement, Finger Lakes region.

quality issues. Waterways are then seen more as a community amenity, and not just an amenity for those who own property along it. Of any level of government, municipalities are often in the best position to protect open space since development activities that reduce open space are regulated locally.

A municipality should develop an open space plan or an assessment of open space resources included as part of the comprehensive plan. This plan/assessment should categorize open space resources, examine their use and function within the community, set priorities for their protection, and consider the best options for the use and

protection of open spaces.

Purchase of development rights (PDR) is a technique whereby the municipality pays a land-owner for the "development rights" of a parcel. In return for that monetary payment, an easement is placed on that property, ensuring that it remains

as agriculture land or open space. Although PDR has been used to preserve farmland, it can also protect ecologically important lands or scenic parcels essential to the character of the community. PDR is a form of open space preservation without the municipality having purchase the property outright.

The 'transfer' of develop-

ment rights (TDR) is similar to the 'purchase' of development rights (PDR). Under the New York State zoning enabling statutes, areas of the municipality which have been identified through the planning process as in need of preservation (e.g. agricultural land) or in which development should be avoided (e.g. municipal drinking water supply protection areas) are established as "sending districts." Development of land in such districts may be heavily restricted, but owners are granted rights under the TDR regulations to sell the rights to develop their lands. Those development rights may thereby be transferred to lands located in designated "receiving districts." Transferable

development rights usually take the form of a number of units per acre, or gross square footage of floor space, or an increase in height. The rights are used to increase the density of development in a receiving district.

A municipality can preserve open space through several ways. It is important to ensure that the open space policies of the open space plan or comprehensive plan are implemented through the municipality's land use controls such as zoning, the site plan review process, and subdivision regulations. Local coordination with the Department of Environmental Conservation's State Open Space Plan is also important. In addition, non-profit organizations, such as various land trusts and the Nature Conservancy, can offer assistance with open space preservation techniques that have worked in communities across New York State.

2. Sewer and Water Infrastructure

Sewer and water infrastructure is approved and built by municipalities or regional authorities. Careful planning and review of all such infrastructure is very important since new sewers can significantly improve water quality in an area with failing on-site wastewater treatment systems. However, new sewer and water infrastructure often leads to increased development, more impervious surfaces and the potential water quality problems that are associated with development.

The municipality should have regular and active dialogue and planning with regional infrastructure entities such as water and sewer authorities. Also, the municipality should clearly and specifically state in comprehensive plans where the community would like to see such infrastructure and areas where it should be limited.

3. On-site Wastewater

On-site wastewater systems are the number one source of nonpoint source pollution within New York State. The reasonable lifespan of a septic system is 25-40 years—a "biomat" will slowly accumulate and eventually overwhelm the bacteria's ability to digest; then a new leach field is needed and is the only real solution. Additives and/or pumping will not solve the problem at that point. Only 10% of soils within New York State are considered to be truly ideal for septic systems. A high percentage of private wells are contaminated by improperly functioning septic systems. This poses not only a threat to water quality but also an immediate public health hazard. Through the local regulatory process and the issuance of building permits and certificates of occupancy, a municipality can have significant control over onsite wastewater systems.

On-site wastewater treatment systems are regulated by county and State health laws, but municipalities can offer an additional level of regulation. Proper design and functioning of onsite systems is as important as the proper design and functioning of a public sewer system. Collectively, on-site wastewater systems are pieces of the community's infrastructure. A properly-functioning septic system is both complex and fragile, further underscoring the need for regular inspection, maintenance and homeowner educa-

tion/outreach.

A municipality can amend their existing laws to include the provisions of an on-site waste water system model ordinance. They can also customize a model ordinance to address situations that may be unique to their community. County Health Departments, Soil and Water Conservation Districts, and the Cornell Cooperation Extension can be valuable partners on this issue.

Please refer to Appendix E10 for model laws related to this topic. Using overlay zoning and the site plan review process to more closely scrutinize development in sensitive areas are also techniques that can be utilized in conjunction with standalone onsite ordinances.

Additional information on the management of septic systems, including inspections, can be obtained through the New York On-site Wastewater Treatment Training Network (OTN).

4. Flood Plain Management

Flood plains are very often environmentally sensitive areas located near streams and lakes. Usually a portion of the flood plain is wetland area. Good flood plain management not only improves public safety, but can lead to less development on sensitive areas near water bodies and therefore can contribute to water quality protection. With participation in the National Flood Insurance Program's Community Rating System, a good flood plain management program can reduce flood insurance premiums for property owners.

Flood hazard areas are identified and mapped

by the Federal Emergency Management Agency (FEMA). Most municipalities *do not* have a detailed base flood elevation mapped. Therefore, all communities should be mapped so that there is a defined base flood elevation (known as the "A Zone" on Flood Insurance Rate Maps). If there is no defined base flood elevation a licensed engineer should be used, along with design standards, for the siting and construction of every new development in the floodplain.

Almost all municipalities in New York State have adopted some form of the Department of Environmental Conservation's model Flood Prevention Ordinance. It is important that municipal officials, staff, and boards utilize it when making land use decisions. Flood prevention concepts should be integrated into zoning laws, subdivision review, and site plan review processes. In addition, Flood Prevention Ordinances usually call for the appointment of a Flood Plain Administrator, who should be trained on flood prevention through various programs offered by the New York State Department of Environmental Conservation and the Federal Emergency Management Agency.

Environmentally Sensitive Areas: Wetlands, Riparian, and Lakeshore Areas

Construction of new buildings, roads and parking lots are activities that are typically regulated by the municipality. Such development often impacts environmentally sensitive areas such as wetlands, stream corridors, and lakeshore areas. And although some wetlands are regulated by State and Federal agencies, municipalities can incorporate a greater level of oversight. Wetlands,

including temporary wetlands known as 'vernal pools,' contribute an important natural habitat, are often a scenic amenity, and act as a natural stormwater retention system. Preserving and utilizing natural wetlands as stormwater retention facilities can lessen the need for costly manmade systems.

Retaining natural vegetation is an important



Vegetated stream buffer in an active agricultural area. Town of Byron, Genesee County.

factor in limiting erosion and sedimentation, especially during construction activities. Municipalities have the ability to control the disturbance of vegetation through the local regulatory and permitting process for development.

Riparian areas are lands located adjacent to streams or rivers, and lacustrine areas are lands located adjacent to lakes. Establishing buffers along streams, rivers, and lakes provides protection from development. Naturally vegetated buffer areas provide not only habitat but water quality benefits as well, by stabilizing soils that could be eroded by overland flow and enter surface waters, facilitating infiltration of through leave litter into the soil, where natural biological and chemical processes take place, and trapping sediment, all of which together can maintain the integrity of waters, and supported uses. Municipalities are in the best position to establish effective vegetated buffers along waterway since development activities that impact water bodies are regulated

locally.

Wetlands are often in flood plains or riparian areas, so limiting flood plain and stream-side development has the added benefit of protecting wetlands. Local knowledge of appropriate State and Federal regulations (especially on the part of the Code Enforcement Officer) is very important. They are the "first line of defense" in protecting water resources and can inform property developers to file for all appropriate permits with the Army Corps of

Engineers and the New York State Department of Environmental Conservation.

A municipality can protect sensitive areas through several means. These include adoption of environmental protection overlay districts (EPODS) as part of their zoning law. Riparian protection can be implemented through setback requirements in the zoning code, the site plan review process (for individual sites), and subdivision regulations (for larger developments). Alternatively, some municipalities have chosen to protect wetlands and riparian areas through their sediment and

erosion control laws. Finally, careful administration of a flood prevention ordinance (which many municipalities have), can restrict development within flood hazard areas, which are also often environmentally sensitive and/or riparian areas. Several models are included in Appendix E.

6. Erosion and Sediment Control

Construction of new buildings, roads, and parking lots are activities that are typically regulated by the

municipality. Activities involving land clearance can create erosion, which leads to sedimentation of waterways. Not only a significant cause of nonpoint source pollution, sedimentation can increase costs for municipalities in terms of infrastructure maintenance. Development in areas with steep slopes is of particular concern, as the potential for more damaging erosion and sedimentation is greater.

Adoption of a well-crafted sediment and erosion control law, or incor-

porating standards within zoning, subdivision, and site plan review controls are recommended techniques. Integration of Phase II Stormwater Regulations at the municipal level can greatly assist in controlling erosion and sedimentation from construction activities. To help implement stormwater controls, the New York State Department of Environmental Conservation and the New York State Department of State teamed up to produce the *Stormwater Management Gap Analysis Workbook for Local Officials*. This assess-

ment tool focuses on stormwater issues, and lists code language that *should* be present somewhere in municipal law and asks the municipality to identify it. It is available through the New York State Department of Environmental Conservation and Regional Planning Councils.

Areas of a municipality such as those with steep slopes, very erodable soils, or adjacent to water bodies, face particular challenges with regard to



Whenever soil is disturbed for construction activities, the potential exists for erosion and sedimentation. Construction, Town of Caroline, Tompkins County.

erosion. Adoption of effective zoning, subdivision, and site-plan regulations that specifically regulate the impacts that development in these can have on the water resources of the municipality is important. Adoption of an Environmental Protection Overlay District (EPOD), which can place more stringent regulations on these particularly sensitive areas can also be very effective. Please see Appendix E3 and E6 for model laws on how this can be addressed.

7. Stormwater Management and Drainage

Impervious surfaces such as roofs (building areas), roads, driveways, and parking lots are regulated by the municipality through its zoning law, subdivision law, and site plan review process. Once water runs off of private property, it tends to become the problem of the municipality. Poorly designed or maintained public drainage infrastructure, such as ditches, can cause erosion, which leads to sedi-



Countless catch basins such as this collect stormwater and channel it to adjacent waterbodies.

mentation of waterways. Not only a significant cause of nonpoint source pollution, sedimentation can increase costs for municipalities in terms of ditch and storm drain cleaning. There are many ways the municipality can improve the construction, operation and maintenance of this drainage infrastructure, which in turn leads to less damage to both private and public (roads, bridges, etc) property and improved water quality.

Adoption of a well-crafted sediment and erosion control law or incorporating standards within

zoning, subdivision, and site plan review controls are recommended techniques. Integration of Phase II Stormwater Regulations at the municipal level can greatly assist in controlling erosion and sedimentation from construction activities. To help implement stormwater controls, the Department of Environmental Conservation and the Department of State teamed up to produce the Stormwater Management Gap Analysis Workbook for Local

> Officials. This assessment tool focuses on stormwater issues, and lists code language that should be present somewhere in municipal law and asks the municipality to identify it. It is available through the New York State Department of Environmental Conservation and Regional Planning Councils.

> There is also the option of adopting an Environmental Protection Overlay District (EPOD), which can encompass particularly environmentally sensitive areas of the municipality (such as lakeshore or stream-side areas) with

more stringent regulations. Please see Appendix E3 for an example. Finally, it is necessary for a municipality to allocate adequate resources for fair and consistent enforcement of any law once it is adopted.

Municipalities should also ensure that municipal highway/public works departments are trained in, and follow best management practices, such as establishing vegetation in newly cleaned ditches. The Highway Superintendent Road and Water Quality Handbook, Edition II, the Cornell Local Roads Program, and training opportunities with county and State transportation departments are resources. A municipality can regulate new road ditches through subdivision regulations and site plan review.

Municipalities also have the option of forming a special district, known as a 'drainage district." Drainage districts are becoming more and more

important as municipalities seek stable funding sources for the improvement, construction, operation, and maintenance of drainage structures, retention ponds, basins, ditches, and culverts. This drainage infrastructure often requires specialized maintenance and developers, property owners, or homeowner's associations cannot always be depended upon to properly maintain stormwater facilities on a long term basis. Drainage districts are similar to special taxing districts used for schools, libraries, fire protection, sewers, sidewalks, and lighting.

8. Road and Bridge Maintenance

Municipalities are often responsible for dozens of miles of roads and roadside drainage-ways and ditches. Roadside ditches are part of the publicly-owned drainage infrastructure that collects water from a public road and adjacent development. Poorly designed or maintained drainage ways can lead to sedimentation of natural water bodies.

Not only a significant cause of nonpoint source pollution, sedimentation can increase costs for municipalities in terms of ditch and storm drain cleaning. Winter road maintenance, de-icing practices, and de-icing material storage practices can also negatively impact water quality.

There are many ways the municipality can improve the construction, operation and maintenance of this drainage infrastructure, which in turn leads



As with building construction, road construction and reconstruction activities disturb soil and have the potential to contribute to erosion and sedimentation. Construction along New York Route 12, Lewis County.

to less damage to both private and public (roads, bridges, etc) property and improved water quality. Regular maintenance of existing infrastructure and establishing vegetative cover following maintenance using hydro-seeding are some examples; ensuring the consistent use of these practices is the greatest challenge.

Municipalities should ensure that municipal highway/public works departments are trained

in, and follow best management practices. The Highway Superintendent Road and Water Quality Handbook, Edition II, the Cornell Local Roads Program, and training opportunities with county and State transportation departments are resources. A municipality can regulate new road ditches through subdivision regulations and site plan review.

Municipalities also have the option of forming a



Unfortunately, loosely regulated junk yards and dumping grounds are still present in many rural areas in New York State.

special district, known as a 'drainage district." See number 7. Stormwater Management and Drainage on page 28.

For examples on actual municipal road maintenance procedures in practice, please see Appendix E12.

9. Junk

In addition to State environmental permitting, junkyards often undergo regulatory processes through local zoning. Junkyards can have significant impacts on water quality as old vehicles and appliances might leak oil or other hazardous and toxic liquids into the soil. After first contaminating the soil, liquid waste will eventually reach the groundwater and pollute local water resources.

A municipality can revise its zoning to limit junk yards to less environmentally sensitive areas or prohibit junkyards altogether. If they are permitted

or mentioned in zoning or other regulations, a municipality should ensure that the definition of "junk" encompasses such things as old appliances, household waste, or uninhabitable mobile homes. Such an action helps to regulate aspects of junk not covered by State law and ensures greater compatibility with surrounding land-uses. The New York State Department of State has a junk storage model law, which is included in Appendix E11.

10. Waste Storage

Storing of waste (hazardous waste, garbage, etc.) can have water quality impacts when rainwater runs off such materials and into local water bodies. Whether dealing with their own facilities or regulating private property, municipalities can enforce waste storage regulations.

One of the best things a municipality can do to address waste storage is to simply maintain an inventory of old municipal and private waste sites (particularly on farms). There is also the potential for local laws that are more stringent than federal and State regulations. Appropriate Code Enforcement Officer training is also important.

11. Mining and Drilling

Mining operations can have significant impacts on surface and groundwater resources. Large mines can alter drainage patterns and affect water tables. Even smaller operations can, like any land disturbance, cause erosion, leading to sedimentation of

waterways. Not only a significant cause of nonpoint source pollution, sedimentation can increase costs for municipalities in terms of ditch and storm drain cleaning. The siting and drilling of gas, oil, brine, and other types of wells can impact water quality. Local knowledge of State regulations in this matter is important.

A municipality can use traditional zoning powers, such as limiting mining to particular zoning districts as a regulated land use. It can also

apply local laws such as a steep slopes environmental protection overlay district to mining, provided the law is written in such as way as to cover many uses/activities and does not single out mining. A municipality can also participate in the DEC permitting process through the Mined Land Reclamation Law (MLRL) (New York State Environmental Conservation Law, Article 23, Title 27) and regulate small scale mines that

fall under the threshold of the MLRL. Finally, a municipality has the option of completely prohibiting mines from the entire municipality.

Knowledge and enforcement of State and Federal regulations is important. Oil, gas and solution mining is regulated by New York State. The Department of Environmental Conservation has the basic responsibility for administering and regulating activities relative to the natural resources of oil and gas within the State.



An example of inappropriate waste storage.

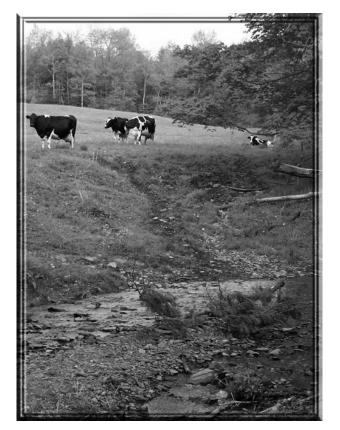
12. Agriculture

Agricultural activities can have significant impacts on water quality. Runoff from farms carries higher levels of phosphorus and nitrates, leading to algae growth and oxygen depletion in nearby water bodies. Sediment washed from plowed fields can choke public drainage ditches and streams, however, well-managed farmland can help protect water quality. Although many

agricultural issues are regulated at the State level by the Department of Agriculture and Markets and the Department of Environmental Conservation, local municipal knowledge and encouragement of good agricultural practices can greatly assist water quality efforts.

Local right-to-farm laws document the importance of farming to a community and put non-

farm rural residents on notice that generally accepted agricultural practices are to be expected in farming In areas. small, rural municipalities, personal connections are often very important and many municipal administrations have close relationships with the farming community. Therefore, municipalities can actively encourage farms to participate in voluntary programs of the Natural Resources



Organically raised dairy cows, Town of Italy, Yates County.

Conservation Service (NRCS) and the Soil and Water Conservation District (SWCD), such as the Agriculture Environmental Management (AEM) I Program and the Conservation Reserve Enrollment Program (CREP). AEM helps farms manage the environmental impacts from manure

and agricultural chemicals, and CREP helps maintain natural vegetation, especially along streams. A well-developed Agriculture Preservation Plan (either stand alone or as part of a municipal comprehensive plan) helps a municipality prioritize its agricultural assets. Encouraging, acknowledging, and rewarding farm participation in environmentally friendly practices such as AEM, CREP, and other programs is something

that can be done at the municipal level. The 'Lake Friendly Farmer' program in Ontario County and the 'Lake Friendly Farm' program of the Cayuga Lake Watershed Network are two such models.

Finally, the American Farmland Trust published a *Guide to Local Planning for Agriculture in New York* in 2005. This concise, easy-to-use document is a very valuable resource for municipalities in New York State.

13. Forest Management

Municipalities can and do regulate timber harvesting. As with any land disturbance, timber harvesting can increase erosion and sedimentation. Sediment entering waterways is not only a significant cause of nonpoint source pollution, but can also increase costs for municipalities in terms of ditch and storm drain cleaning.



Forest Management Seminar, Schuyler County.

There are several ways to address this issue, from property owner education and outreach through County Soil and Water Conservation Districts and/or Cornell Cooperative Extensions, to municipal registration of large timber harvests, to enforcement of existing public highway laws (public highway laws often prohibit the deposition of mud and dirt on public roads). The most comprehensive method would be the adoption of a well-crafted Timber Harvesting Law. A model timber harvesting law from the Canandaigua Watershed Council is included in Appendix E9.

14. Boating/Marinas

For municipalities with navigable waterways, recreational boating can have significant impacts on water quality, such as waste disposal and boat maintenance. The infrastructure necessary for boating, such as launches and marinas, are gener-

ally subject to local review, so a municipality can have oversight on where and how these facilities are built.

Adoption of an effective zoning law or Dockings and Moorings Law which addresses vessel waste and other sources of pollution related to boating can be an effective tool. Vessel pump-outs at marinas and boating facilities is a key provision in this regard. Grants are available for pump-out facilities at public and private marinas from the New York State Environmental Facilities Corporation through the Federal Clean Vessel Act. Municipal regulation of some aspects of navi-



Docks along Canandaigua Lake, Town of Gorham, Ontario County.

gable waterways is sometimes limited by State and Federal regulation. Check with the New York State Department of State to determine what local regulation is allowed on a particular water body.

Inter-municipal Cooperation

As Stated in Section 1 of this manual, our water resources do not recognize political boundaries. By working together in coalitions, local municipalities can promote dialogue, cooperation and sharing of services for an issue (water resources) that are multi-jurisdictional in nature (watershed-wide). For more details on this issue, please see the New York State Department of State guidebook on Intergovernmental Cooperation.

Article 12-C of the New York State General Municipal Law authorizes formation of joint survey committees for this purpose. Many New York State grants, are tailored to encourage inter-municipal cooperation.

There are many models for inter-municipal cooperation, including the inter-municipal agreements (IA) for the Canandaigua Lake watershed (Canandaigua Lake Watershed Council) and the Cayuga Lake watershed (Cayuga Lake Inter-municipal Organization). Please see Appendix E13 for a sample inter-municipal agreement.

Section 4

Examples of Local Law Revision: Middlesex, Ulysses, Groveland

Case Studies

A. Town of Middlesex, Yates County

(Canandaigua Lake Watershed)

The Town of Middlesex lies within the central eastern portion of the Canandaigua Lake watershed. The Town covers an area of 30.3 square miles, 92.3 percent of which lies within the Canandaigua Lake watershed. Middlesex has approximately 7.5 miles of shoreline on Canandaigua Lake.

According to the 2000 Census, the Town of Middlesex contains 1,345 people. The Town experienced a population increase of 37.9 percent between 1960 and 1980 and an increase of 19.3 percent between 1980 and 2000. The median age in Middlesex is 41.1 years and the average household size is 2.52 persons. Median household income is \$43,618, with a poverty rate of 3.4 percent. There are 732 housing units in the Town, 12.7 percent of which have been built since 1990. The median value of owner-occupied homes is \$72,500.

The Town of Middlesex has several laws that regulate land use and development and help the Town protect the water quality of Canandaigua Lake. By reviewing the results of the Nonpoint Assessment, and taking local priorities into account, the Town determined that developing a Subdivision Law was of primary importance. Developing a good Subdivision Law was particularly important in light of past problems with multi-lot development (especially

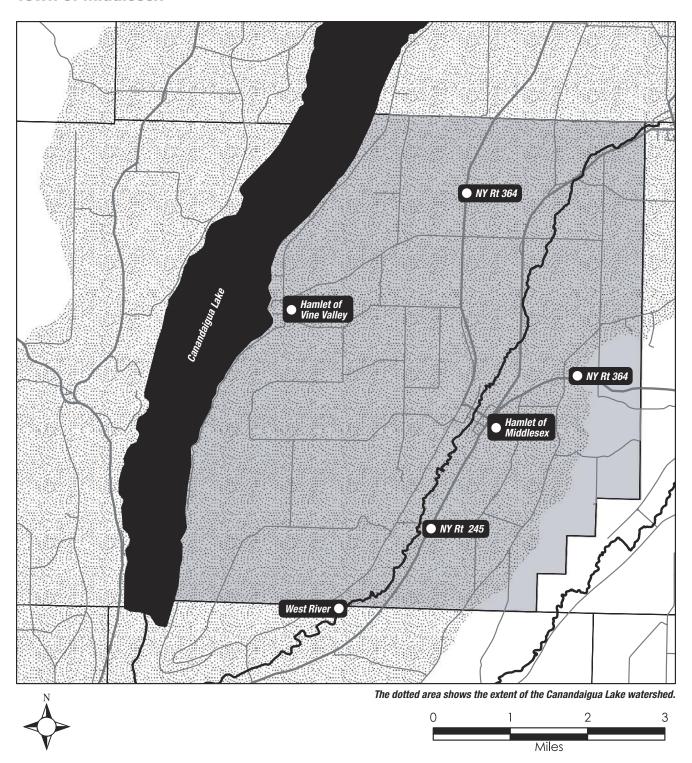
drainage problems). In addition, regional growth patterns indicate that more residential development will likely spread south from the Ontario County Town of Gorham along Canandaigua Lake into Middlesex. The Town is concerned about avoiding past mistakes and carefully regulating future growth to maintain the quality of life that Middlesex currently enjoys.

Working with the Town's dedicated Planning Board, Genesee/Finger Lakes Regional Planning Council (G/FLRPC) was able to provide assistance with the development of a Subdivision Law. Over the course of many months, G/FLRPC and the citizen-planners of Middlesex analyzed the initial model subdivision law and made significant edits to address the situation particular to Middlesex. This was an iterative process that saw information gathering and research conducted by both G/FLRPC staff and the members of the Planning Board. In addition, Planning Board members were able to consult other municipal officials such as the Highway Superintendent and Code Enforcement Officer. This contributed to a successful collaborative effort. See Appendix E4 for the subdivision law that was developed for Middlesex.

Aspects that greatly helped the process in Middlesex include:

 The knowledge, intelligence, thoughtfulness, and dedication of the individuals on the Planning Board

Town of Middlesex



- The Planning Board's willingness to hold periodic working sessions in addition to their usual monthly meetings.
- The Planning Board's apparent valued position within the municipal administration; board members were able to act as liaisons with various municipal departments, such as the highway superintendent and code enforcement officer.

B. Town of Ulysses, Tompkins County

(Cayuga Lake Watershed)

The Town of Ulysses lies within the southeastern portion of the Cayuga Lake watershed. The Town covers an area of 32.4 square miles, all of which lies within the Cayuga Lake watershed. Ulysses has over 6 miles of shoreline on Cayuga Lake.

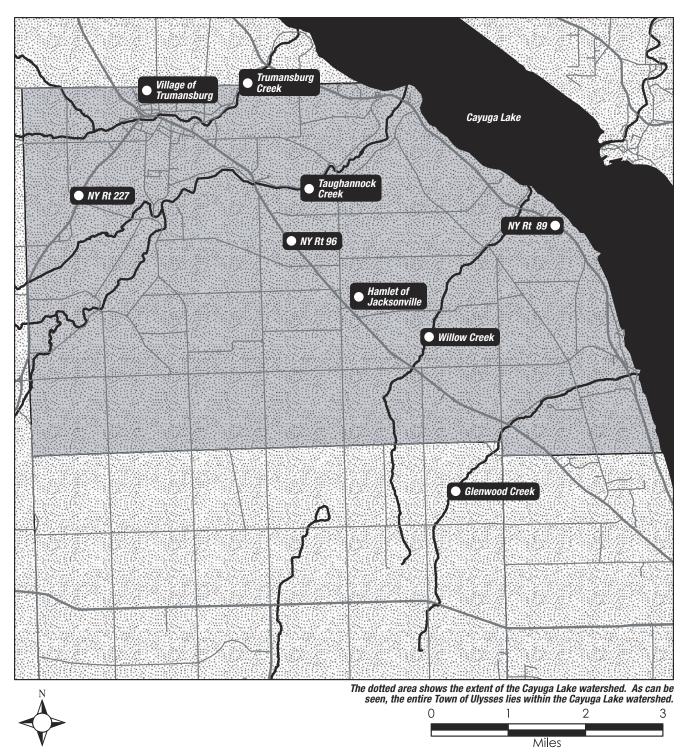
According to the 2000 Census, the Town of Ulysses contains 4,775 people. The Town experienced a population increase of 8.3 percent between 1960 and 1980, and an increase of 2.3 percent between 1980 and 2000. The median age in Ulysses is 41.7 years and the average household size is 2.37 persons. Median household income is \$45,066, with a poverty rate of 4.3 percent. There are 2,200 housing units in the Town, 11.7 percent of which have been built since 1990. The median value of owner-occupied homes is \$103,000.

The Town of Ulysses felt that there were gaps in its ability to regulate development, especially with regard to increasing growth emanating from the Ithaca area, and the unique landscape of the Town, where much growth pressure is concentrated on very steep land along the Cayuga Lake shoreline. In addition, the Town of Ulysses was designated a regulated Municipal Separate Storm Sewer System (MS4) (as part of the Ithaca urbanized area) in 2003. Developing and adopting greater regulatory tools was a priority so that the Town would comply with the Minimum Measures of the Stormwater Phase II Regulations.

Because Ulysses already had many of the basic land use tools (zoning, subdivision regulations, etc.), and was in the midst of a zoning update process, the Town chose to focus on a particular aspect of that zoning update: an Environmental Protection Overlay District (EPOD). This also dovetailed with the results of the Nonpoint Assessment results which showed a relatively weak score in the 'Development' category.

Working with the Town's Deputy Supervisor and the Town's special Stormwater Committee, Genesee/Finger Lakes Regional Planning Council (G/FLRPC) provided significant assistance in developing EPOD language for the new zoning code, as well as helping the Town review various model Sediment Control and Stormwater Management Laws as required by the Stormwater Phase II Regulations. The development of the EPOD, as with the other case study examples, was an iterative process whereby an initial model was presented and the committee and G/FLRPC staff went through rounds of editing to make the desired changes. See Appendix E3 for the EPOD language that was developed for Ulysses.

Town of Ulysses



Aspects that greatly helped the process in Ulysses include:

- The presence, most likely due to a location near Cornell University, of engaged civic involvement and significant expertise of the people involved (for example, one of the members of the municipal Stormwater Committee was a professor of environmental science at Cornell)
- Adequate municipal staff, both administrative and enforcement. The impression G/FLRPC received in Ulysses was that the Town is closer to providing enough paid people-hours to deal with issues rather than overly relying on part time or volunteer efforts.
- A deep and abiding concern for environmental protection. In Ulysses, the impression was the Town is concerned about the environment for its own sake, and did not need to be convinced that environmental protection is in its best interest.

C. Town of Groveland, Livingston County

(Conesus Lake Watershed)

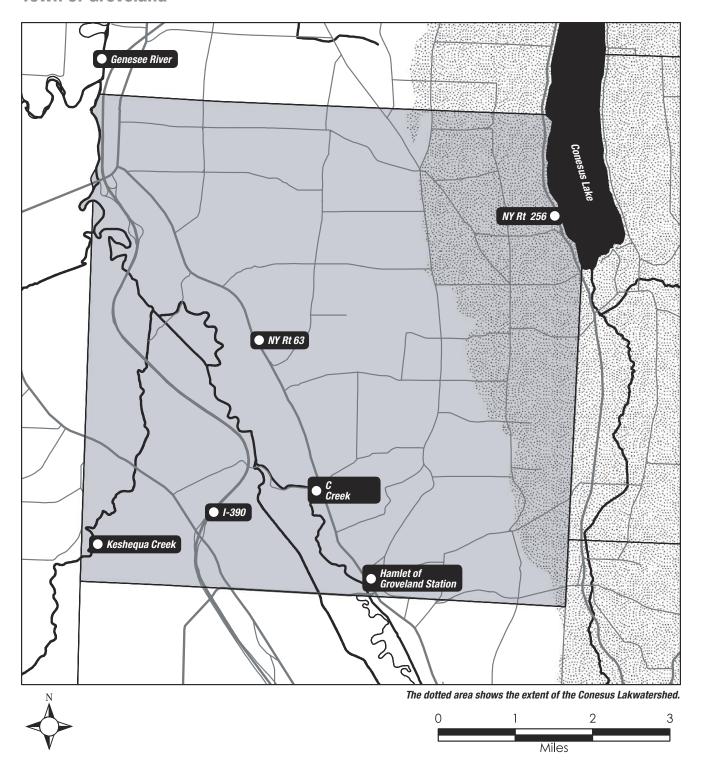
The Town of Groveland lies within the central southern portion of the Conesus Lake watershed. The Town covers an area of 38.5 square miles, 19.9 percent of which lies within the Conesus lake watershed. Groveland has approximately 2 miles of shoreline on Conesus Lake.

According to the 2000 Census, the Town of Groveland contains 3,853 people. The Town experienced a population decline of 11.5 percent between

1960 and 1980 but then an increase of 80 percent between 1980 and 2000. The median age in Groveland is 35.9 and the average household size is 2.63 persons. Median household income is \$46,797, with a poverty rate of 7.7 percent. There are 648 housing units in the Town, 6.1 percent of which have been built since 1990. The median value of owner-occupied homes is \$91,800.

After review of the Nonpoint Assessment results, and consideration of local priorities, the Town of Groveland identified three gaps in its land use review and control laws. First, the Town wanted to adopt a Junk Storage Law, which not only serves to protect the aesthetics of the Town, but also its environment and water resources. This law was developed by Genesee/Finger Lakes Regional Planning Council (G/FLRPC), based on a Department of State model, with the active input of the Town's Planning Board. Second, the Town had a significant issue with dock placement problems on Conesus Lake, especially with regard to coves and bays. Working with the Planning Board and the Code Enforcement Officer, G/FLRPC provided revisions to the existing Docks and Moorings Law. Finally, the Town had a zoning ordinance dating from 1966, with several amendments over time, that was very difficult to read and use. G/FLRPC re-codified this zoning ordinance, integrating the changes since 1966, and provided a clear, concise, land use regulatory tool for the Town. While perhaps not the most "glamorous" water resource protection tool, having a zoning law that is easy to use and reference should not be underestimated.

Town of Groveland



Aspects that greatly helped the process in Groveland include:

- A very dedicated and engaged code enforcement officer who regularly attended and participated in Planning Board meetings. This high level of integration between planning and enforcement is beneficial and is not seen in all municipalities.
- An open-minded, thoughtful, and dedicated Planning Board.
- The presence of a Planning Board secretary who was not a member of the board itself. This position is valuable in that it oversees many of the administrative functions of the board and frees the board members, who, after all, are volunteers, to focus on the core issues of land use planning.

Appendix A

Organizations, Agencies, and Entities Involved in Water Resource Protection

The following summary of local, state, federal, and international programs, agreements, jurisdictions, rules and regulations that govern and affect water resources in New York State shows the many entities involved. Every attempt has been made to compile a comprehensive list of the most relevant and useful information. The reader should not assume any order of significance between programs or agencies due to their placement herein.

A1 Local and County Entities

a. Water Quality Coordinating Committee (WQCC)

The Water Quality Coordinating Committee (WQCC) represent municipalities, agencies and organizations that conduct planning, education, regulation or operations that affect water quality. The WQCC identifies water quality problems, prioritizes needed actions, seeks funding for projects, coordinates programming and recommends policy to protect and improve water resources in the County and its watersheds.

b. Soil and Water Conservation Districts (SWCD)

www.agmkt.state.ny.us/soilwater/home.html

As stipulated in the New York State Soil and Water Conservation Districts Law, county soil and water conservation districts may be created through an act by the County Legislature or Board of Supervisors. SWCDs play a largely prescriptive role in the monitoring and assessment of both public and private water and soil quality, as well as in the design and implementation of any necessary mitigation plans. Cooperation between local and state agencies is encouraged under the SWCD law, although state and federal lands do not fall within the jurisdiction of either county or municipal governments, making cooperative agreements strictly voluntary. SWCDs play a pivotal role in watershed, recreation and conservation planning, management, stewardship and education and outreach activities across New York.

c. County Health Departments

County Health Departments manage and regulate county sanitary codes and are responsible for onsite sewage disposal systems. Counties without health departments may assume responsibility for upholding the New York State Sanitary Code by adopting their own sanitary codes, which may be more stringent than the State's. In a county with neither a health department nor a code, the local code enforcement officer administers the New York State Sanitary Code.

d. Local Government Programs

In New York State, local municipalities have significant land use powers that can be used to effectively address a wide variety of environmental issues. The comprehensive plan, zoning and a host of tools such as site plan review, subdivision regulation, erosion and sediment control ordinances and special use permits can be used separately or in combination to produce the desired environmental outcomes of a community in a specific area or throughout an entire jurisdiction. Often municipalities can hire an engineering or planning consultant to perform drainage studies or environmental impact assessments that inform local leaders and citizens how to apply land use planning authority wisely in regard to water quality and quantity.

A2 New York State Programs

a. New York State Department of State (NYSDOS), Division of Coastal Resources

www.dos.state.ny.us

The Department of State's Division of Coastal Resources works with communities throughout New York State to help them make the most of what their waterfronts have to offer. One specific program area covered by the Division includes the Local Waterfront Revitalization Program (LWRP). The LWRP is a locally prepared, comprehensive land and water use program for a community's natural, public, working waterfront, and developed coastal area. The document provides a comprehensive structure within which critical coastal issues can be addressed.

There are 250 Significant Coastal Fish and Wildlife Habitat (SCFWH) sites designated statewide. The boundaries for each designated site are mapped in the Division of Coastal Resources Coastal Atlas. For each designated SCFWH site, a habitat map and narrative are created that provide site-specific information, including a description of the habitat, its fish and wildlife values, and an impact assessment.

b. New York State Department of Environmental Conservation (NYSDEC)

www.dec.state.ny.us

The New York State Department of Environmental Conservation exists to "conserve, improve, and protect New York State's natural resources and environment, and control water, land and air pollution, in order to enhance the health, safety and welfare of the people of the state and their overall economic and social well being."

The DEC has evolved to include many divisions, each charged with a host of important duties and responsibilities.

1. Office of Administration, Division of Environmental Permits

The Division of Environmental Permits manages a system of permits known as the Uniform Procedures Act (UPA) permits. These permits protect New York's air, water, mineral, and biological resources. Administering these permits requires that the public is informed concerning:

- Permit applications
- Opportunities to provide information concerning a particular application,
- Opportunities to review and comment on any environmental impact statements and other documents that may become part of the application.
- Participation in any hearings concerning these applications.
- State Environmental Quality Review Act (SEQRA)

The State Environmental Quality Review Act (SEQRA) requires all state and local government agencies to consider environmental impacts equally with social and economic factors during discretionary decision-making. This means these agencies must assess the environmental significance of all actions they have discretion to approve, fund or directly undertake. Additional

information on Environmental Impact Assessment in New York State is found at www.dec. state.ny.us/website/dcs/seqr

2. New York State Freshwater Wetlands Act

The NYSDEC has classified regulated freshwater wetlands (New York State Freshwater Wetlands Act, ECL 24-0403) according to their respective function, values and benefits. Wetlands may be Class I, II, III or IV. Class I wetlands are the most valuable and are subject to the most stringent standards. A wetland must be 12.4 acres or larger for protection under the Freshwater Wetlands Act. Smaller wetlands may be protected when the NYSDEC Commissioner determines they have unusual local importance in providing one or more of the wetland functions described in Article 24. The wetland buffer zone, an adjacent area that extends 100 feet from the wetland boundary, may also be regulated.

3. Regulation of Dams

The Dam Safety Unit of the NYSDEC is responsible for safety inspection of dams, technical review of proposed dam construction or modification, monitoring of remedial work for compliance with dam safety criteria, and emergency preparedness.

4. Office of Natural Resources and Water Quality, Division of Fish, Wildlife and Marine Resources

The Division of Fish, Wildlife and Marine Resources is comprised of the Bureaus of Fish and Wildlife Services, Fisheries, Habitat, Marine Resources, and Wildlife, as well as Division-level offices. Staff is located throughout the state in Regional Offices, Program Headquarters Offices and Field Stations.

5. Comprehensive Wildlife Conservation Strategy

In order to make the best use of the State Wildlife Grants program, Congress charged each state and territory with developing a statewide Comprehensive Wildlife Conservation Strategy. These strategies will provide an essential foundation for the future of wildlife conservation and a stimulus to engage the states, federal agencies and other conservation partners to strategically think about their individual and coordinated roles in prioritizing conservation efforts in each state and territory.

6. Division of Lands and Forests

The Division of Lands and Forests manages public lands in New York State and provides leadership in forestry and forest management. The Department of Environmental Conservation cares for about four million acres of state owned land or 13 percent of the land area of New York State. This includes the Adirondack and Catskill Forest Preserves, State Forests, Unique Areas and the State Nature and Historical Preserve. The Division of Lands and Forests is responsible for the management, protection and recreational use of these lands, the care of the people who use these lands and the acquisition of additional lands to conserve unique and significant resources.

The Division of Lands and Forests is made up of four bureaus: Forest Preserve Management, Private Land Services, Real Property and State Land Management.

7. New York State Open Space Conservation Plan

New York's Open Space Conservation Plan serves as the blueprint for the State's land conservation efforts, which during the past several years has conserved more than 394,000 acres of land across the State with an investment of \$378 million in Environmental Protection Fund and Clean Water/Clean Air Bond Act funds.

The Open Space Plan contains: a comprehensive description of programs and policies that affect the conservation of the State's open space resources; a compilation of major conservation successes accomplished under the plan; a list of priority projects; conservation strategies for major resource areas; evaluation and criteria used to determine Environmental Protection Fund (EPF) and Clean Water/Clean Air Bond Act spending priorities; and recommendations by regional advisory committees and the Governor's Quality Communities Task Force to improve New York's open space conservation program.

8. Division of Water, New York State Water Quality Standards

The New York State water quality standards (6NYCRR parts 700-705) contain the classification system for New York State surface and groundwater. The standards and guidance values for surface water and groundwater quality and groundwater effluent limitations are employed in these regulations, including in the State Pollution Discharge Elimination System (SPDES). Details of this classification system can be found under Section 3.3.2.3.3. New York State Use and Protection of Waters.

9. NYSDEC Priority Waterbodies List

The NYSDEC Priority Waterbodies List (PWL) is required by Section 303(d) of the Clean Waters Act and is a section of the 305(b) Water Quality Report made by NYSDEC to the United States Environmental Protection Agency (USEPA). The PWL identifies waters that have one or more uses that are not fully supported or are threatened by conditions or practices that could lead to declining water quality. The PWL is used as a base for water program management.

10. New York State Use and Protection of Waters

Article 15 of the New York State Environmental Conservation Law provides for the protection of rivers, lakes, streams and ponds of the State. As stated by the NYSDEC:

Certain human activities can adversely affect, even destroy the delicate ecological balance of these important areas, impairing the uses of these waters. The policy of New York State, set forth in Title 5 of Article 15 of the Environmental Conservation Law (ECL), is to preserve and protect these lakes, rivers, streams and ponds.

The New York State Protection of Waters Regulatory Program is the implementing structure behind the legislation. The classification system works as follows:

All waters of the state are provided a class and standard designation based on existing or expected best usage of each water or waterway segment.

The classification AA or A is assigned to waters used as a source of drinking water. Classifica-

tion B indicates a best usage for swimming and other contact recreation, but not for drinking water. Classification C is for waters supporting fisheries and suitable for non - contact activities. The lowest classification and standard is D.

Waters with classifications A, B, and C may also have a standard of (T), indicating that it may support a trout population, or (TS), indicating that it may support trout spawning (TS). Special requirements apply to sustain these waters that support these valuable and sensitive fisheries resources. Small ponds and lakes with a surface area of 10 acres or less, located within the course of a stream, are considered to be part of a stream and are subject to regulation under the stream protection category of Protection of Waters.

To determine the classification and standard of a given watercourse, contact the Department of Environmental Conservation regional office responsible for the area in which the watercourse is located.

Certain waters of the state are protected on the basis of their classification. Streams and small water bodies located in the course of a stream that are designated as C(T) or higher (i.e., C(TS), B, or A) are collectively referred to as "protected streams," and are subject to the stream protection provisions of the Protection of Waters regulations.

The Protection of Waters Regulatory Program regulates five different categories of activities:

 Disturbance of bed or banks of a protected stream or other watercourse.

- Construction, reconstruction or repair of dams and other impoundment structures.
- Construction, reconstruction or expansion of docking and mooring facilities.
- Excavation or placement of fill in navigable waters and their adjacent and contiguous wetlands.
- Water quality certification for placing fill or undertaking activities resulting in a discharge of waters of the United States.

11. Stormwater

Beginning in the late 1980s, the U.S. government started the federal stormwater management program under the National Pollutant Discharge Elimination System (NPDES). The program's goal is to limit pollution of the nation's lakes, streams and rivers by runoff from construction sites and developed areas. It is administered by the US Environmental Protection Agency (EPA).

The New York State Department of Environmental Conservation (NYSDEC) has received delegation from the federal government to carry out the NPDES program, using a system of state permits called SPDES (State Pollutant Discharge Elimination System). The state has issued two non-industrial Stormwater Management General Permits under SPDES, one for construction site operators and one for regulated localities.

State/federal regulations require operators of construction sites and operators of Municipal Separate Storm Sewer Systems (MS4s) to obtain coverage under the appropriate general permit

(the size of the land disturbance or the population of the MS4 determine which entities must obtain permit coverage). The General Permits (GP) impose these obligations:

Under General Permit 02-01, Operators of Construction Sites must prepare formal written stormwater management plans, called Stormwater Pollution Prevention Plans (SWPPPs), before beginning construction, and must adhere to the provisions of these plans during and after construction;

Under General Permit 02-02, Operators of Municipal Separate Storm Sewer Systems (MS4s) must establish stormwater management programs that include elements specified in federal and state regulation. Certain parts of the local stormwater program must be embodied in a local law or other regulatory mechanism.

The term MS4 includes both municipal and non-municipal systems of underground pipes, and also systems of streets and roads with drainage, catch basins, curbs, gutters, ditches, man-made channels, or storm drains. An MS4 may be a municipal system, or one serving a large complex such as a military base, hospital or prison.

Phase I Stormwater Program

In 1990, EPA published rules establishing Phase I of the federal stormwater program. Phase I required operators of Municipal Separate Storm Sewer Systems (MS4s) in large urbanized areas (populations of 100,000 or greater) to implement storm water management programs that would

control polluted discharges. It also required operators of construction projects disturbing five acres or more of land to prepare SWPPPs. In New York State, the Phase I MS4 regulations were applied only to New York City, since large Upstate cities generally have combined sewer systems, rather than separate storm sewer systems.

Phase II Stormwater Program

The federal Storm Water Phase II rule expands the applicability of the stormwater program to smaller MS4s. The Phase II rule automatically applies to all MS4s located in "urbanized areas" as defined by the Bureau of the Census, plus additional MS4s designated by the state. The rule includes special requirements for stormwater management programs in areas where the receiving waters are already polluted.

Under Phase II, all operators of construction sites disturbing one acre or more of land must prepare SWPPPs, regardless of whether the construction sites are located within the jurisdiction of a regulated MS4. The rule requires regulated MS4s to establish stormwater management programs whose components match a federal standard. The municipality must integrate review of the required stormwater plans into local land use regulation.

DEC has established a list of MS4s in the state that are regulated under Phase II. (See NYSDEC's publication, Guidelines for Completing the Notice of Intent Based on SPDES General Permit (GP-02-02) for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems.)

Municipalities that have stormwater transport systems meeting the definition of MS4s, but that are not located within urbanized areas or specially designated by DEC, are not subject to stormwater Phase II regulation at this time.

New York State Implementation of Phase II

In New York State, the Phase II Stormwater Program is being implemented through two General Permits under SPDES, issued in January, 2003: the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-02-01), and the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems, or MS4s (GP-02-02).

GP-02-02 requires operators of regulated MS4s to establish stormwater management programs that reduce the discharge of pollutants to the maximum extent practicable to protect water quality. Stormwater discharges from regulated MS4s must satisfy any applicable water quality requirements of the New York State Environmental Conservation Law and the federal Clean Water Act.

The federal rule requires stormwater management programs in regulated MS4s to include six Minimum Control Measures established by EPA (or to demonstrate that the program provides at least equivalent protection). In New York State, stormwater management programs in all regulated MS4s must be fully developed and implemented by January 2008.

12. Concentrated Animal Feeding Operations

State Pollution Discharge Elimination System (SPDES) permits are also required for Concentrated Animal Feeding Operations (CAFOs). A CAFO can be described as an agricultural operation that confines a large number livestock into a barn or feed lot for a period of time. The 2004 General CAFO regulations define the animal number thresholds that constitute medium and large scale CAFOs, specific effluent management guidelines for those operations, as well as record keeping requirements. The Agricultural Environmental Management (AEM) program has been used to effectively bring farms into compliance with CAFO regulations.

c. NYS Department of Agriculture and Markets www.agmkt.state.ny.us

Article 25AA of the Agriculture and Markets Law authorizes the creation of local agricultural districts pursuant to landowner initiative, preliminary county review, state certification, and county adoption. As of April 2002, 341 agricultural districts existed statewide, containing approximately 21,500 farms and 8.6 million acres (about 30 percent of the State's total land area).

The purpose of agricultural districting is to encourage the continued use of farmland for agricultural production. The program is based on a combination of landowner incentives and protections, all of which are designed to forestall the conversion of farmland to non-agricultural uses. Included in these benefits are preferential real property tax treatment (agricultural assessment and special benefit assessment), and protections against overly restrictive local laws, government funded acquisition or construction projects, and private nuisance suits involving agricultural practices.

The Agricultural Environmental Management (AEM) Program helps farmers meet economic challenges and address environmental concerns while complying with regulatory requirements. AEM is a state-wide, voluntary, incentivebased program designed to help farmers better understand how their on-farm activities impact the environment. The program is designed to guide farmers through the regulatory framework, provide funding for on-farm improvements and encourage farmers to adopt methods that can effectively address issues such as nonpoint source water quality concerns and other pertinent agriculture environmental issues. In 2005, all counties in NYS are now required to develop a five-year strategic plan to guide AEM activities in priority areas of concern. Plans are required to emphasize the watershed approach to environmental management.

d. New York State Canal Corporation

www.canals.state.ny.us

The system of canals in New York are regulated and maintained by the New York State Canal Corporation, a currently a subsidiary of the New York State Thruway Authority, although likely to become an independent state entity in the near future.

The New York State Canal Recreationway Commission was created by the New York State Legislature in 1992 under Article XIII-A, Section 138-a of the Canal Law, to advise the Canal Corporation on canal-related activities.

Upon its formation, the Commission was instructed to develop a conceptual framework for fostering the development of the Canal System into a recreationway system. As a result, the Canal Recreationway Plan was prepared and was adopted by the Commission in August 1995. In September 1995 the Canal Corporation Board adopted the Recreationway Plan with the stipulation that a detailed schedule of costs, funding and phasing be prepared for the Plan's proposals prior to implementation.

The New York State Canal Revitalization Program was completed in September 1996. The \$32.3 million, five-year program presented a realistic approach to Canal System development. It focused on four major elements: Canal Harbors, Canal Service Port and Lock Projects, the Canalway Trail, and a Canal System Marketing Plan.

In addition to maintaining and periodically revising the Canal Recreationway Plan, the primary responsibility of the Commission is to make recommendations concerning the future of the Canal System.

A3 Federal Programs

a. US Environmental Protection Agency (EPA)

www.epa.gov

The mission of the EPA is to protect human health and the environment. Developing and enforcing environmental regulations, providing financial assistance, performing environmental research, sponsoring and promoting partnerships and programs, and monitoring hazardous materials and reporting related information to the public are several of the many varied duties of the EPA. While the EPA is the primary federal body behind such regulations as the Endangered Species Act, the Clean Air Act and the Clean Water Act, enforcement of most, if not all, of these regulations is generally delegated to the New York State Department of Environmental Conservation (DEC). The EPA in turn provides considerable sources of funding to be used by the responsible state agencies for enforcement and implementation of policies outlined in the federal laws and regulations.

Selected Major Federal Environmental Laws and Regulations

1. National Environmental Policy Act of 1969 (NEPA); 42 U.S.C. 4321-4347.

NEPA is the basic national charter for protection of the environment. It establishes policy, sets goals, and provides means for carrying out the policy. In New York, the State Environmental Quality Review Act (SEQRA) is the substantive component of NEPA.

2. Clean Water Act; Water Pollution Prevention and Control, U.S.C. Title 33 Section 1251.

The Clean Water Act requires states to classify waters according to their best uses and to adopt water quality standards that support those uses. Section 404 of the Clean Water Act requires that anyone interested in depositing dredged or fill material into waters of the United States, including wetlands, must receive authorization for such activities. The U.S. Army Corps of Engineers (USACE) has been assigned responsibility for administering the Section 404 permitting process. As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. In most states, including New York, the NPDES permit program is administered by the state environmental agency. Thus, the New York State Department of Environmental Conservation administers the State Pollutant Discharge Elimination System (SPDES). Since its introduction in 1972, the NPDES permit program is responsible for significant improvements in the nation's water quality.

3. Concentrated Animal Feeding Operations (CAFO).

To be considered a CAFO, a facility must first be defined as an Animal Feeding Operation (AFO). Animal Feeding Operations (AFOs) are agricultural operations where animals are kept and raised in confined situations. AFOs generally congregate animals, feed, manure, dead animals, and production operations on a small land area. Feed is brought to the animals rather than the animals grazing or otherwise seeking feed in pastures. Animal waste and wastewater can enter water bodies from spills or breaks of waste storage structures (due to accidents or excessive rain), and non-agricultural application of manure to crop land. AFOs that meet the regulatory definition of a concentrated animal feeding operation (CAFO) have the potential of being regulated under the NPDES permitting program. An animal feeding operation (AFO) is a lot or facility (other than an aquatic animal production facility) where the following conditions are met:

- Animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and
- Crops, vegetation, forage growth, or postharvest residues are not sustained in the normal growing season over any portion of the lot or facility.
- An operation must meet the definition of an AFO before it can be defined or designated as a concentrated animal feeding operation (CAFO). Previous EPA regulations based the definition of CAFOs on the number of "animal"

units" confined. EPA no longer uses the term "animal unit," but instead refers to the actual number of animals at the operation to define a CAFO.

4. Clean Water Act; Water Pollution Prevention and Control, U.S. C Title 33 Section 1251.

The Clean Water Act requires states to classify waters according to their best uses and to adopt water quality standards that support those uses. Section 404 of the Clean Water Act requires that anyone interested in depositing dredged or fill material into waters of the United States, including wetlands, must receive authorization for such activities. The U.S. Army Corps of Engineers (USACE) has been assigned responsibility for administering the Section 404 permitting process.

5. The Endangered Species Act (ESA); 7 U.S.C. 136;16 U.S.C. 460 et seq. (1973).

The Endangered Species Act provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The U.S. Fish and Wildlife Service of the Department of the Interior maintains the list of 632 endangered species (326 are plants) and 190 threatened species (78 are plants).

6. The Safe Drinking Water Act (SDWA).

This act is the main federal law that ensures the quality of Americans' drinking water. The Safe Drinking Water Act was signed info law on December 16, 1974, to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996

and requires many actions that help protect public health and drinking water, including rivers, lakes, reservoirs, springs, ground water wells and other sources.

b. Natural Resource Conservation Service (NRCS), U.S. Department of Agriculture www.nrcs.usda.gov

The Natural Resource Conservation Service (NRCS) is a U.S. Department of Agriculture (USDA) agency that assists land owners with conserving soil, water and other natural resources. Services include Agricultural Conservation Plans, the Conservation Reserve Program, the Wetlands Reserve Program, preparation of Comprehensive Nutrient Management Plans, assistance to managing Confined Animal Feeding Operations (CAFOs) and technical assistance to farmers on water quality and erosion control issues.

The Resource Conservation and Development (RC&D) program is a national program that helps communities improve their economies through the wise use of natural resources. Currently there are 368 RC&D Areas designated for USDA assistance by the Secretary of Agriculture. The purpose of the RC&D program is to improve the capability of state, tribal and local units of government and local nonprofit organizations in rural areas to plan, develop and carry out programs for resource conservation and development. The NRCS provides administrative support for the RC&D program including office space and staff.

c. Army Corps of Engineers (ACE), U.S. Department of Defense

www.usace.army.mil

The US Army Corps of Engineers (USACE) is responsible for flood control, navigation, shore protection, environmental restoration, hazardous, toxic and radiological waste site management, and water resource management and regulation. Flood control includes dam construction and maintenance and control of lake levels. Navigation includes dredging of navigable waterways.

d. Fish and Wildlife Service (FWS), U.S. Department of the Interior

www.fws.gov

The U.S. Fish and Wildlife Service (USFWS) mission is to conserve, protect and enhance fish, wildlife and plants and their habitats for the continuing benefit of the American people. The USFWS helps protect a healthy environment for people, fish and wildlife and helps Americans conserve and enjoy the outdoors and our living treasures. The USFWS major responsibilities are for migratory birds, endangered species, certain marine mammals and freshwater and anadromous fish. The USFWS takes jurisdiction over listing for terrestrial and native freshwater species. Under the Endangered Species Act the USFWS determines critical habitat for the maintenance and recovery of endangered species and requires that the impacts of human activities on species and habitat be assessed.

e. National Parks Service (NPS),

U.S. Department of the Interior

www.nps.gov

The National park Service preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

Sites administered by the National Park Service in the Great Lakes region of New York State include the Fort Stanwix National Monument in Rome, Theodore Roosevelt Inaugural National Historic Site in Buffalo, Women's Rights National Historic Park in Seneca Falls, and the Erie Canal Heritage Corridor.

The Erie Canalway National Heritage Corridor was established on December 21, 2000 (P.L. 106-554, Title VIII, Sec. 801). According to the National Park Service, "National Heritage Areas are places designated by the US Congress where natural, cultural, historic and recreational resources combine to form a cohesive, nationally distinctive landscape arising from patterns of human activity shaped by geography." The Corridor covers 524 miles in Upstate New York and includes four navigable waterways: the Erie, Champlain, Oswego and Cayuga-Seneca Canals.

On June 17th, 2002, the National Park Service, in partnership with the State of New York, formalized the 27-member Erie Canalway National Heritage Corridor Commission. The purpose of this commission is to work with federal, state, and local authorities in creating and implementing a Canalway Plan for the corridor that fosters the integration of canal-related historical, cultural, recreational, scenic, economic and community development initiatives. In June 2005, the Draft Preservation and Management Plan and Environmental Assessment for the corridor was completed and made available for public review. This document and other information relative to the Canalway can be found at: www.eriecanalway.org.

f. United States Geologic Survey (USGS)

www.usgs.gov

The USGS offers an immense array of services and data related to hydrologic research and development, wildlife and fisheries management, invasive species, geographic information systems, mapping, costal management and watershed planning. Services include stream flow, flood and high flow, drought, groundwater, earthquake, mineral, and water resources information.

A4 International Programs

a. International Joint Commission (IJC)

www.ijc.org

The IJC is an independent, bi-national organization established by the Boundary Waters Treaty of 1909. Its purpose is to help prevent and resolve disputes relating to the use and quality of boundary waters and to advise Canada and the United States on related questions. Specific duties of the IJC include (but are not limited to):

- Reviewing the operation and effectiveness of the Great Lakes Water Quality Agreement
- Assessment and evaluation of the criteria used for regulating water levels on Lake Ontario and the St. Lawrence River
- Maintaining the general process in which the Remedial Action Plans and Lakewide Management Plans should proceed in order to restore the Beneficial Use Impairments of the Great Lakes.
- Support the establishment of ecosystemfocused watershed boards, in accordance with a 1998 request from the U.S. and Canadian governments. Core elements of the concept include recognizing local expertise and initiatives and coordinating among numerous organizations within the watershed

b. Great Lakes Commission (GLC)

www.glc.org

The Great Lakes Commission is a bi-national agency that promotes the orderly, integrated and comprehensive development, use and conservation of the water and related natural resources of the Great Lakes basin and St. Lawrence River. Its members include the eight Great Lakes states (New York, Pennsylvania, Ohio, Indiana, Michigan, Illinois, Wisconsin, and Minnesota) with associate member status for the Canadian provinces of Ontario and Québec. Each jurisdiction appoints a delegation of three to five members comprised of senior agency officials, legislators and/or appointees of the State governor or Provincial premier.

The Commission was established by joint legislative action of the Great Lakes states in 1955 (the Great Lakes Basin Compact) and granted Congressional consent in 1968. A Declaration of Partnership established associate membership for the provinces in 1999.

The GLC researches, compiles and reports a wide variety of information relative to the health and condition of the Great Lakes. Communicating relevant Great Lakes issues to members of congress, coordinating regional monitoring and restoration strategies and strengthening partnerships among federal, state and local agencies represent a small number of the roles and responsibilities addressed by the GLC.

c. Lakewide Management Plans (LaMP) for the Great Lakes

In conjunction with other international and state agencies, the EPA has developed the Lakewide Management Plan (LaMP) as a framework for integrating the myriad restoration and monitoring practices that have been taking place throughout the Great Lakes for decades. Each of the five Great Lakes has its own LaMP.

In 1987, the governments of Canada and the United States made a commitment, as part of the Great Lakes Water Quality Agreement (GLWQA) (see also, International Joint Commission listed previously in this section), to develop a Lakewide Management Plan (LaMP) for each of the five Great Lakes. According to the 1987 Agreement, LaMPs shall embody a systematic and comprehensive ecosystem approach to restoring and protecting beneficial uses in ... open lake waters, including consultation with the public.

Agencies in charge of developing and implementing LaMP strategies include the United States Environmental Protection Agency (Region II), Environment Canada, the New York State Department of Environmental Conservation and the Ontario Ministry of the Environment (collectively referred to as "the Four Parties").

A5 Other Organizations

a. Cornell Cooperative Extension (CCE)

www.cce.cornell.edu

Cornell Cooperative Extension (CCE) has programs to conserve and ensure the quality of water supplies, promote environmental stewardship and community, agricultural and residential environmental enhancement, prepare youth to make informed environmental choices and enhance science education through the environment. CCE can be an important collaborator with water quality research, education and outreach activities in the watershed.

b. Finger Lakes/Lake Ontario Watershed Protection Alliance (FL/LOWPA)

www.fllowpa.org

The Finger Lakes-Lake Ontario Watershed Protection Alliance is an alliance of 25 counties in the Lake Ontario Watershed. Its mission is to protect and enhance water resources by promoting the sharing of information and resources related to the management of watersheds, to foster dynamic and collaborative watershed management programs and partnerships and to emphasize an ecosystem-based approach to water quality improvement and protection.

c. Regional Planning Councils

www.nysarc.com

www.dos.state.ny.us/lists/rgcoplan.html

A Regional Council is a public organization created to foster coordination among neighboring counties and to provide a regional approach to those concerns crossing local boundaries. It serves a grouping of counties whose residents are joined as a unit economically, socially and geographically. The local governments representing these counties have joined together voluntarily to address common economic and social concerns through the efforts of Regional Councils.

Programmatically, Regional Councils are multipurpose organizations with legal status. In New York State, Regional Planning Councils are voluntary associations and do not have the power to regulate or tax and are responsible to the representatives of the counties that make up their regions. The governing bodies of Regional Councils are primarily composed of local government officials and/or appointed representatives of local and county government.

Nationwide, there are more than 670 of these Regional Councils, representing almost all 50 states. In New York, there are nine Regional Councils that cover 43 of the 55 counties of Upstate New York:

- Capital District Regional Planning Commission
- Central New York Regional Planning & Development Board

- Genesee/Finger Lakes Regional Planning Council
- Herkimer-Oneida Comprehensive Planning Program
- Hudson Valley Regional Council
- Lake Champlain-Lake George Regional Planning & Development Board
- Southern Tier Central Regional Planning & Development Board
- Southern Tier East Regional Planning & Development Board
- Southern Tier West Regional Planning & Development Board

These councils are a vehicle for local governments to share their resources. Through communication, planning, policy making, coordination, advocacy, and technical assistance, Regional Councils serve the local governments and citizens in their region by dealing with issues and needs that cross city, town, county, and in some instances, state boundaries. Working with State and Federal agencies, Regional Councils also often serve as a liaison between upper level governments and local governments.

d. New York Sea Grant

www.seagrant.sunysb.edu

The New York Sea Grant (NYSG)is charged with formulating and funding scientific research and in disseminating science-based information for coastal decision-making and education, as well as a key collaborative force for wise management, economic development and conservation of

New York's coastal assets. NYSG is funded by the National Sea Grant College Program (part of NOAA and the US Dept. of Commerce) and New York State. Within New York, NYSG is a joint program of Cornell University and the State University of New York. A Board of Governors establishes NYSG policy and oversees its operations and budget. NYSG uses stakeholder advisory groups to obtain input and feedback on programmatic value and priorities. The program's main administrative offices are at Stony Brook University; extension administration is located at Cornell University campus in Ithaca. Research proposals are solicited from campuses throughout New York State and beyond. The proposals are rigorously reviewed to select high quality research that addresses the region's most pressing coastal issues and opportunities. Extension professionals are all specialists in one or more technical fields related to coastal resources and are located near their audiences at offices across the state.

e. Land Trusts

www.lta.org

The nation's 1,500-plus nonprofit land trusts, including 81 in New York State, are non-profit organizations that operate independently of government, and work with communities to help them protect America's land resources.

Land trusts have been extraordinarily successful, having protected more than 9.3 million acres of land, according to the National Land Trust Census.

Community-based land trusts are experts at helping interested landowners find ways to protect their land in the face of ever-growing development pressure.

They may protect land through donation and purchase, by working with landowners who wish to donate or sell conservation easements (permanent deed restrictions that prevent harmful land uses), or by acquiring land outright to maintain working farms, forests, wilderness, or for other conservation reasons.

f. The Nature Conservancy

www.nature.org

The mission of The Nature Conservancy (TNC) is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive.

TNC has a land protection and property acquisition program that is active in Upstate New York.

Appendix B

Glossary of Terms

accelerated erosion. see 'erosion'

algae. Microscopic plants, considered primary producers in the lake food web, capable of photosynthesis.

algal blooms. Massive growths of phytoplankton, commonly occurring in lakes in the spring. When the phytoplankton are profuse, the water may be stained bright green or blue and the lake rendered unfit for swimming or drinking.

bacterial decomposition. A gas producing process, which occurs when organic waste is broken down by bacteria naturally present in waste and in the soil used to cover a landfill. Organic wastes include food, garden waste, street sweepings, textiles, and wood and paper products.

best management practices (BMPs). Methods that have been determined to be the most effective, practical means of addressing a problem, usually of flooding or pollution.

brownfield. Land that is or was occupied by a permanent structure, which has become vacant, underused, derelict, or environmentally contaminated and has the potential for redevelopment.

Clean Water Act of 1972. National environmental law that regulates water pollution, enforced by the United States Environmental Protection Agency (USEPA). Amendments to the Clean Water Act in the 1980s led to the establishment of the NPDES and SPDES Stormwater Programs.

dissolved oxygen. The quantity of oxygen dissolved in the water. In lakes, the amount of oxygen dispersed in the water helps determine the degree of stratification, and the potential for depletion

of oxygen, fish and other aquatic organisms. Dissolved oxygen is affected by temperature (as water temperature decreases, increasing amounts of oxygen can be dissolved in water), time of day (photosynthetic plants create oxygen during the day, and use oxygen at night), and pollution (aerobic bacteria and other organisms require oxygen for the consumption of wastes).

easement. A legal agreement between a landowner and a land trust or government agency that permanently limits uses of the land in order to protect it for specific purposes, often historical or environmental.

erosion. The wearing away of the land surface by running water, wind, ice, or other geologic agents and by such processes as gravitational creep.

geologic erosion. Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

accelerated erosion. Erosion much more rapid than geologic erosion, mainly as a result of the actions of man or other animals or of a catastrophe in nature, for example, fire, that exposes a bare surface.

estuary. Partially enclosed coastal area at the mouth of a river where nutrient rich fresh water meets with salty ocean water.

eutrophication. The process whereby water bodies, such as lakes, estuaries, or slow-moving streams, gradually age. It occurs when the water bodies receive excess nutrients that stimulate plant

growth, which then reduces dissolved oxygen in the water causing plants to die. While this process usually takes thousands of years to occur, humans, through their various cultural activities, have greatly accelerated this process in thousands of lakes around the globe.

floodplain. The area that borders a water body and is subject to flooding on a periodic basis.

geologic erosion. see 'erosion'

greenway.

- 1. A linear feature or area of land that can be comprised of any number or combination of natural and cultural resources. Greenways link recreational, cultural and natural focal points while conserving open space. The term represents a conservation planning and management concept that is very flexible in its scope. Greenways may contain a mixture of public and privately owned land and they may extend over more than one political jurisdiction. Not all greenways have trails within them, but many do. Greenways vary considerably in length and width and they serve a variety of purposes. (Local Open Space Planning: A Guide to the Process, New York State Department of Environmental Conservation)
- 2. Undeveloped land, usually in cities, set aside or used for recreation or conservation. (Natural Resources Defense Council)
- 3. A linear open space; a corridor composed of natural vegetation. Greenways can be used to create connected networks of open space that include traditional parks and natural areas. (Sustainable Communities Network)

4. A corridor of various width, linked together with others in a network in much the same way as networks of highways and railroads have been linked. (Julius Gy. Fabos, author of *Greenways: The Beginning of an International Movement*)

herbicide. A chemical compound, applied in either liquid or granular form, used to kill undesired rooted vegetation and restrict further vegetation growth.

home rule. Generally, the concept of 'home rule' is that local municipalities have control over most or all of their own affairs. New York is considered to be a home rule state where local governments, once created, are largely free of interference from the State Legislature in local matters.

Home rule power is contained in the New York State Constitution. The State Constitution guarantees and requires that each county, city, town and village have a legislative body elected by the people of that government. Local legislative bodies are granted broad powers to adopt local laws in order to carry out the responsibilities accorded them.

Article IX of the State Constitution, entitled "Local Government," is commonly referred to as the "Home Rule" article, for it provides both an affirmative grant of power to local governments over their own property, affairs and government, and restricts the power of the State Legislature from acting in relation a local government's property, affairs and government only to general laws or to special laws upon home rule request.

hydro-seeding. Dissemination of seed under pressure, in a water medium.

impervious surface. Any surface that does not allow water to infiltrate, or soak into, the soil. Concrete, asphalt, and roofing materials are a few examples of impervious surfaces.

indigenous plants. Plants that are native to an area and biome.

invertebrate. An organism lacking a backbone or spinal column.

lacustrine. Of or pertaining to a lake.

leach field. A subsurface, porous soiled area generally associated with septic tanks. The unit serves the purpose of biologically treating sanitary sewage.

marine. Of or pertaining to the ocean.

mining. The process of extracting minerals and other geological materials from the earth.

municipal separate storm sewer system (MS4).

The term MS4 includes both municipal and non-municipal systems of underground pipes, and also systems of streets and roads with drainage, catch basins, curbs, gutters, ditches, man-made channels, or storm drains. An MS4 may be a municipal system, or one serving a large complex such as a military base, hospital or prison. In common usage, however, the term "MS4" is often used to refer to a municipality that must comply with the regulations of the SPDES Phase II Stormwater Program.

National Pollution Discharge Elimination System (NPDES). See 'State Pollution Discharge Elimination System (SPDES).'

native plants. See 'indigenous plants'

nitrogen. An odorless, colorless, and gaseous element that makes up approximately 78% of the Earth's atmosphere. While it is brought into

Earth's water supply each time it rains and is essential for plant and animal growth, it can also be problematic. It is considered a pollutant when nitrogen compounds are mobilized in the environment (i.e. runoff from manure or fertilized fields, discharged from septic tanks, or emitted from combustion engines, etc.)

nonpoint source pollution. Water pollution involving complex transport and delivery within a watershed. Unlike point source pollution, where the pollutants are discharged directly into a water body, nonpoint pollution is more diffuse and more difficult to control.

on-site wastewater treatment system (OWTS). A

wastewater treatment/disposal system by which an individual home or business cleans and disposes of wastewater on or near its site (as opposed to being piped to a common sewage treatment plant at some distance). A conventional OWTS relies largely on gravity and natural processes and is composed of a septic tank for pretreatment and a leach field for

treatment and disposal of the wastewater. Non-

conventional systems include anaerobic digesters

open space. Land that does not contain structures. Open space may be public parkland, or privately owned woodlands, fields, marshes, or agricultural land.

and other engineered solutions.

pesticide. A chemical compound used to eliminate or control insects which may include herbicides.

phase I. with regard to stormwater, see 'State Pollution Discharge Elimination System (SPDES)'

phase II. with regard to stormwater, see 'State Pollution Discharge Elimination System (SPDES)'

phosphorus. A non-metallic element that is a major constituent in the tissue of both plants and animals.It is an essential nutrient for plant growth.

point source pollution. Water pollution where the pollutants are discharged directly to a water body.

pollution. Undesirable change in the physical, chemical, or biological characteristics of the air, water, or land that can harmfully affect the health, survival, or activities of humans and other living organisms.

pond. An inland and still body of water smaller than a lake. Light penetrates all the way across the body of water and it is often shallow enough for rooted plants to grow throughout.

right-of-way. An area of land, usually linear, occupied or intended to be occupied by transportation and public use facilities, such as roadways, railroads, and utility lines.

riparian. Of or pertaining to a river or stream.

riparian area. Vegetated ecosystems along a river or stream through which energy, materials, and water pass. Riparian areas characteristically have a high water table and are subject to periodic flooding and influence from the adjacent river or stream.

salinization. Pedogenic process that concentrates salts at or near the soil surface because evapotranspiration greatly exceeds water inputs from precipitation.

sediment. Loose particles of clay, silt and sand that suspend in a body of water and eventually settle to the bottom. It is a natural component of the ecosystem of many water bodies, but in excessive

amounts, sediment creates harmful conditions for plants and animals.

During periods of rain or melting snow, soil and other particles flow off the land and into waterways. Soil erosion caused by wave and current action along shorelines and banks also contributes to sediment in water bodies.

- Sediment can smother benthic (bottomdwelling) plants and animals.
- Suspended sediment clouds the water, preventing light from penetrating to the leaves and stems of underwater grasses, or submerged aquatic vegetation.
- High concentrations of toxic materials also may be present in sediment, which further contaminate waterways.
- Sediment carries excess nutrients, particularly phosphorus, into water bodies, compromising water quality.
- Accumulations of sediment can clog waterways and ports, making boat traffic difficult or hazardous, and requiring dredging.

sediment and erosion control regulations. regulations intended to control soil erosion, sedimentation, and non-agricultural runoff from land-disturbing activities to prevent degradation of property and natural resources.

State Pollution Discharge Elimination System (SPDES). The state-administered program of Federal water quality regulations, or National Pollution Discharge Elimination System (NPDES). Since this regulatory program has been delegated by the Federal government to

State agencies in New York, it is known as the State Pollution Discharge Elimination System (SPDES). The stormwater program of SPDES has had, to date, two phases:

Phase I. Phase I began in 1990 and required operators of Municipal Separate Storm Sewer Systems (MS4s) in large urbanized areas (populations of 100,000 or greater) to implement storm water management programs that would control polluted discharges. It also required operators of construction projects disturbing five acres or more of land to prepare SWPPPs.

Phase II. Phase II began in 2003 and expanded the applicability of the stormwater program to smaller MS4s. The Phase II rule automatically applies to all MS4s located in "urbanized areas" as defined by the Bureau of the Census, plus additional MS4s designated by the state. The rule includes special requirements for stormwater management programs in areas where the receiving waters are already polluted.

Under Phase II, all operators of construction sites disturbing one acre or more of land must prepare SWPPPs, regardless of whether the construction sites are located within the jurisdiction of a regulated MS4. The rule requires regulated MS4s to establish stormwater management programs whose components match a federal standard. The locality must integrate review of the required stormwater plans into local land use regulation.

stormwater. Water that falls from the sky as rain or results from melting snow that does not infiltrate, or soak into, the soil.

stormwater Phase I. see 'State Pollution Discharge Elimination System (SPDES)'

stormwater Phase II. see 'State Pollution Discharge Elimination System (SPDES)'

subdivision. The legal division of a parcel of land into a number of lots for the purpose of development and sale. The subdivision and development of individual parcels must conform to the provisions of local laws and regulations related to land development.

urbanized area. an area is automatically designated as urbanized for purposes of the SPDES Stormwater Phase II program regulations if the population of the area is at least 50,000 and there is an overall population density of at least 1,000 people per square mile, based on the 2000 U.S. Census.

vascular plant. A plant that has vascular tissue to transport water, nutrients, and other metabolic products.

watershed. An area of land that drains into a body of water.

wetland. An area that is inundated or saturated by surface or groundwater on an annual, seasonal, or periodic basis, that displays hydric soils, and that typically supports or is capable of supporting water-loving vegetation.

Appendix C

List of Acronyms

ACE	see USACE	DWSRF	Drinking Water State Revolving Fund
ACP	Agricultural Conservation Program	EPA	Environmental Protection Agency
AEM	Agriculture Environmental Management	EPCRA	Emergency Planning and Community Right-To-Know Act
ASCS	Agricultural Stabilization and Conservation Service	EPOD	Environmental Protection Overlay District
BOD	Biochemical Oxygen Demand	EPF	Environmental Protection Fund
BLM	Bureau of Land Management	EIS	Environmental Impact Statement
BMP	Best Management Practice	FEMA	Federal Emergency Management
CBS	Chemical Bulk Storage		Agency
CCE	Cornell Cooperative Extension	FIFRA	Federal Insecticide, Fungicide and
CEO	Code Enforcement Officer	EDO	Rodenticide Act
CERCLA	Comprehensive Environmental	FPO	Flood Prevention Ordinance
	Response, Compensation and Liability	FOLA	Federation of Lake Associations
~~ ·	Act	FSA	Farm Service Agency
CPA	Conservation Priority Area	GIS	Geographic Information System
CREP	Conservation Reserve Enrollment	GP	General Permit
CDD	Program	GWDR	Ground Water Disinfection Rule
CRP Conservation Reserve Program		IO	Inter-municipal Organization
CSGWPI	Comprehensive State Ground Water Protection Program	IUP	Intended Use Plan
CSO	Combined Sewage Overflow	IWI	Index of Watershed Indicators
CWS	Community Water System	LWRP	Local Waterfront Revitalization Plan
CWA	Clean Water Act	MCL	Maximum Contaminant Level
		MCLG	Maximum Contaminant Level Goal
CWSRF	Clean Water Act State Revolving Fund	MLRL	Mined Land Reclamation Law
CZARA	Coastal Zone Act Reauthorization Amendments	MNA	Municipal Nonpoint Assessment
DBP	Disinfection By-Products	MOSF	Major Oil Storage Facility
DEC	see NYSDEC	MS4	Municipal Separate Storm Sewer
DOD	Department of Defense		System (often used in reference to the
DOE	Department of Energy		operator of a storm sewer system, such as a municipality)
DOH	see NYSDOH	NCWS	Non-Community Water System
DOI	Department of Interior	NEP	National Estuary Program
DOS	see NYSDOS	NEPA	National Environmental Policy Act
DOT		NFIP	,

Appendix C

NOAA	National Oceanic and Atmospheric	SHPO	State Historic Preservation Office	
NPDES	Administration National Pollutant Discharge	SPDES	State Pollution Discharge Elimination	
NFDES	National Pollutant Discharge Elimination System	SSA	System Sole Source Aquifer	
NPS	Nonpoint Source	STORET	•	
NRCS	Natural Resource Conservation Service	STORET	Waterways data system	
NYSDEC	New York State Department of	STP	Sewage Treatment Plant	
	Environmental Conservation	SWAP	Source Water Assessment Program	
NYSDOH	New York State Department of Health	SWCD	Soil and Water Conservation District	
NYSDOS	New York State Department of State	SWCP	State Wetlands Conservation Plan	
NYSDOT	New York State Department of	SWP	Source Water Protection	
NACODDO	Transportation	SWPPP	Stormwater Pollution Prevention Plan	
NYSORPS	New York State Office of Real Property Services	SWTR	Surface Water Treatment Rule	
OPRHP	Office of Parks, Recreation, and Historical Preservation	TDR	Transfer of Development Rights	
011111		TMDL	Total Maximum Daily Load	
OSM	Office of Surface Mining	TOT	Time-of-Travel	
OWTS	On-site Wastewater Treatment System	UIC	Underground Injection Control	
PB	Planning Board	USACE	United States Army Corps of	
PBS	Petroleum Bulk Storage		Engineers	
PDR	Purchase of Development Rights	USDA	United States Department of Agriculture	
PUD	Planned Unit Development	USEPA	see EPA	
PWL	Priority Waterbodies List	USGS	United States Geological Survey	
PWS	Public Water System Resource Conservation and Recovery Act	UWA	Unified Watershed Assessment	
RCRA		WHP	Wellhead Protection Program	
RMP	Resource Management Plan	WHPA	Wellhead Protection Area	
RPS	Real Property Service (often in refer-	WQCC	Water Quality Coordinating	
-	ence to the county-level department)		Committee	
SCS	Soil Conservation Service	ZBA	Zoning Board of Appeals	
SDWA	Safe Drinking Water Act	ZEO	Zoning Enforcement Officer	
SDWIS	Safe Drinking Water Information System			
SEQR(A)	State Environmental Quality Review (Act)			

Appendix D

Model Law Overview

This appendix is designed to give an overview on the model laws and best practices that were researched and compiled. These include:

- 1. Comprehensive Plan, Town of Italy
- 2. Zoning, Town of Ulysses
- 3. Zoning, (Environmental Protection Overlay District), Town of Ulysses
- 4. Subdivision Regulations, Town of Middlesex
- 5. Stormwater Management and Sediment and Erosion Control, New York State Department of Environmental Conservation, New York State Department of State
- 6. Erosion and Sediment Control, New York State Department of Environmental Conservation, New York State Department of State
- 7. Erosion and Sediment Control with Riparian Protections, *Town of Geneseo*
- 8. Wetlands and Watercourse Protection, Town of Pawling
- 9. Timber Harvesting, Canandaigua Lake Watershed Council
- 10. Onsite Wastewater System Model Law, Ontario County Planning Department
- 11. Junk Storage Model Law, Town of Groveland
- 12. Municipal Practices, Warren County Soil and Water Conservation District, Lake George Association
- 13. Inter-municipal Agreement Model

For the full text of these models, please see Appendix E, which is on the CD-ROM included with this document or available in hardcopy as a separately bound document.

1. Comprehensive Plan, Town of Italy

A comprehensive plan is the basis for sound land use decision making at the local level in New York State. Decisions on how the land is used and developed have significant water quality implications. Therefore, a comprehensive plan is an important component for water resource protection at the local level.

The Town of Italy developed its very first comprehensive plan in the nearly 200 year history of the town as part of the *Local Laws to Protect Finger Lakes Water Quality Project*. Highlights from this plan follow can be found in Appendix E1 (bound separately; available on CD-ROM).

2. Zoning, Town of Ulysses

Zoning is the legal document that a municipality can use to regulate development and implement the goals and visions as expressed in its comprehensive plan. Therefore, like a comprehensive plan, zoning is an important component for water resource protection at the local level.

The Town of Ulysses has been engaged in a zoning revision process. In the Town's draft zoning document, an innovative technique for water resource protection was integrated into the language. Within many of the zoning districts, such as B1-Business District which can be found in Appendix E2 (bound separately; available on CD-ROM), a section on Buffer Areas (Section 11.6) was included. This provision requires all new structures to be setback 50 feet from the centerline of any watercourse and all state and federally designated wetlands. Thus, water

resource protection is achieved through a fairly standard tool of zoning – the setback. It is a simple technique that can have a great impact on water resource protection.

3. Zoning (Environmental Protection Overlay District), Town of Ulysses

An overlay district is a zoning technique that selects certain areas of the municipality based on criteria such as: main street retail areas, historic districts, scenic views, steep slopes, wetlands, woodlots, or other environmentally or culturally sensitive areas. These areas are defined as an overlay district with certain regulations different from the rest of the zoning law. As the name suggests, these districts overlay the underlying zoning designation (such as commercial, residential, etc.). The underlying zoning, and all of its regulations, remain in place. The overlay district simply adds another set of regulation processes to help protect these sensitive areas.

One of the more common uses of overlay districts is for environmental protection. In this case, they are called 'environmental protection overlay districts' or EPODs. As part of its zoning revision process, the Town of Ulysses considered using an EPOD to protect a fragile area within the Town, steep slopes. These slopes are generally near Cayuga Lake and the increased level of oversight for development on these slopes also protects the water quality of Cayuga Lake by preventing improper construction techniques that lead to erosion and sedimentation. The EPOD language can be found in Appendix E3 (bound separately; available on CD-ROM),

4. Subdivision Regulations, Town of Middlesex

Along with the comprehensive plan and zoning law, subdivision regulations form the three basic land use regulatory tools available to municipalities in New York State. While there are many more specialized tools and techniques, this suite of documents give municipalities the potential for a great deal of control over how their community develops.

The Town of Middlesex developed subdivision regulations as part of the *Local Laws to Protect Finger Lakes Water Quality Project*. It did not have this key land use control tool and foresaw development pressures occurring in this rural and very scenic Town at the southern end of Canandaigua Lake.

The complete Subdivision Regulations can be found in Appendix E4 (bound separately; available on CD-ROM).

5. Stormwater Management and Sediment and Erosion Control, New York State Department of Environmental Conservation, New York State Department of State

Controlling stormwater runoff and the resulting erosion from areas where the soil as been disturbed, such as construction sites, is a key aspect of protecting water quality. The Federal Clean Water Act, which in New York State is administered by the State Department of Environmental Conservation, mandates that all construction activities that disturb one acre or more of soil must demonstrate how the site work will prevent erosion and sedimentation. Proce-

durally, this is accomplished by having the owner of the parcel being developed file what is called a 'Notice of Intent' (NOI) with the DEC.

As has been noted, however, the DEC can use assistance in making sure what the developer says will be done is actually done. Municipalities are encouraged (those in urbanized areas, the so-called "Regulated MS4s," are required) to adopt local laws that require developers to get a local permit for construction activities that disturb soil. By implementing a local permitting process, the municipality is able to enforce good development practices and ideally protect water quality. Because so much of the development permitting process, from zoning approval to building permits, happens at the local level, ensuring that the construction process proceeds in an appropriate manner should happen locally.

The model law in Appendix E5 (bound separately; available on CD-ROM) was developed by the Department of Environmental Conservation and the Department of State so that municipalities could implement local oversight of construction and ground disturbance activities. the Regulated MS4s adopting of this law is a requirement (one of the six Minimum Control Measures). Although this law is designed to ensure compliance with the Minimum Control Measures of the Stormwater Phase II Regulations for regulated MS4s, the model law is certainly applicable for any municipality in New York State. However, for non-regulated municipalities, there is the option of adopting a simpler model Stormwater Management law, which can

be found in Appendix E6 (bound separately; available on CD-ROM). Regardless of whether your municipality is a regulated MS4 or not, all municipalities should consult the 2004 DEC/DOS publication *Stormwater Management Guidance Manual for Local Officials*.

6. Erosion and Sediment Control, New York State Department of Environmental Conservation, New York State Department of State

Controlling stormwater runoff and the resulting erosion from areas where the soil as been disturbed, such as construction sites, is a key aspect of protecting water quality. The Federal Clean Water Act, which in New York State is administered by the State Department of Environmental Conservation, mandates that all construction activities that disturb one acre or more of soil must demonstrate how the site work will prevent erosion and sedimentation. Procedurally, this is accomplished by having the owner of the parcel being developed file what is called a 'Notice of Intent' (NOI) with the DEC.

As has been noted, however, the DEC can use assistance in making sure what the developer says will be done is actually done. Municipalities are encouraged (those in urbanized areas, the so-called "Regulated MS4s," are required) to adopt local laws that require developers to get a local permit for construction activities that disturb soil. By implementing a local permitting process, the municipality is able to enforce good development practices and ideally protect water quality. Because so much of the development permitting process, from zoning approval to building

permits, happens at the local level, ensuring that the construction process proceeds in an appropriate manner should happen locally.

A model law was developed by the Department of Environmental Conservation and the Department of State so that municipalities could implement local oversight of construction and ground disturbance activities. Unlike the model law described in the previous section, however, the model contained in Appendix E6 (bound separately; available on CD-ROM) does not fulfill the requirements for Regulated MS4s. However, for non-regulated municipalities, this simpler model may be useful as a first step towards greater oversight of construction activities in the community. Regardless of whether your municipality is a regulated MS4 or not, all municipalities should consult the 2004 DEC/DOS publication Stormwater Management Guidance Manual for Local Officials.

7. Erosion and Sediment Control with Riparian Protections, *Town of Geneseo*

Controlling stormwater runoff and the resulting erosion from areas where the soil as been disturbed, such as construction sites, is a key aspect of protecting water quality. The Federal Clean Water Act, which in New York State is administered by the State Department of Environmental Conservation, mandates that all construction activities that disturb one acre or more of soil must demonstrate how the site work will prevent erosion and sedimentation.

As has been noted, however, the DEC can use assistance in making sure what the developer says

will be done is actually done. Municipalities are encouraged (those in urbanized areas, the so-called "Regulated MS4s," are required) to adopt local laws that require developers to get a local permit for construction activities that disturb soil. By implementing a local permitting process, the municipality is able to enforce good development practices and ideally protect water quality. Because so much of the development permitting process, from zoning approval to building permits, happens at the local level, ensuring that the construction process proceeds in an appropriate manner should happen locally.

The third and final model for stormwater management, sediment and erosion control laws follows. The draft law from the Town of Geneseo in Appendix E7 (bound separately; available on CD-ROM), is an example of a locally developed Sediment and Erosion Control Law for a non-regulated MS4, with recently proposed amendments to the law that would strengthen protection for riparian areas in the Town. This model of riparian protection contrasts with the model from the Town of Ulysses (see Appendix E2 (bound separately; available on CD-ROM) which integrates riparian buffers into the zoning law.

This draft law for the Town of Geneseo *does not* fulfill the requirements for Regulated MS4s (See Appendix E5, bound separately; available on CD-ROM). However, for non-regulated municipalities, this model may be useful as a first step towards greater oversight of construction activities and riparian protection in the community.

8. Wetlands and Watercourse Protection, Town of Pawling

Preserving wetlands and undeveloped buffer areas around wetlands and water courses is an important step in protecting water quality. Protecting these areas from development allows them to function closer to their natural state and act as natural filtering systems and retention areas for stormwater runoff. Aside from the many ecological benefits of their preservation, utilizing wetlands and buffer areas for stormwater management can sometimes reduce the costs of having to construct engineered solutions to stormwater problems.

In other model law overviews in this Appendix, riparian protections were integrated into Zoning, as with the Town of Ulysses (Appendix E2, bound separately; available on CD-ROM) or a Sediment and Erosion Control Law, as with the Town of Geneseo (Appendix E7, bound separately; available on CD-ROM). In the example in Appendix E8 (bound separately; available on CD-ROM), the Town of Pawling uses a different method to protecting wetlands and watercourses through local law. It is a very thorough approach and one that municipalities may find useful in their communities.

9. Timber Harvesting, Canandaigua Lake Watershed Council

Any time vegetation is removed and soil exposed, the potential for damaging erosion and sedimentation exists. Most of the time, soil disturbance is thought of in association with development and construction. But harvesting timber is another activity that disturbs soil and which municipalities can regulate.

The complete Timber Harvesting Law can be found in Appendix E9 (bound separately; available on CD-ROM).

10. Onsite Wastewater System Model Law,

Ontario County Planning Department

Onsite wastewater treatment systems are widely used in rural areas not served by public sewer systems. When designed and maintained properly, onsite wastewater treatment is an effective way to deal with the issue. However, onsite systems do require regular maintenance and have finite life spans. Municipalities can regulate onsite systems to ensure there is a procedure in place for regular inspections and maintenance.

The complete Onsite Wastewater System Model Law can be found in Appendix E10 (bound separately; available on CD-ROM).

11. Junk Storage Model Law, Town of Groveland

While junkyards may not be the first thing that is thought of when dealing with water quality issues, how and where junk is stored does impact a municipality's waterways. Junk – cars, other vehicles, appliances- all can leak toxic substances which can find their way into the nearest waterbody.

Careful consideration of how and where junk is permitted to be stored is a component of a municipality's overall local water quality strategy. The complete Junk Storage Model Law can be found in Appendix E11 (bound separately; available on CD-ROM).

12. Municipal Practices, Warren County Soil and Water Conservation District, Lake George Association

Not all water resource protection has to occur under the local laws. The procedures and practices that municipalities follow as part of the regular activities, such as road and bridge maintenance and snow removal, can also help to improve water quality.

A great example of this is a program from the Adirondack region to stabilize roadside drainage ditches and swales as routine road maintenance is conducted. The Warren County Soil and Water Conservation District serves as project manager for the scheduling and use of a state-of-the-art, mobile hydro-seeding unit. This equipment is used to quickly establish a vegetative cover on soil surfaces, particularly those recently excavated, to reduce erosion. In its first year of operation, Soil and Water Conservation District staff spread over 2,000 pounds of seed on 25 sites. This initiative has been made possible by a \$40,000 grant from the New York State Environmental Protection Fund-Local Waterfront Revitalization Program. The hydro-seeding service is provided free of charge to all communities within the Lake George Watershed as part of the ongoing campaign to reduce non-point source pollution.

Another example of good municipal practices is the shared use of a mobile hydro-vacuum. Under the guidance of the Lake George Association, municipalities are encouraged to use a mobile hydro-vacuum unit to clean sediment catch basins throughout the watershed. Use of this equipment has been progressing rapidly, as municipalities incorporate it into their annual maintenance programs. The periodic cleaning of such facilities allows them to work more effectively to collect sediment that would otherwise enter the Lake. Purchase of this equipment was financed through a \$55,000 grant from the New York State Environmental Protection Fund-Local Waterfront Revitalization Program, with matching funds provided by the Lake George Association.

13. Inter-municipal Agreement Model

The natural flow of water does not reflect or respect the political boundaries that humans have drawn on the landscape. Therefore, working cooperatively with the other municipalities in a given watershed is a crucial step towards meaningful action. Regardless of whether your community lies within a lake watershed, a stream or river watershed, or the direct drainage watershed to Lake Erie, Lake Ontario, or the Atlantic Ocean, there is opportunity for cooperation.

The complete Inter-municipal Agreement Model can be found in Appendix E13 (bound separately; available on CD-ROM).

Appendix E1

Comprehensive Plan

Town of Italy

A comprehensive plan is the basis for sound land use decision making at the local level in New York State. Decisions on how the land is used and developed have significant water quality implications. Therefore, a comprehensive plan is an important component for water resource protection at the local level.

The Town of Italy developed its very first comprehensive plan in the nearly 200 year history of the town as part of the Local Laws to Protect Finger Lakes Water Quality Project. Highlights from this plan follow. In particular, the sections on Water Resources and Recreation and Natural Resource Recommendation #5 are particularly relevant for water resource protection. These two passages are just a couple examples of the type of information that can be integrated into a municipality's comprehensive plan.

SECTION 1 - INTRODUCTION

1.1 What is a Comprehensive Plan?

The fundamental nature of a Comprehensive Plan is to guide future decision making in a town. It provides the overall framework for future public and private investment and policy development. Many forces influence a town: the regional economy, state and federal agencies and regulations, local laws, developers, and the actions of individual property owners. By clearly stating the Town's goals and following them, the town can help guide these influences and determine its own future. The Comprehensive Plan provides a broad outline for the basis of land use and development. It encompasses the aspects of Italy that make it truly unique: its history, geographic location, scenic beauty, and rural town character.

According to New York State Law, a Town can prepare a comprehensive plan which then is reviewed by the public and adopted by the Town Board. This approval process does not prevent future review and amendment. The visions and goals set forth in this document should be viewed as flexible. As the Town and the needs of its residents change, so should the Comprehensive Plan. This plan is intended to serve the Town of Italy over the next ten years. It should be updated every ten years or less as directed by the Town Board.

The Comprehensive Plan for the Town of Italy is intended to reflect a shared vision of the town's future. A clear sense of Italy's history and present state will help guide this vision for the future. One of the most significant inputs to the Town of Italy Comprehensive Plan is a survey that was developed, completed, and compiled in 2003 and 2004.

Again, the Town of Italy Comprehensive Plan is driven, first and foremost, by the voices of its residents and land owners. This document is meant to reflect those voices.

1.2 The Planning Process

In December of 2002, the Town of Italy Zoning Commission was formed because of pressing issues and concerns facing the community. From the onset, the Italy Town Board and members of the Zoning Commission emphasized the need for, and encouraged, public participation and input into the planning process. The goal of the Zoning Commission was to ensure that the Comprehensive Plan reflected the shared ideas, desires, and vision of the community. The Zoning Commission accomplished this by reaching out to the public and seeking input from the community and incorporating this information into the planning process. Input from town residents and landowners was solicited, welcomed, and received at every step in this process, from the initial Zoning Commission survey development (the "strengths, weaknesses, opportunities, and threats" or S.W.O.T. process), to regular open meetings, to the mailed Comprehensive Plan Survey itself.

A list of Zoning Commission members is included in the acknowledgement section in the appendices.

SECTION 4 - CURRENT CONDITIONS

4.1 Recreation and Natural Resources

The Town of Italy is rich in natural resources. The responses to the survey indicate that the protection of these resources is important. Concern for natural resources is not a new phenomenon; indeed the reforestation of marginal farmland in the town was started over 70 years ago. However, population growth in rural areas and other development issues create new challenges for environmental protection.

When taken together, High Tor State Wildlife Management Area, Italy Hill State Forest, and Yates County property, Italy has approximately 5,500 acres of designated open space. The Town of Italy lies within two principle watersheds, Flint Creek and West River. Approximately seven miles of the Bristol Hills Branch of the Finger Lakes Trail is in Italy, connecting the town to 450 miles of trail across New York State. Italy is the most forested and least developed town in Yates County. It is precisely this lack of development that may be Italy's greatest natural resource.

Recreation

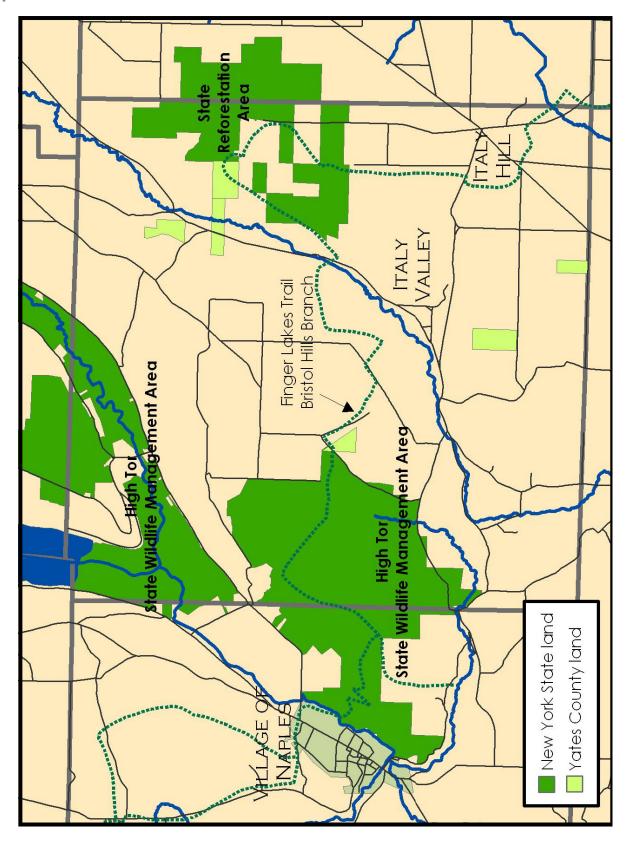
According to the National Forrest Service, backcountry use and outdoor recreation have increased tenfold since 1985, making it one of the largest growth industries in the United States. The Town of Italy is uniquely positioned to take advantage of this opportunity. Italy has always been a favored destination of deer, turkey, and grouse hunters. Increasingly, backpackers, day hikers, mountain bikers, parasailers, ice climbers, kayakers, canoeists, telemarkers (a form of skiing), and Nordic skiers are coming to Italy for its miles of trails, gullies, wooded hills, and vistas. Brook Trout, once abundant in Flint Creek, can still be found in small tributaries. The West River and Italy's many ponds offer excellent sport fishing opportunities.

The Finger Lakes Trail in the Town of Italy is made possible by the generosity of private landowners who allow the trail to connect public lands. There is a single lean-to, known as the "Outback Inn," where backcountry enthusiasts can stay in Italy.

Italy is home to over 4,300 acres of the High Tor State Wildlife Management Area, a preserve of over 6,100 total acres in three towns. High Tor includes approximately 3,400 acres of steep, wooded terrain with several man-made impoundments; 1,700 acres of marsh bordering the southern end of Canandaigua Lake; and 1,000 acres of overgrown fields with steep, wooded hillsides. Among the critical diverse habitats found within the High Tor Wildlife Management Area are grasslands, shrublands, conifer stands, emergent marshes, and large blocks of forest.



In March of 2002, Governor George E. Pataki announced the designation of High Tor Wildlife Management Area in Ontario and Yates Counties as a new State Bird Conservation Area



Map 3 - Public Recreational Lands, Town of Italy

(BCA), providing additional protection for critical bird habitats and expanding opportunities for bird watching. High Tor Wildlife Management Area is one of only 18 bird conservation Areas designated across New York State. New York's Bird Conservation Area Program, which was modeled on the National Audubon Society's Important Bird Areas Program, was signed into law by the Governor in 1997.

Forestry and Agriculture

Italy's abundant hardwood forests were at first an impediment to settlement, then later drew loggers and sawmills to the town. Today, the Town's forests contribute greatly to its scenic beauty and represent an economic benefit to many forest land owners.

In addition to nurturing forests, the land in Italy has also supported agriculture. Although developed later than many, more easily accessible areas, agriculture grew in Italy throughout the 19th century, especially along the fertile valleys. Farms later spread into more marginal hillside and hilltop lands. As the regional and national agricul-



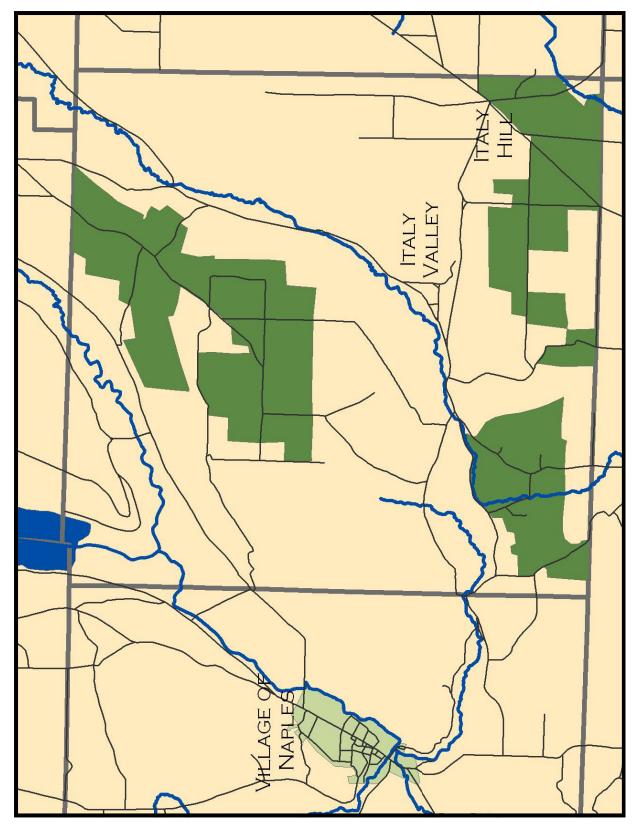
Organically raised dairy cows, Town of Italy

tural economy shifted in the 20th century, these marginal farms were the first to be abandoned, some of which became part of High Tor. Today, many hillsides that even twenty or thirty years ago were active pastures or hayfields are reverting to scrubland and forest. The lands are criss-crossed with the remnants of farming, including old hedgerows, stone walls, and old foundations.

Still, agriculture remains active in Italy today and the residents' survey indicates a strong desire to see these maintained and encouraged. Current agricultural activity in Italy includes viniculture, maple sugaring, beef cattle, hay cutting, and some dairy farming.

Article 25-AA of the Agriculture and Markets Law authorizes the creation of local agricultural districts pursuant to landowner initiative, preliminary county review, state certification, and county adoption. Of the Town's more than 24,000 total acres, 6,200 acres are in Yates County Agricultural District 1. The map on the following page shows the locations of these lands.

The purpose of agricultural districting is to encourage the continued use of farmland for agricultural production. The program is based on a combination of landowner incentives and protections, all of which are designed to forestall the conversion of farmland to non-agricultural uses. Included in these benefits are preferential real property tax treatment (agricultural assessment



Map 4 - Agricultural Districts, Town of Italy

and special benefit assessment), and protections against overly restrictive local laws, government funded acquisition or construction projects, and private nuisance suits involving agricultural practices.

Water Resources

The water resources of Italy are also very important. Although Italy has only a very short stretch of shoreline on Canandaigua Lake, the Lake is an asset for Yates County and the entire Finger Lakes Region. The enjoyment of this resource, and the increasing importance of tourism to the Finger Lakes, depends on the high quality of the water. The western portion of Italy (approximately 42% of the town) drains into Canandaigua View of Canandaigua Lake from Sunnyside Lake via the West River and Naples Creek.

Currently, there is a "cottage community" clustered along Sunnyside Road and some private roads in the vicinity in the northwest corner of the town. The slopes in the area are quite steep, leaving little room at the water's edge for the cottages. This creates both a scenic community and challenging environment for infrastructure such as roads, access, and utilities (especially sewer and water). All of the lakeshore itself is in private ownership and there is no official public access to the lake.





Naples Creek and wetlands, Town of Italy

Aside from the lake itself, Naples Creek and West River and their adjacent marshes are significant amenities in the town. Canoeists, kayakers, bicyclists, bird-watchers, hikers, and fisherman all enjoy these areas. There is public access to the West River in two places, from which boaters can easily reach Canandaigua Lake. In addition, the marshes help retain and purify the water from large storms before it flows into the lake, improving the water quality of the lake.

Other Natural Resources

The Town of Italy's potential for other natural resource extraction, such as mining, oil, or natural gas, is yet to be determined.

4.2 Land Use

The land uses of the various parcels in the Town of Italy are compiled by the Yates County Office of Real Property Services and represents the town tax assessor's estimation of land use.

According to this data, there are 23,883 acres of real property in the Town of Italy. Please see Table 1 below for a detailed break down of land uses.

Table 1 - Land Use

Land Classification	Total Area (acres)	Percentage of Total
Residential	10,163	42.6%
Vacant	5,902	24.7%
No Data	3,061	12.8%
Ag	2,865	12.0%
Public Open Space	1,539	6.4%
Community Service	297	1.2%
Commercial	42	0.2%
Utilities	15	0.1%
Total*	23,883	100.0%

^{*} Note: This is not the same figure as the total area of the Town, since large areas of surface water and the public road right-of-ways are not included in the county real property data

4.3 Population and Housing

According to the 2000 United States Census, the Town of Italy has 1,087 people. 50.9% are male and 49.1% are female. 98.3% identified themselves as white and 0.4% as African American, American Indian, or Asian. 0.4% identified themselves as some other race and 0.9% identified themselves as more than one race. 0.6% identified themselves as Latino (Note: the Census considers Latino an ethnicity, not a race).

The median age of town residents is 38.5 years, compared with 37.9 for Yates County as a whole.

The Town's building stock is relatively new, reflecting the sparsely settled, rural nature of the town for much of its history and the increasing growth in recent decades. Nearly 40% (39.6%) of the housing in Italy has been built since 1980, while only 20.9% of the structures were built before 1939. The total number of housing units in the Town is 578. Of those housing units 418 are considered occupied housing and 127 are seasonal housing, with the remaining 36 units vacant.

4.4 Services

Water

There is no public water utility within the Town. Individual residents utilize private well water for their water supply.

Sewer

There are no public sewers in the Town. Each property has private on-site waste water systems of various ages.

Gas/Propane

Residences in the Town of Italy use a variety of fuel sources. 42.8% depend on home heating oil or kerosene. 29.4% use propane, while 19.4% use wood. 3.8% use electricity and 2.4% use coal or coke. The remaining 2.2% use other fuels.

Electric

Electric service in the Town of Italy is provided by New York State Electric and Gas (NYSEG).

Communication

Italy's telephone infrastructure (poles, wires, etc.) is owned and maintained by Verizon Corporation, Frontier, and Empire Access. Individuals are able to chose from many local and long distance service providers. Digital subscriber line (DSL) high-speed internet service is available.

Cable television is available in certain sections of Italy and is provided by Adelphia Cable. High speed internet via cable is not available at the time of this report and Adelphia has no plans to offer it in the Italy area in the foreseeable future.

4.5 Community Organizations, Institutions, and Government

Town Government

The Town was incorporated in 1815 and is run by a supervisor and town board of four. There are five full time employees: an elected Highway Superintendent, and four highway department staff. There are six part



time employees: Clerk and Tax Collector, Assessor, Code Enforcement Officer, Attorney, Town Justice, and Historian.

The Town Hall was built in 2000 and is located at 6060 Italy Valley Road, a short distance west of the hamlet. It was built with State and Town funds and utilized volunteer efforts in its construction.

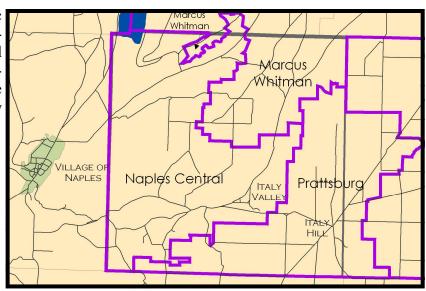
The Town maintains the roads owned by the Town and cuts the grass at several cemeteries in the Town.

Churches

Methodist Church - Italy Valley *(in the hamlet)*Baptist Church - Italy Hill
Italy-Naples Baptist Church - Italy Valley *(near the town line)*

Schools

Italy is served by three Public School Districts, Naples Central, Marcus Whitman, and Prattsburg Central, as illustrated on the Map. A private school is located at the County line Church.



Map 5 School District Boundary Lines, Town of Italy

Fire Department

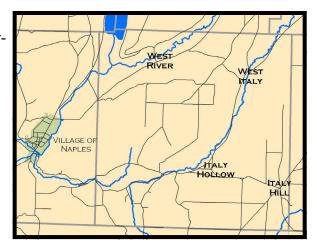
The western two-thirds of the town is served by Naples Volunteer Fire Department, which maintains a substation in the Town on Italy Valley Road just northeast of Italy Valley (the hamlet). The southeastern portion of the town, is served by the Prattsburg Volunteer Fire Department, while a small portion along Shay Road in the northern part of the town is served by Middlesex Volunteer Fire Department.

Law Enforcement

Italy has no formal or contractual arrangements for law enforcement. The Town is patrolled and serviced by the regular activities of the Yates County Sheriff and New York State Police.

Post Office

At the turn of the last century (1900), Italy had four post offices: Italy Hollow (located in the current hamlet area), Italy Hill, West Italy (located on Italy Valley Road between Sliter and Warren Road), and West River (located at the present Route 245 and Sunnyside Road). Since then, these have all closed, in large part due to improved transportation and technology, and Italy currently has no post office. Postal services are provided by post offices in Naples (14512), Branchport (14418), and Middlesex (14507). While Branchport does have a zip code and approximately 10% of Italy uses Branchport as a mailing address, there is no actual Branchport Post Office and postal functions for this zip code are handled by the Keuka Park Post Office.



Map 6 - Approximate location of Italy's Post Offices, circa 1900

An analysis of zip codes taken from the Real Property records reflect Italy's role as a recreational and vacation community. Table 2 below illustrates this. For example, nearly 20% of property in Italy is owned by persons with an address in the Greater Rochester area.

Table 2 - Italy Mailing Address Analysis

City/Area	Number of Addresses	Percent
Naples	412	39%
Rochester Metro Area	197	19%
Branchport	111	10%
Ontario County (except for		
Naples)	85	8%
Yates County (except for		
Branchport and Middlesex)	69	7%
Wayne County	46	4%
Middlesex	43	4%
Out of State	39	4%
Buffalo Metro Area	13	1%
Prattsburg	13	1%
Other New York State	13	1%
Southern Tier (except for		
Prattsburg)	10	1%
Syracuse Metro Area	9	1%
Total	1060	100%

4.6 Economy

According the to 2000 Census, the Town of Italy has an unemployment rate of 5.2%. There were 544 town residents over the age of 16 who were employed. Table 3 below shows the areas of employment.

Table 3 - Employment

Industry	Percent of Employed Population
Education, Health, Social Services	22.2%
Manufacturing	20.6%
Construction	11.9%
Retail Trade	10.3%
Arts, Entertainment, Recreation, Accomodation, Food Services	6.3%
Professional, Management, Administrative	5.5%
Other	5.4%
Wholesale Trade	4.8%
Public Administration	3.5%
Finance, Insurance, Real Estate	2.9%
Transportation and Utilities	2.9%
Agriculture, Forestry, Fishing and Hunting, and Mining	2.4%
Information	1.3%
Total	100.0%

As the table indicates, the top five areas (Education, Health, Social Services, Manufacturing, Construction, Retail Trade, and Arts, Entertainment, Recreation, Accommodation, and Food Services) of employment for Italy residents account for over two-thirds of all employment. Since there are very limited operations for these industries within the Town, it can be inferred that most residents commute to work outside the Town

There are viable farm and forestry operations within the town, as well as a limited number of commercial and home based business.

The median household income in 1999 was \$33,750 and 7.6% of families in Italy were below poverty level.

SECTION 5 - COMMUNITY VISION AND IMPLEMENTATION

The vision for the Town of Italy is to preserve and protect its present rural character, natural resources, and quality of life. To that end, the following recommendations, based on extensive citizen input through the public meetings and survey, are suggested.

5.1 Recreation and Natural Resources

Recreation

Recreation and Natural Resources Recommendation 1: The town support actions to attract sportsmen and women and support the protection of greenspaces for sustainable future outdoor recreational pursuits. Related small business opportunities could include bed and breakfasts, hostels, horseback riding, gunsmithing, guiding, shuttle service, campgrounds, and retail stores catering to an outdoor sports market.

Recreation and Natural Resources Recommendation 2: The town sponsor, to the ability it is able, full enjoyment of the town's resources by its residents. Examples of this might include summer youth programming with an outdoor focus, guided hikes, or municipal sports leagues. It is further recommended that the Town of Italy disseminate information about available public land and its recreational opportunities through an information kiosk.

Agriculture and Forestry

Recreation and Natural Resources Recommendation 3: The town foster sustainable forestry practices in keeping with local and state forestry codes.

Recreation and Natural Resources Recommendation 4: In keeping with the high value residents of the Town of Italy place on agriculture, the residents strong desire to preserve agricultural areas, and in the greater interest of securing safe, local food production, the town support the following agricultural activities in whatever manner is appropriate:

- Pasture based livestock businesses, such as cattle, sheep, horses, goats, etc.
- Sustainable farm practices, including organic methods.
- Small scale poultry production.
- Maple sugar production

Water

Recreation and Natural Resources Recommendation 5: The water resources in the Town are very important for its continued vitality. All residents depend on wells for their drinking water, and the amenities of West River, Naples Creek, and Canandaigua Lake are valuable amenities for residents and are crucial components of the increasing tourism economy of the entire region. Therefore, the Town should actively work with relevant organizations to protect water quality, including the consideration of appropriate new ordinances to help achieve this objective.

Other Natural Resources

Recreation and Natural Resources Recommendation 6: These resources should be explored and used in such a way as to not adversely affect or endanger the soils, water, air, forests, or views. It is further recommended that other natural resources, such as wind energy, be explored with the same considerations.

July 2005 Amendment: From the time of the adoption of this Comprehensive Plan in 2004 to July 2005, the Zoning Commission explored the issue of wind energy as a possibility for the Town of Italy. A great amount of information was collected and studied, including reviews of:

- existing and proposed wind farms
- turbine manufacturers' specifications
- governmental agency and non-governmental organization research on wind farms

This was conducted in order to assess the advantages and disadvantages that might occur with an industrial project of this type. At the completion of this extensive research, it was determined that an industrial wind farm would not be compatible with the goals or visions of the residents as documented in this Comprehensive Plan.

5.2 Land Use

Land Use Recommendation 1: Establish Zoning. The Town will work, through the Italy Zoning Commission and with assistance from Genesee/Finger Lakes Regional Planning Council, on developing and adopting a zoning ordinance that takes into consideration the need to allow for appropriate development, indentify inappropriate land uses, reinforce the existing character of the town, and protect natural land and water resources.

July 2005 Amendment: Land Use Recommendation 2: Adopt a Scenic Protection Overlay District. The Zoning Commission will incorporate unique scenic viewsheds and scenic areas as listed in the Yates County Looking Ahead document, prepared in 1990 under the auspices of the Yates County Land Use Review Board. Protecting the viewsheds and scenic areas as identified will help protect sensitive environmental areas within the Town. See the Scenic Viewshed and Scenic District Map in the Appendix to this Comprehensive Plan, Page A12.

5.3 Population and Housing

Population and Housing Recommendation 1: Future housing proposals should be considered and reviewed with an eye toward preserving the natural landscape and rural character of the Town of Italy.

Population and Housing Recommendation 2: Codes should be fairly and effectively enforced to address unkempt properties, identified as a need in the survey.

5.4 Services

Services Recommendation 1: The Town should continue to work with relevant organizations and agencies to monitor existing on-site waste water treatment (septic) systems and enforce the proper regulations for new systems. This is especially critical in sensitive or higher-density residential areas such as the Canandaigua Lake shoreline area (Sunnyside) and Italy Valley (the hamlet).

Services Recommendation 2: The Town should inventory and identify all first responder/ emergency service providers with a goal of developing coordinated, comprehensive fire, emergency medical, and law enforcement services.

Services Recommendation 3: The Town, through its Highway Department should inventory all roads and parcels (Town Hall grounds, cemeteries, etc.) that it is responsible for. The current state of this infrastructure should be noted and an operation and management plan developed. Particular attention should be paid to issues of un-paved roads, private roads, and emergency access issues, so that the Town can address these issues in a knowledgeable and orderly fashion.

5.5 Community Organizations, Institutions, and Government

Community Organizations, Institutions, and Government Recommendation 1: The 2004 Survey results indicate a strong desire on the part of residents to preserve historic structures and sites. Consequently, the town should support the preservation of these structures and sites.

5.6 Economy

Economy Recommendation 1: Economic development efforts should be in the concert with the rural character of the Town of Italy. The town should to the extent that it is able, support the small-scale, home-based, businesses as reflected in the 2004 Town Survey.

Recommendations for Implementation

It is recommended that the Italy Town Board appoint, at its discretion, regular or special purpose (ad hoc) committees to review and develop specific actions to be undertaken by the Town to encourage the implementation of the Town's vision as laid out in this Comprehensive Plan document.

Appendix E2

Zoning

Town of Ulysses

Zoning is the legal document that a municipality can use to regulate development and implement the goals and visions as expressed in its comprehensive plan. Therefore, like a comprehensive plan, zoning is an important component for water resource protection at the local level.

The Town of Ulysses has been engaged in a zoning revision process. In the Town's draft zoning document, an innovative technique for water resource protection was integrated into the language. Within many of the zoning districts, such as B1-Business District on the following pages, a section on Buffer Areas (Section 11.6) was included. This provision requires all new structures to be setback 50 feet from the centerline of any watercourse and all state and federally designated wetlands. Thus, water resource protection is achieved through a fairly standard tool of zoning – the setback. It is a simple technique that can have a great impact on water resource protection.

Article X – B1 - Business District

11.1 Purpose

The purpose of this district is to provide opportunities for neighborhood-scale retail commercial development in appropriate locations in the Town of Ulysses to serve the needs of local residents, and to provide the Town with the ability to assert reasonable controls over commercial development consistent with the comprehensive plan, organized and logical growth, increased employment opportunities and increased tax base.

Permitted Uses

In the B1 Business District, no building or structure shall be erected, altered or extended, and no land or building thereof shall be used for any purpose or purposes other than the following, upon receipt of site plan approval from the Planning Board, per the provisions of Article XVII, Section 17.2:

- Retail store.
- Place of business such as the following, and businesses of a similar and no more intense nature, provided that any manufacture or processing of goods on the premises is clearly incidental to a retail business conducted on the premises:
 - o Baker
 - o Barber or hairdresser
 - o Decorator
 - Dressmaker or tailor
 - o Florist or nursery
 - o Optician
 - o Photographer, photo developing services
 - o Printing, photocopying, digital imaging
- Business or professional office.
- Bank or other financial institution, provided there is no more than one (1) drive-through window.
- Conference center.
- Fraternal organization and their clubhouse, hall, post, temple or other facilities associated with the activities of the organization.
- Funeral home.
- Health club.
- Hospital.
- Hotel.
- Place of amusement such as a theatre, including drive-in theatre, bowling alley, game arcade, miniature golf course or skating rink.
- Self-service storage facility.
- Sit-down restaurant, tavern, bar or other place for serving food and beverages, except fast food restaurants.
- Video, DVD, and other electronic visual or audio entertainment media rentals and sales.

Permitted Accessory Uses

- Accessory storage buildings.
- Dish antennae with a diameter of 6 feet or less, freestanding or mounted on a building, provided that the highest point of the antenna not exceed the maximum allowed building height and that no such antennae be sited within any required setback area.
- Off-street loading areas.
- Outdoor dining facilities, except that no such facilities shall be located closer than 25 feet from a public road or highway right of way, and excluding permanent structures within any required setback areas.
- Signs as regulated under Article XVIII, Section 18.4.
- Vehicle parking, pursuant to the provisions of Article XVIII, Section 18.3.

Uses Permitted by Special Permit

The following uses are allowed within the B1-Business District upon receipt of special approval by the Board of Zoning Appeals, per Article XVII, Section 17.1:

- Any establishment ordinarily operating between the hours of 11:00p.m. and 6:00a.m.
- Adult care center.
- Business directional signs, subject to limitations set forth in Article XVIII, Sect. 18.4.2
- Child care center, group child care center.
- Community center.
- Drive-through restaurant.
- Drive-through bank with more than one drive-through lane.
- Dry cleaner.
- Fire station or other public building necessary for the protection or the servicing of a neighborhood.
- Flag lot.
- Fraternal organization and their clubhouse, hall, post, temple or other facilities associated with the activities of the organization.
- Gasoline and other retail vehicle fuels sales.
- Marina.
- Retail lumber and building supply center
- Vehicle and boat sales rentals and repair shops.
- Vehicle and boat rentals.
- Vehicle and boat service and repair shops.

11.5 Lot Area & Yard Requirements

Minimum lot area – None.

Minimum lot width at front yard setback – None.

Minimum lot depth - None.

Minimum front yard setback shall be 30 feet.

Minimum side yard setbacks shall be 15 feet or as required by the New York State Fire Prevention Code, whichever is greater.

Minimum rear setback shall be 15 feet.

Maximum building height for any non-agricultural building or structure shall be 40 feet.

Maximum lot coverage by all buildings, structures and impervious surface shall be 70 percent of the lot area.

No parking shall be allowed within the required front yard setback.

No outdoor display of products shall be allowed within the front yard setback.

11.6 Buffer Areas

Wherever a B1-Business District abuts a R1 – Moderate Density Residence District, R2 - Rural Residence District, RM - Multiple Residence District or RH - Hamlet Residence District, there shall be in addition to the required side yard and rear yard a vegetated buffer area of not less than thirty-five (35) feet. No building or structure, parking or outside storage of any kind shall be allowed within this buffer area.

No buildings or other structures, or parking areas, shall be located within 50 feet horizontal distance from the centerline of any watercourse carrying water six (6) months or more throughout the year, or any wetland as defined by state or federal law. With the exception of stream crossings no roadways shall be located within 50 feet horizontal distance from the centerline of any watercourse carrying water six (6) months or more throughout the year, or any wetland as defined by state or federal law.

11.7 Building Permits

No building permit shall be issued for a building or structure within a B1-Business District unless the proposed building or structure is in accordance with an approved site plan, except as provided for in Article XVII, Section 17.5.

Appendix E3

Zoning (Environmental Protection Overlay District)

Town of Ulysses

An overlay district is a zoning technique that selects certain areas of the municipality based on criteria such as:
main street retail areas, historic districts, scenic views, steep slopes, wetlands, woodlots, or other environmentally
or culturally sensitive areas. These areas are defined as an overlay district with certain regulations different from
the rest of the zoning law. As the name suggests, these districts overlay the underlying zoning designation (such as
commercial, residential, etc.). The underlying zoning, and all of its regulations, remain in place. The overlay district
simply adds another set of regulation processes to help protect these sensitive areas.

One of the more common uses of overlay districts is for environmental protection. In this case, they are called 'environmental protection overlay districts' or EPODs. As part of its zoning revision process, the Town of Ulysses considered using an EPOD to protect a fragile area within the Town, steep slopes. These slopes are generally near Cayuga Lake and the increased level of oversight for development on these slopes also protects the water quality of Cayuga Lake by preventing improper construction techniques that lead to erosion and sedimentation.

ARTICLE XX Environmental Protection Overlay Districts – Draft Model

Section 1 - Purpose

A.The purpose of the environmental protection overlay districts established in this article is to provide special controls over land development located in sensitive environmental areas within the Town of Ulysses. These districts and the regulations associated within them are designed to preserve and protect unique environmental features within the Town as much as possible, including, but not limited to, wetlands, steep slopes, and floodplains.

B.The regulation contained in each environmental protection overlay district (EPOD) are not intended to be substituted for other general zoning district provisions, but can be superimposed over such district provisions and should be considered as additional requirements to be met by the applicant or developer, prior to project approval. The purpose of the overlay districts is to provide the Town with an additional level of review and regulation that controls how land development permitted by the Town's primary zoning districts should occur in sensitive or unique environmental areas.

Section 2 - Division of districts

In order to address the specific goals listed in Section 1 of this chapter, the Town of Ulysses is hereby divided into the following environmental protection overlay districts:

EPOD1 - Wetland Protection District

EPOD2 - Steep Slopes Protection District

EPOD3 - Floodplain Protection District

EPOD4 - Watercourse Protection District

Section 3 - Maps

The locations and boundaries of all environmental protection overlay districts shall be delineated on an official set of maps on file in the Town Clerk's office and Town Building Department. These maps shall be known and may be cited as the "Official Town of Ulysses EPOD Maps" and shall include the Official Wetland Maps for the Town [prepared by the New York State Department of Environmental Conservation (NYSDEC)] and the Official Flood Insurance Rate Maps (FIRM) for the Town [prepared by the Federal Emergency Management Agency (FEMA)]. The Official Town of Ulysses EPOD Maps shall be used for reference purposes only and shall not be used to delineate specific or exact boundaries of the various overlay districts. Field investigations and/or other environmental analyses may be required in order to determine whether or not a particular piece of property is included within one or more of the overlay districts.

Section 4 - Interpretation of district boundaries

The Town Department of Code Enforcement shall be responsible for interpreting environmental protection overlay district boundaries based on an interpretation of the Official Town of Ulysses EPOD Maps, as well as the use of various criteria set forth in this article for determining such district boundaries. The Town Department of Code Enforcement may request the assistance of the Town Engineer or other appropriate department or agency in making such a determination. Appeals from a determination of the Town Department of Code Enforcement regarding boundaries of overlay districts shall be made to the Town Planning Board in accordance with the public hearing procedures of Article XV of this chapter.

Section 5 - Development permit required

An EPOD development permit shall be required, subject to the provisions of this article, prior to the commencement of any regulated activity or the issuance of any building permit for regulated development in a designated

environmental protection overlay district within the Town of Ulysses. The following activities are exempt from the permit procedures of this article, subject to a determination by the Town Code Enforcement Officer that such activities involve necessary normal maintenance and upkeep of property and/or involve public health, safety or emergency situations:

- A. Lawn care and maintenance.
- B. Gardening activities.
- C. Tree and shrub care and maintenance.
- D. Removal of dead or deteriorating vegetation.
- E. Removal of structures.
- F. Repair and maintenance of structures.
- G. Repair and maintenance of faulty or deteriorating sewage facilities or utility lines.
- H. Reconstruction of structures damaged by a natural disaster.
- I. Agricultural activities, except structural activities.
- J. Public health activities, orders and regulations of the New York State Department of Health, Tompkins County Department of Health or other agencies undertakes in compliance with § 24-0701, Subdivision 5, of the New York State Environmental Conservation Law, as amended or changed.
- K. Activities subject to the review jurisdiction of the New York State Public Service Commission or the New York State Board on Electric Generation Siting and the Environment, under the provisions of Article 7 or Article 8 of the New York State Public Service Law, respectively.
- L. Any actual or ongoing emergency activity which is immediately necessary for the protection and preservation of life, property or natural resource values.

Section 6 - Development permit application

- A. Application for EPOD development permits shall be made in writing to the Town Planning Board on forms available from the Town Department of Code Enforcement. Such an application shall be made by the property owner or his/her agent and shall be accompanied by any materials or information deemed appropriate by the Town Department of Code Enforcement or Town Engineer, including but not limited to a scaled site plan prepared and certified by a licensed engineer or land surveyor that contains the following minimum information:
- (1)A location plan and boundary line survey of the property.
- (2) The location of all environmental protection overlay district boundaries, designated Town open space, Town, county or state parkland or other similar areas within and/or adjacent to the property, as defined by this article.
- (3)The location of all existing and proposed buildings, structures, utility lines, sewers, water and storm drains on the property or within 200 feet of the proposed work site.
- (4)The location of all existing and proposed impervious surfaces, such as driveways, sidewalks, etc., on the property or within 200 feet of the proposed work site.
- (5)Existing and proposed contour levels at intervals of two feet for the property, unless such property is located within a Steep Slope Protection District whereby contour levels shall be required at intervals of one foot.

- (6)The location and types of all existing and proposed vegetation and shrub masses, as well as all trees with a diameter of four inches or more within and/or adjacent to the property.
- (7) The location of all existing and proposed drainage patterns, drainageways, swales, etc., within and/or adjacent to the property.
- B. Each application for an EPOD development permit shall be accompanied by an application fee set in accordance with Section XX. This fee shall be in addition to any other fee required for the development under this chapter.

Section 7 - Application review; public hearing; issuance or denial of permit

A. The Town Department of Code Enforcement shall refer a completed permit application to the Town Planning Board for a public hearing in accordance with the provisions of Article XX of this chapter.

OPTIONAL: The Town Department of Code Enforcement shall also refer a completed permit application to the Town Conservation Board for its review and recommendations. The Town Conservation Board shall have 30 days from the date of its receipt of a completed application in which to review such application and report its recommendations to the Town Planning Board. Should the Town Conservation Board fail to report or make a recommendation to the Town Planning Board regarding the application within the thirty-day time period, the Town Planning Board may take action on the permit application without such report.

- B. Following the required public hearing, the Town Planning Board shall have the authority to grant or deny an EPOD development permit, subject to the standards, criteria and other regulations contained in this article. The Town Planning Board [optional: shall consider the comments and recommendations of the Town Conservation Board and] may also request a report from the Town Engineer or other appropriate department or agency in acting on such permit application.
- C. In addition, the Town Planning Board, when deemed necessary by a majority vote of the Board, may refer any completed application for an EPOD development permit to the Town Board for its review, comments and recommendations. When such a referral is made, then the Town Planning Board may not take action on such an application until it has received the report of the Town Board concerning the development permit request.
- D. Any development permit issued by the Planning Board in accordance with the provisions of this article may be issued with conditions. Such conditions may be attached as are deemed necessary by the Board to ensure the preservation and protection of environmentally sensitive areas and to ensure compliance with the policies and provisions of this article. Every permit issued pursuant to this article shall contain the following conditions:
- (1) The Town Building Inspector, Town Engineer and/or other appropriate Town official shall have the right to inspect the project from time to time.
- (2) The permit shall expire on a particular date, unless extended by the Planning Board upon good cause shown.
- (3) The permit holder shall notify the Town Building Inspector or other appropriate Town official of the date on which project construction is to begin, at least five days in advance of such date.
- (4) The EPOD development permit shall be prominently displayed at the project site during the undertaking of the activities authorized by the permit.
- E. Review of application for all permits. Any permit issued by the Commissioner of Public Works/Superintendent of Highways pursuant to this chapter or Chapter 98, Building Construction and Fire Prevention, which involves property subject to one or more environmental protection overlay districts must be reviewed by the Town Planning Board.
- F. Site capacity worksheet.

(1)The applicant shall also submit a completed site capacity worksheet with any application for land subdivision to the Town of Ulysses Planning Board. Said worksheet shall be made available at the Town of Ulysses Department of Code Enforcement office. Said worksheet shall be in a form approved by the Town Board and shall include, as part of the calculation, base site areas, environmental protection overlay districts, net buildable site areas and maximum allowable dwelling units. Said site capacity worksheet is attached at the end of this document and made a part hereof as Schedule A, together with any further changes or amendments that may be approved by the Town Board.

Section 8 - Performance guaranty

Following approval of an application for an EPOD development permit and prior to the commencement of any site activity, issuance of any building or other Town permit, the applicant shall furnish the Town Department of Code Enforcement with an irrevocable letter of credit in an amount to be reviewed by the Town Engineer and Town Attorney, which is sufficient to cover the costs of compliance with the various specifications and conditions of the development permit. The purpose of the letter of credit shall be to ensure that all items, activities or structures specified in the plans approved by the Town Planning Board are constructed or carried out in accordance with such plans and specifications and other appropriate requirements of the Town of Ulysses. The irrevocable letter of credit shall continue in full force and effect until such time as Town Code Enforcement Officer has certified, in writing, to the Town Planning Board that, based on a site inspection, all specifications, requirements and permit conditions have been completed and/or complied with, whereupon the letter of credit shall be released to the applicant. The Town Code Enforcement Officer, upon recommendation of the Town Engineer, Town Planning Board or other appropriate department or official, may deduct or withhold an amount from the letter of credit sufficient to cover the cost of noncompliance with any requirements, specifications or permit condition and/or release the Town from any liability resulting from such noncompliance.

Section 9 - Suspension or revocation of permits

The Town Department of Code Enforcement may suspend a permit (temporarily) until such time as the Planning Board reviews the suspension. The Town Planning Board, upon recommendation of the Town Code Enforcement Officer or other appropriate Town official and subject to a majority vote of the Board, may suspend or revoke a development permit issued in accordance with the provisions of this article where it has found evidence that the applicant has not complied with any or all terms or conditions of such permit, has exceeded the authority granted in the permit or has failed to undertake the project in the manner set forth in the application. The Town Planning Board shall set forth, in writing, its findings and reasons for revoking or suspending a permit issued pursuant to this article and shall forward a copy of said findings to the applicant.

Section 10 - Citizen enforcement

Citizens of the Town of Ulysses shall have the power to enforce the EPOD regulations in the same manner as is permitted in Town Law Section XX, as amended or changed.

Section 11 - EPOD1 - Wetland Protection District

A. Purpose. The purpose of the Wetland Protection District is to preserve and protect freshwater wetlands located within the Town of Ulysses, pursuant to Article 24 of the New York State Environmental Conservation Law. Through this statement of purpose, it is declared to be the public policy of the Town of Ulysses that these areas shall be protected as invaluable natural resources that provide for flood protection, wildlife habitats, recreational and open space, erosion and pollution control and protection and recharging of groundwater supplies. The regulations contained in this district seek to prevent the despoilation and destruction of freshwater wetlands by controlling development in these areas and by requiring review and permit approval prior to project commencement.

B. Delineation of district boundaries. The boundaries of the Wetland Protection District shall be delineated on the Official Town of Ulysses EPOD Maps and shall include all wetland areas designated as Type I, Type II, Type III and Type IV by the New York State Department of Environmental Conservation. The provisions of this section shall be applicable to all wetland areas within the Town of Ulysses and as shown on the Official Town Maps, other than those areas designated as Type I wetlands by the State Department of Environmental Conservation. Permit application for development within all Type I Environmental Conservation shall be reviewed and approved by the

State Department of Environmental Conservation, subject to the provisions of Part 665 of the New York State Codes, Rules and Regulations (NYCRR). Upon application for a development permit within a Wetland Protection District, the Town Department of Planning and Zoning shall refer such application and site plan to the State Department of Environmental Conservation in order to determine the precise boundary of the wetland area. The boundary of a Wetland Protection District shall include a buffer zone that extends out from the edge of the wetland area for a distance of 100 feet or three hundred feet, as determined by the DEC.

- C. Regulated activities. No person shall conduct any of the following regulated activities within any Wetland Protection District in the Town of Ulysses, unless such person has first applied for and obtained an EPOD development permit pursuant to the requirements of this article:
- (1) Any form of draining, dredging, excavation or removal of any natural materials, directly or indirectly, from a wetland.
- (2) Any form of dumping, filling or depositing any material either directly or indirectly within a wetland.
- (3) The construction or placement of any structures, roads or any man-made materials within the wetland.
- (4) Any form of pollution, including but not limited to installing a septic tank, running a sewer outfall or discharging sewage treatment effluent or other liquid wastes into a wetland.
- (5) Any activity which impairs the natural function of wetlands, whether located within the wetland or not.
- (6) Any activity regulated by § 24-0701 of the New York State Environmental Conservation Law, as amended or changed.
- 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 several functions and benefits of freshwater wetland areas as stated in Subsection A of this section. No permit to undertake a regulated activity within a wetland protection district in the Town of Ulysses shall be issued by the Town Planning Board, unless the applicant can adequately demonstrate to the Board that:
- (a) The proposed regulated activity is consistent with the policy of this chapter to preserve, protect and conserve freshwater wetlands and the benefits derived therefrom.
- (b) The proposed regulated activity is compatible with the public health, safety and welfare.
- (c) The proposed regulated activity is reasonable and necessary.
- (d) There is no reasonable alternative for the proposed regulated activity on a site which is not a freshwater wetland or adjacent area.
- (2) In addition, any applicant for a permit to undertake a regulated activity within a Wetland Protection District of the Town of Ulysses shall be required to adequately demonstrate to the Town Planning Board that the proposed activity will in no way at present or at any time in the future adversely affect the following:
- (a) Groundwater reservoir capacities.
- (b) Watercourse flood-carrying capacities.
- (c) Water quality.
- (d) Water retention capabilities.

- (e) Downstream siltation.
- (f) The natural wildlife balance.
- (g) Any natural function of the wetland.
- (3) The applicant for a permit shall have the burden demonstrating that the proposed regulated activity will be conducted in accordance with the standards and requirements set forth above.

Section 12 - EPOD2 - Steep Slopes Protection District

- 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 Ulysses 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 to minimize the disturbance or removal of existing vegetation, 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 Ulysses EPOD Maps and shall include all areas in the Town of Ulysses with a fifteen-percent (15%) slope or greater [optional: can modify slope percentages]. The Town Department of Code Enforcement 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 Tompkins County Soil Survey) with moderate to severe limitations for development and recreational uses as determined on a site-specific high-intensity soil survey.
- C. Regulated activities. No person shall conduct any of the following regulated activities within any Steep Slope Protection District in the Town of Ulysses, 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 Section 5 of this article.
- (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 Ulysses 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 as recommended by the Tompkins County Soil and Water Conservation District 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 Cayuga Lake, its immediate tributaries, and their wetlands.
- (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 Cayuga Lake 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 non-roadway 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 shall be permitted to provide protection of slope 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 slopes 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.

Section 13 - EPOD3 - Floodplain Protection District

A.Purpose. Certain areas of the Town of Ulysses are subject to periodic flooding which can result in loss of life, property damage, health and safety hazards, disruption of commercial and governmental services, extraordinary public expenditure for flood protection and relief and impairment of the tax base, all of which adversely affect the public health, safety and general welfare of the residents of this Town. These flood losses are caused by the cumulative effect of obstructions in the floodplain causing increases in flood heights and velocities and by the occupancy in flood hazard areas by uses which are inadequately elevated, floodproofed or otherwise protected from

flood damage. It is the purpose of the Floodplain Protection District to prevent public and private losses due to flood conditions in certain areas by provisions designed to:

- (1) Protect the health and welfare of the residents of this Town.
- (2) Minimize public expenditure for flood-control projects.
- (3) Minimize the need for relief and rescue efforts.
- (4) Minimize business interruptions.
- (5) Minimize damage to public facilities and utilities.
- (6) Help maintain a stable tax base by minimizing flood damage to private and commercial property.
- (7) Identify those structures and properties which are located in areas of special flood hazard and maintain such information for public inspection.
- B. Delineation of district boundaries.
- 1) The boundaries of the Floodplain Protection District shall be delineated on the Official Town of Ulysses EPOD Maps and shall include all areas of special flood hazard, as identified by the Federal Insurance Administration through a report entitled the "Flood Insurance Study for the Town of Ulysses, New York" dated XXXX, with an accompanying Flood Insurance Rate Map and Flood Hazard Boundary Map. These maps and any revision thereto are hereby adopted by reference and declared to be a part of this section.
- (2) Where base flood elevation data has not been provided in the Flood Insurance Study for areas in the Town of Ulysses as required above, the Town Planning Board, Town Department of Planning and Zoning or Town Engineer shall obtain, review and reasonably utilize any base flood elevation data available from a federal, state, Town or other source in order to administer the standards and requirements of this section.
- (3) For the purposes of this section, there is hereby established within the Town of Ulysses three Floodplain Protection Districts to be known as "Floodplain Overlay District I (FPO-I)," "Floodplain Overlay District II (FPO-II)" and "Floodplain Overlay District III (FPO-III)." The boundaries of the Floodplain Overlay District shall include all areas within the floodways as delineated in the Flood Insurance Study for the Town of Ulysses, and as shown on the National Flood Insurance Rate Map (FIRM) of the Town. The boundaries of the FPO-III Zone shall include all areas within the one-hundred-year floodplain as delineated in the Town Flood Insurance Study, but does not include any areas within Floodplain Overlay District I (FPO-I) and Floodplain Overlay District II (FPO-II).

Note: the preceding paragraph may need to be modified to reflect the flood studies available for Ulysses.

- C. Regulated activities.
- (1) Prohibited activities. The following activities are not permitted in a Floodplain Overlay District (FPO):
- (a) The temporary or permanent placement of a mobile home or similar structure.
- (b) The construction or operation of an on-site sewage disposal system.
- (c) Any other activity which, as demonstrated through a technical evaluation, will result in any increase in the flood level during the occurrence of the base discharge.
- (2) Regulated activities. No person shall conduct any of the following regulated activities within the FPO Zone unless such person has first applied for and obtained an EPOD development permit pursuant to the requirements of this section:

- (a) Additions or substantial improvements to structures.
- (b) New structures (temporary or permanent).
- (c) Subdivision of land.
- (d) Any man-made change to improved or unimproved real estate, including but not limited to building or other structures, mining, filling, grading, paving, excavation or drilling operations.
- D. Development standards/permit conditions.
- (1)No EPOD development permit shall be issued by the Town Planning Board for any regulated activity within any Floodplain Overlay District unless the applicant for such a permit has submitted a plan that is certified by a registered professional engineer and shows evidence of the following:
- (a) That the structure will be constructed with its lowest floor, including basement, elevated to at least two feet above the base flood level.
- (b) That the structure will not affect the efficiency or the capacity of the floodway or increase flood heights.
- (c) That the structure will not cause increased velocities or obstruct or otherwise catch or collect debris which will obstruct flow under flood conditions.
- (d) That the structure shall be constructed and placed on the building site so as to offer the obstruction to the flow of waters.
- (e) That the structure shall be firmly anchored to prevent flotation, collapse or lateral movement which may result in damage to other structures, restrictions of bridge openings and other narrowings of the watercourse.
- (f) That all new and replacement water supply and sanitary sewer systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from the systems into floodwaters.
- (g) That service facilities, such as electrical and heating equipment, shall be constructed at or above the base flood level for the particular area or shall be floodproofed.
- (h) That new construction and substantial improvements shall be constructed using materials, methods and practices that minimize flood damages.
- (i) That base flood elevation data is provided for all subdivision proposals.
- (j) Such other data or evidence as may be requested by the Town Planning Board Town Department Code Enforcement pertaining to flooding and site plan information.
- (k) Information and/or a description regarding the extent to which any watercourse will be altered or relocated as a result of any proposed development.
- (1) Plans indicating any walls to be used to enclose space located below the base flood level.
- (m) That there is no reasonable alternative for the proposed regulated activity on a site which is not in a flood hazard area.
- (2) When taking action on an application for an EPOD development permit for a regulated action in any Floodplain Overlay District, the Town Planning Board shall consider all technical information available, all relevant factors and standards specified in this section, as well as the following:
- (a) The danger that materials may be swept onto other lands to the detriment of others;

- (b) The danger to life and property due to flooding or erosion damage;
- (c) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (d) The importance of the services provided by the proposed facility to the community;
- (e) The necessity to the facility of a waterfront location;
- (f) The availability of alternative locations not subject to flooding or erosion damage for the proposed use;
- (g) The compatibility of the proposed use with existing and anticipated development;
- (h) The relationship of the proposed use to the Town Comprehensive Plan and floodplain management program for that area;
- (i) The safety of access to the property in times of flood for ordinary and emergency vehicles;
- (j) The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
- (k) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems and streets and bridges.
- (3) The Town Planning Board may also require the applicant for an EPOD development permit in any Floodplain Overly District to adequately demonstrate that one or more of the following conditions have been met before a permit is granted for any regulated activity:
- (a) Anchorage to resist flotation and lateral movement.
- (b) Reinforcement of walls to resist water pressure.
- (c) Installation of watertight doors, bulkheads and shutters.
- (d) Use of paints, membranes or mortars to reduce seepage of water through walls.
- (e) Addition of mass or weight to resist flotation.
- (f) Installation of pumps to lower water levels in structures.
- (g) Pumping facilities to relieve hydrostatic water pressure on external walls and basement floors.
- (h) Elimination of gravity flow drains.
- (i) Construction to resist rupture or collapse caused by water pressure or floating debris.
- (j) Compliance with other applicable environmental regulations contained in the Code of the Town of Ulysses.
- E.Additional requirements/information.
- (1)In addition to the other duties and responsibilities specified in this section, the Town Department of Code Enforcement is authorized to administer the following provisions of this chapter. The Town Department of Code Enforcement shall:

- (a) Secure from the applicant all information necessary for a complete review of the proposed development by the appropriate boards and officials. The information necessary for submission shall be the same as required for site plan approval as specified in Article XX of this chapter, plus any additional information that may be required by the Town Planning Board to adequately review a request for a permit.
- (b) Review all applications to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.
- (c) Obtain and record the actual elevation (in relation to sea level) of the lowest habitable floor (including basement) of all new or substantially improved structures and whether or not the structure contains a basement.
- (d) For all new or substantially improved floodproofed structures:
 - [1] Verify and record the actual elevation (in relation to sea level).
 - [2] Maintain the floodproofing certifications required in this section.
- (e)Maintain for public inspection all records pertaining to the provisions of this section.
- (f) Notify adjacent communities and the New York State Department of Environmental Conservation prior to any alteration or relocation of a watercourse and submit evidence of such notification to the Federal Insurance Administration.
- (g) Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
- (2) Where this section imposes greater restrictions than are imposed by the provision of any law, ordinance, regulation or private agreement, this section shall control. Where there are restrictions by any law, ordinance, regulation or private agreement greater than those imposed by this section, such greater restrictions shall control. All uses presently permitted in the zoning districts within the Town of Ulysses which also fall within the FPO Zones shall continue to be permitted uses for these districts, except where otherwise restricted by this section.
- (3) Appeals for variances to the requirements of this section shall be based upon Section 80.6 (formerly Section 1910.6) of the National Flood Insurance Program Regulations. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- (4) No board or official of the Town of Ulysses shall approve any construction or other activity within the Town not in compliance with the standards of Public Law No. 93-234, 93rd Congress, H.R. 8449, December 31, 1973, better known as the "Flood Disaster Protection Act of 1973," and the floodplain management requirements of Section 60.3(d) [formerly Section 1910.3(d)] and any amendments thereto.
- (5) The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This chapter does not imply that land outside the area of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the Town of Ulysses, any officer or employee thereof or the Federal Insurance Administration for any flood damages that result from reliance on this section or any administrative decision lawfully made thereunder.

Section 14 - EPOD4 - Watercourse Protection District

A. Purpose. The purpose of the Watercourse Protection District is to preserve and protect watercourses located within the Town of Ulysses 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 Ulysses EPOD Maps and shall include all areas in the Town of Ulysses as follows:
- (1) All those areas within 200 feet of the center line of a natural or man-made watercourse [definition requires further research and input and should be consistent with proposed stream buffers indicated in draft zoning]
- C. Regulated activities.
- (1) No person shall conduct any of the following regulated activities within any Watercourse Protection District in the Town of Ulysses unless such person has applied for and obtained an EPOD development permit pursuant to the requirements of this section:
- (a) Clearing of or constructing on any lands or areas which lie within the Watercourse Protection District boundaries, except that the following activities shall be exempted from the clearing regulations of this part:
 - [1] Customary agricultural operations.
 - [2] Watercourse maintenance activities.
- (b) The construction or placement of any septic tank or septic drainage field.
- (c) Any activity which would alter the natural flow pattern of the watercourse.
- (2) All of the above regulated activities shall be subject to the EPOD permit application procedures set forth in Section 5.
- (3) Notwithstanding the foregoing, no person shall build or grade within 50 feet of the center line of streams subject to stream corridor environmental protection overlay districts.
- 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 and enhancement of watercourses within the Town.
- (2) Any applicant for a permit to undertake a regulated activity within a Watercourse Protection District in the Town of Ulysses shall be required to adequately demonstrate to the Town Planning Board that the proposed activity will in no way at present or at any in the future adversely affect the following:
- (a) Water quality.
- (b) Watercourse flood-carrying capacities.
- (c) Rate of sedimentation.
- (d) Velocity of groundwater runoff.
- (e) Natural characteristics of the watercourse.
- (3) When altering the natural flow pattern of a natural or man-made watercourse, the applicant shall prove that the alteration:
- (a) Is necessary; and
- (b) Will not impair the natural functions of the watercourse.
- (4) 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.

Schedule A

Site Capacity Worksheet

A. Base Site Area: =	Acres
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B. Environmental Protection Overlay Districts:

(Area to be subtracted from the Base Site Area)

EPOD	Open Space Factor*	Acres in Resources	Required Resource Protection Land
Steep slopes over 30%	0.9	X	
Watercourse corridor protection	0.95	X	
Woodlot	0.75	X	
Steep slopes 20%-30%	0.5	X	
Floodplain	0.9	X	
NYS DEC wetlands	0.9	X	
US ACOE wetlands	0.9	X	

TOTAL EPOD LAND = _____ Acres

C. Gross Buildable Site A	Area
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- (1)Base Site Area (A) =_____
- (2)Total EPOD Protection Land (B) =_____
- (3)Gross Buildable Site Area = C(1) C(2) = _____ Acres
- D. Total Area Within Right(s)-of-Way = _____ Acres
- E. Net Buildable Site Area = C(3) D = _____ Acres

F. Maximum Allowable Dwelling Units

- (1)Net Buildable Site Area (E) =_____
- (2)Minimum Lot Size =_____
- (3)Maximum Dwelling Units = $F(1) \div F(2) =$ Units

NOTES:

- 1. The open space factors are not intended to be calculated on a cumulative basis. Where a property is encumbered with more than one overlapping Environmental Protection Overlay Districts (EPODs), the EPOD with the higher open space factor would be used in the subsequently overlapping EPOD area(s).
- 2. Floodplains, steep slopes, wetlands and watercourses can be effectively designed to act as buffers between existing and proposed developments, used as open space within subdivision or maintained privately as part of the subdivision lots and homesites.

A reasonable credit is, therefore, provided for the amenity these features provide in determining the maximum density of subdivisions.

(2)No permit to undertake any regulated activity within an EPOD shall be issued by the Planning Board unless the net buildable site area and maximum allowable dwelling units are less than or equal to the calculated value under the site capacity calculation worksheet.

Appendix E4

Subdivision Regulations

Town of Middlesex

Along with the comprehensive plan and zoning law, subdivision regulations form the three basic land use regulatory tools available to municipalities in New York State. While there are many more specialized tools and techniques, these suite of documents give municipalities the potential for a great deal of control over how their community develops.

The Town of Middlesex developed subdivision regulations as part of the Local Laws to Protect Finger Lakes Water Quality Project. It did not have this key land use control tool and foresaw development pressures occurring in this rural and very scenic Town at the southern end of Canandaigua Lake.

Some key elements of the subdivision regulations are:

- the distinction between major and minor subdivisions
- the "time limit" on subdividing (this closes a potential loophole whereby a developer would apply for several minor subdivisions in quick succession to avoid the more rigorous review process of a major subdivision, see the definitions of 'parent parcel,' 'major subdivision,' and 'minor subdivision' in Appendix A)
- a three stage review process (sketch plan, preliminary plat, and final plat, see Article 3)
- a requirement for performance bonding (see Article 3, Sections 3.6 and 3.7)
- a requirement for compliance with Phase II Stormwater Regulations (see Article 4, Section 4.7)
- the ability to "charge back" the applicant for costs incurred by the Town during the review process (see Article 1, Section 1.2 and Article 3, Section 3.6C). Note: this is a particularly important power in a small and/or rural municipality which may not have the staff expertise (planning, engineering, legal, etc.) to review a large complex proposal.

ARTICLE 1 - Declaration of Policy

1.1 Purpose

The Town Board of the Town of Middlesex finds that in order to provide for the orderly, efficient and economical development of the Town in keeping with the Town's environmental and rural character as noted in the Town's Master Plan of 1992, the Planning Board shall have the power and authority to consider, review, and approve land subdivision plats within the boundaries of the Town of Middlesex.

Further, The Town Board of the Town of Middlesex finds that in order to protect the Town of Middlesex, its residents and their property, with respect to land development within the Town, it is essential for the Town to have:

- A. Competent engineers and planners retained by the Town to review and approve plans and designs, and make recommendations to the Town Board and Planning Board
- B. Competent engineers and planners retained by the Town to inspect the construction of highways, drainage, sewer, other facilities, and parks to be dedicated to the Town and to recommend their acceptance by the Town
- C. Competent attorneys retained by the Town to negotiate and draft appropriate agreements with developers, obtain, review and approve necessary securities, insurance and other legal documents, review proposed deeds and easements to assure the Town is obtaining good and proper title and to generally represent the Town with respect to legal disputes and issues with respect to developments

The cost of retaining such competent engineers, planners, and attorneys should ultimately be paid by those who seek to profit from such development rather than from general Town funds.

1.2 Authority

By the authority of the resolution of the Town Board of the Town of Middlesex adopted on **[DATE]**, pursuant to the provisions of Article 16 of New York State Town Law, the Planning Board of the Town of Middlesex is authorized and empowered to approve plats showing lots, blocks, or sites, with or without streets or highways, to approve the development of entirely or partially undeveloped plats already filed in the office of the Clerk of Yates County and to approve preliminary plats within the Town.

Further authority for this local law is contained in subparagraphs (a) (12) and (d)(3) of the New York State Municipal Home Rule Law Section 10(1) (ii) and New York State Municipal Home Rule Law Section 22. To the extent that New York State Town Law Sections 274-a, 276, and 277 do not authorize the Town Board or Town Planning Board to require the reimbursement to the Town of legal, planning, and engineering expenses incurred by the Town in connection with the review and consideration of application for subdivision approval, it is the expressed intent of the Town Board to change and supersede such statutes. More particularly, such statutes do not authorize the deferral or withholding of such approvals in the event such expenses are not paid to the Town. It is the expressed intent of the Town Board to change and supersede New York State

Town Law, Sections 274-a, 276, and 277 to empower the Town to require such payment as condition to such approvals.

1.3 Lot layout, street system and open spaces.

All proposed lots shall be so laid out and of such a size as to be in harmony with the development pattern of neighboring properties. The proposed streets shall compose a convenient system conforming to the Official Map, if such exists and shall be properly related to the proposals shown on the Comprehensive Plan, if such exists, and shall be of such width, grade and location as to accommodate the prospective automobile, bicycle, and pedestrian traffic, to facilitate fire protection and to provide access of fire-fighting equipment to buildings (as detailed in documents such as, but not limited to, the Town of Middlesex Zoning Law Section 703). Proper provision shall be made for open spaces for parks and playgrounds.

1.4 Title; adoption and approval.

In order that land subdivisions may be made in accordance with this policy, these regulations shall be known as the "Town of Middlesex Land Subdivision Regulations" having been adopted by the Planning Board on [DATE] and approved by the Town Board on [DATE].

ARTICLE 2 - Definitions

2.1 Terms defined.

For the purpose of these regulations, certain words and terms used herein are defined as indicated in Appendix A. Please refer to Appendix A for definitions.

ARTICLE 3 - Application Procedures

3.1 Application in writing required.

Whenever any subdivision of land is proposed, and before any contract for the sale of, or any offer to sell any lots in such subdivision or any part thereof is made, and before any permit for the erection of a structure in such proposed subdivision shall be granted, the subdivider or his duly authorized agent shall apply in writing for approval of such proposed subdivision in accordance with the following procedures.

3.2 Sketch plan.

A. Prior to submitting a final plat application for a minor subdivision or a preliminary plat application for a major subdivision, the subdivider may submit a sketch plan for informal review by the Planning Board. The sketch plan should show the location of the subdivision, all existing structures, wooded areas, streams, ponds, lakes, or poorly drained areas, significant physical features, available utilities and the proposed pattern of lots, roads, drainage and sewer and water facilities.

B. The Planning Board shall determine whether the sketch plan meets the purposes of this chapter and shall inform the subdivider of the necessary action he should take in meeting the requirements of these regulations.

3.3 Minor subdivision.

- A. Application and fee.
 - (1) Any owner of land shall, prior to subdividing or resubdividing a minor subdivision, submit an application for approval of a subdivision plat to the Planning Board Chairperson at least 20 calendar days prior to the next regularly scheduled meeting of the Planning Board. The plat shall conform to the requirements listed in Article 5, Section 5.1.
 - (2) All applications for plat approval for minor subdivisions shall be accompanied by a fee as set forth in the Schedule of Fees.
- B. Number of copies. The subdivider shall submit five copies of the plat.
- C. Subdivider to attend Planning Board meeting. The subdivider, or his duly authorized representatives, shall attend the meeting of the Planning Board to discuss the subdivision plat.
- D. The procedure for approval of the plat shall be in accordance with Subdivision 6 of § 276 of the New York State Town Law.

3.4 Preliminary plat for major subdivision.

- A. Application and fee.
 - (1) Prior to the filing of an application for the approval of a major subdivision plat, the subdivider shall file an application for the consideration of a preliminary plat of the proposed subdivision, in the form described in Article 5, Section 5.3. The preliminary plat shall, in all respects, comply with the requirements set forth in the provisions of Sections 276 and 277 of the New York State Town Law, and Article 5, Section 5.3 of these Subdivision regulations, except where a waiver may be specifically authorized by the Planning Board.
 - (2) The application for review of the preliminary plat shall be accompanied by a fee as set forth in the Schedule of Fees.
- B. Number of copies. Five copies of the preliminary plat shall be presented to the Planning Board Chairperson at least 20 calendar days prior to a regularly scheduled meeting of the Board.
- C. Subdivider to attend Planning Board meeting. The subdivider, or his duly authorized representatives, shall attend the meeting of the Board to discuss the preliminary plat.
- D. Study of preliminary plat. The Board shall study the practicability of the preliminary plat taking into consideration the requirements of the community and the best use of the land being

subdivided. Particular attention shall be given to the arrangement, location, and width of streets, their relation to the topography of the land, water supply, sewage disposal, drainage and watercourses, lot sizes and arrangements, the future development of the adjoining lands as yet unsubdivided, and the requirements of the Comprehensive Plan, the Official Map, and zoning regulations, paying particular regard to Town of Middlesex Zoning Law Sections 402 and 403.

E. The procedure for approval of the plat shall be in accordance with Subdivision 5 of § 276 of the New York State Town Law.

3.5 Final plat for major subdivision.

- A. Application and fee. Within six months of the approval of the preliminary plat the owner shall file with the Planning Board an application for approval of the subdivision plat in final form. All applications shall be accompanied by a fee as set forth in the Schedule of Fees. If the final plat is not submitted within six months of the approval of the preliminary plat, the Board may revoke the approval of the preliminary plat.
- B. Number of copies. The subdivider shall provide the Planning Board Chairperson with a copy of the application and seven copies (in a format that satisfies the requirements of the Yates County Clerk's Office) of the plat, plus the original and one true copy of all offers of cession, covenants, and agreements and two prints of all construction drawings. These documents shall be submitted at least 20 calendar days prior of the regularly scheduled meeting of the Board.
- C. Endorsement of state and county agencies. Applications for approval of plans for sewer and water facilities will be filed by the subdivider with all necessary town, county and state agencies. Endorsement and approval by the New York State Department of Health shall be secured by the subdivider before official submission of the subdivision plat.
- D. The procedure for approval of the plat shall be in accordance with Subdivision 6 of § 276 of the New York State Town Law.
- E. No building permits shall be issued until approval of the final plat is granted.

3.6 Project Execution Requirements.

The Subdivider shall be required to provide for, or comply with, the following:

A. Performance Bonding. Prior to any building permit being issued, the Subdivider shall provide bonding for the benefit of the Town of Middlesex to both assure completion of all Town required improvements and to cover the cost of restoring the site should the Subdivider abandon the project before completion. If the latter occurs, the bond will be used to fund all necessary work required to return the parcel to near its original state or to a condition satisfactory to the Town Planning Board and Town Code Enforcement Officer. The value of the bond shall be an agreed upon percentage of the overall project estimate that will be sufficient to cover the conditions stated above. Any such bond shall comply with the requirements of § 277 of the Town Law and shall be satisfactory to the Town Board or it's designee as to form, sufficiency,

manner of execution and surety. A period of one year (or other period as the Town Board may determine appropriate, not to exceed three years) shall be set forth in the bond within which required improvements must be completed.

B. Inspection of Required Improvements. The Town Board shall appoint as Town Representative either the Town Code Enforcement Officer (CEO) or the Town's Consulting Engineer (CE) as the point contact for the Subdivider on all matters of construction inspection, construction modifications and project acceptance. After receipt of a building permit, and at least ten (10) calendar days prior to commencing construction of required improvements, the Subdivider shall notify the Town Representative in writing what the construction start date will be. The Town Representative shall subsequently begin periodic site inspections to assure that required improvements per the final plat are being performed satisfactorily. If any of the required improvements are found to be out of compliance with the approved plans and specifications, the Subdivider shall be given written notice by the Town Representative. If the Subdivider fails to respond to the written notice in a reasonable period of time, the Town Board may revoke the building permit and shall take all necessary steps to preserve the Town's rights under Article 7 (Enforcement) of this Law.

NOTE: Primary inspection responsibilities for the project are anticipated to fall under the scope of the engineering and design firm secured by the Subdivider. The Town Representative shall monitor and coordinate with these primary inspection efforts.

- C. Reimbursement of Fees and Expenses. The applicant, for approval of a subdivision in the Town, shall reimburse the Town of all reasonable and necessary planning and engineering expenses incurred by the Town in connection with the review and consideration of such subdivision. A developer who constructs, or proposes to construct, one or more highways, drainage facilities, utilities or parks within or in conjunction with an approved subdivision in the Town shall reimburse the Town for all reasonable and necessary legal, planning, and engineering expenses incurred by the Town in connection with the inspection and acceptance by the Town of such highways, drainage facilities, utilities and parks and the dedication of same to the Town.
 - 1. Exemptions. Any subdivision of land into no more than two lots abutting an existing public highway is hereby exempt from reimbursement of fees and expenses.
 - 2. Exemptions. Notwithstanding anything to the contrary contained in this local law, an applicant or developer shall not be required to reimburse the Town for any part of a legal, planning, or engineering fee incurred by the Town for services performed in connection with matters, including but not limited to those resulting from complaints by third parties, as to which the Town Board determines the applicant or developer had no responsibility or was beyond the reasonable control of the applicant or developer.
- D. Modification of design improvements. If at any time before or during the construction of the required improvements it is demonstrated to the satisfaction of the Town Representative that unforeseen conditions make it necessary or preferable to modify the location or design of such required improvements, the Town Representative, upon approval by the Town Planning Board, may authorize such modifications provided that these modifications are within the spirit and intent of the Town Master Plan and do not violate any governing specifications. Authorization

for the change(s) shall be granted via signature by the Town Representative on a change authorization form prepared and submitted by the Subdivider in advance of any modification work taking place. A copy of each change authorization shall be submitted to the Planning Board for review as well. The Subdivider shall take note that modification review by the Planning Board may not take place until the next regularly scheduled meeting. (Meetings are held the first Thursday in each month.)

E. Completion of Required Improvements. The Subdivider shall alert the Town Representative in writing when a final inspection of Town required improvements is requested. One required item of completion will always be a set of as-built drawings, properly drafted, locating all underground utilities, roadway centerlines, rights-of-way, and lot boundaries, all referenced off any new permanent survey monuments or established existing control points. Once all required improvements have been performed satisfactorily, the Town Representative shall prepare and present a Letter of Completion to the Chair of the Town Planning Board for joint signatures. Upon receipt of a properly signed Letter of Completion from the Town Representative, the Subdivider will be allowed to release any performance bond in force.

NOTE: No Letter of Completion, or release of bonding, shall be issued or granted if the Subdividor is in default on any previously approved plat.

3.7 Deposit and Payment of Fees

- A Simultaneously with the filing of an application for approval of a development and prior to the commencement of any construction of buildings, highways, drainage facilities, utilities or parks therein the applicant or developer, as the case may be, shall deposit with the Town Clerk a sum of money, as set forth in the Schedule of Fees, which sum shall be used to pay the costs incurred by the Town for engineering, planning and legal services as described in Section 3.6C of this local law.
- B. Upon receipt of such sums, the Town Clerk shall cause such monies to be placed in a separate non-interest bearing account in the name of the Town and shall keep a separate record of all such monies so deposited and the name of the applicant or developer and project for which such sums were deposited.
- C. Upon receipt and approval by the Town Board of itemized vouchers from an engineer, planner, and/or attorney for services rendered on behalf of the Town pertaining to the development, the Town Clerk shall cause such vouchers to be paid out of the monies so deposited, and shall furnish copies of such vouchers to the applicant or developer at the same time such vouchers are submitted to the Town.
- D. The Town Board shall review and audit all such vouchers and shall approve payment of only such engineering, planning, and legal fees as are reasonable in amount and necessarily incurred by the Town in connection with the review, consideration and approval of developments and the inspection and acceptance of highways, drainage facilities, utilities and parks within or in conjunction with such developments. For purpose of the foregoing, a fee or part thereof is reasonable in amount if it bears a reasonable relationship to the average charge by engineers,

planners, or attorneys to the Town for services performed in connection with the approval or construction of a similar development and in this regard the Town Board may take into consideration the size, type and number of buildings to be constructed, the amount of time to complete the development, the topography of the land on which such development is located, soil conditions, surface water, drainage conditions, the nature and extent of highways, drainage facilities, utilities and parks to be constructed and any special conditions or considerations as the Town Board may deem relevant; and a fee or part thereof is necessarily incurred if it was charged by the engineer, planner, or attorney for a service which was rendered in order to protect or promote the health, safety or other vital interests of the residents of the Town, protect public or private property from damage from uncontrolled, surface water run-off and other factors, assure the proper and timely construction of highways, drainage facilities, utilities arid parks, protect the legal interests of the Town including receipt by the Town of good and proper title to dedicated highways and other facilities and the avoidance of claims and liability, and such other interests as the Town Board may deem relevant.

- E. If at any time during or after the processing of such application or in the construction, inspection or acceptance of buildings, highways, drainage facilities, utilities or parks there shall be insufficient monies on hand to the credit of such applicant or developer to pay the approved vouchers in full, or if it shall reasonably appear to the Town Board that such monies will be insufficient to meet vouchers yet to be submitted, the Town Board shall cause the applicant or developer to deposit additional sums as the Town Board deems necessary or advisable in order to meet such expenses or anticipated expenses.
- F. In the event that the applicant or developer fails to deposit such funds or such additional funds, the Town Board shall notify as applicable, the Chairperson of the Planning Board, and the Town's Code Enforcement Officer of such failure, and any review, approval, building permit or certificates of occupancy may be withheld by the appropriate board, officer or employee of the Town until such monies are deposited.
- G. After final approval, acceptance and/or the issuance of a Certificate of Occupancy relating to any specific development, and after payment of all approved vouchers submitted regarding such development, any sums remaining on account to the credit of such applicant or developer shall be returned to such applicant or developer, along with a statement of the vouchers so paid.
- H. Application Fees. The deposits required by Section 3.7 of this law shall be in addition to any regular application fees as may be required by Section 3.3A and 3.4A, and shall not be used to offset the Town's general expenses of legal and engineering services for the several boards of the Town, nor its general administration expenses.

3.8 Filing of approved subdivision plat.

A. Final approval and filing. Upon completion of the requirements in Sections 3.5 and 3.6 above and notation to that effect upon the subdivision plat, it shall be deemed to have final approval and shall be properly signed by the appropriate officer of the Planning Board (Chair or Acting Chair) and may be filed by the applicant in the office of the County Clerk. Any

subdivision plat not so filed or recorded within 62 calendar days of the date upon which such plat is approved or considered approved by reasons of the failure of the Planning Board to act shall become null and void.

B. Plat void if revised after approval. No changes, erasures, modifications, or revisions shall be made in any subdivision plat after approval has been given by the Planning Board and endorsed in writing on the plat, unless the plat is first resubmitted to the Planning Board and such Board approves any modifications. In the event that any such subdivision plat is recorded without complying with this requirement, the same shall be considered null and void, and the Board shall institute proceedings to have the plat stricken from the records of the County Clerk.

3.9 Acceptance of public streets and recreation areas.

- A. Ownership and maintenance of streets: The approval by the Planning Board of a subdivision plat shall not be deemed to constitute or be evidence of any acceptance by the Town of any street, easement, or other open space shown on such subdivision plat. Please refer to the document entitled *Standards for New Roads Town of Middlesex*, which can be obtained from the Town of Middlesex Highway Superintendent.
- B. Ownership and maintenance of recreation areas: When a park, playground, or other recreation area shall have been shown on a plat, the approval of said plat shall not constitute an acceptance by the Town of such area. The Planning Board shall require the plat to be endorsed with appropriate notes to this effect.

In the instance of park or recreational land provision, either at the time of application or at a future date, the Town Board, in consultation with the Planning Board and Town staff, reserves the right to accept dedication of such park or recreational land to the Town as public property. The Town Board may also require the filing of a written agreement between the applicant and the Town covering future deed and title, dedication, and provision for the cost of grading, development, equipment, and maintenance of any such park or recreation area.

ARTICLE 4 - General Requirements and Design Standards

4.1 Minimum standards; waiver.

In considering applications for subdivision of land, the Planning Board shall be guided by the standards set forth below. These standards shall be considered to be minimum requirements and shall be waived by the Planning Board only under circumstances set forth in Article 6 herein.

4.2 General requirements.

- A. Character of land. Land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood or other menace.
- B. Conformity to Official Map and Comprehensive Plan. Subdivisions shall conform to the Official Map of the Town and shall be in harmony with the Comprehensive Plan if such exists.

C. Specifications for required improvements. All required improvements shall be constructed or installed to conform to the Town specifications, which may be obtained from the Code Enforcement Officer.

4.3 Street layout.

- A. Width, location and construction. Streets shall be of sufficient width, suitably located, and adequately constructed to conform with the Comprehensive Plan, if such exists, and to accommodate the prospective traffic of all modes (motor vehicle, bicycle, pedestrian) and afford access for fire fighting, snow removal and other road maintenance equipment. The arrangement of streets shall be such as to cause no undue hardship to adjoining properties and shall be coordinated so as to compose a convenient network of streets.
- B. Arrangement. The arrangement of streets in the subdivision shall provide for the continuation of principal streets of adjoining subdivisions, and for proper projection of streets into adjoining properties which are not yet subdivided, in order to make possible necessary fire protection, movement of traffic and the construction or extension, presently or when later required, of needed utilities and public services such as sewers, water and drainage facilities. Where, in the opinion of the Planning Board, topographic or other conditions make such continuance undesirable or impracticable, the above conditions may be modified.
- C. Special treatment along major arterial streets. When a subdivision abuts or contains an existing or proposed major arterial street, the Board may require marginal access streets, deep lots with rear service laneways, or such other treatment as may be necessary for adequate protection of residential properties and to afford separation of through and local traffic and limit the access points to the arterial.
- D. Provision for future resubdivision. Where a tract is subdivided into lots substantially larger than the minimum size required in the zoning district in which a subdivision is located, the Board may require that streets and lots be laid out so as to permit future resubdivision in accordance with the requirements contained in these regulations.
- E. Dead-end streets. The creation of dead-end or loop residential streets should not interfere with normal traffic (including bicycle and pedestrian) circulation in the area. Where dead-end streets are needed, the Board may require the reservation of a fifty foot wide easement to provide for continuation of pedestrian traffic and utilities to the next street and the potential future continuation of the dead-end street pavement; subdivisions containing 20 lots or more shall have at least two street connections with existing public streets, or streets shown on the Official Map, if such exists, or streets on an approved subdivision plat for which a bond has been filed.
- G. Block size. In order to encourage walking and neighborhood connections, blocks generally shall not be less than 400 feet nor more than 800 feet in length. If a block does exceed 800 feet in length, the Board may require the reservation of a twenty-foot-wide easement through the block to provide for the crossing of underground utilities and pedestrian traffic where needed

or desirable and may further specify, at its discretion, that an eight foot wide paved footpath be included.

- H. Intersections with collector or major arterial streets. Minor or secondary street openings into such roads shall, in general, be at least 500 feet apart.
- I. Angle of intersection. In general, all streets shall join each other so that for a distance of at least 100 feet the street is approximately at right angles to the street it joins.
- J. Relation to topography. The street plan of a proposed subdivision shall bear a logical relationship to the topography of the property, and all streets shall be arranged so as to obtain as many of the building sites as possible at or above the grade of the streets. Grades of streets shall conform as closely as possible to the original topography.
- K. Other required streets. Where a subdivision borders on or contains a railroad right-of-way or limited access highway right-of-way, the Planning Board may require a street approximately parallel to and on each side of such right-of-way, at a distance suitable for the appropriate use of the intervening land (as for park purposes in residential districts, or for commercial or industrial purposes in appropriate districts). Such distances shall also be determined with due regard for the requirements of approach grades and future grade separations.

4.4 Street design.

A. Widths of rights-of-way. Streets shall have the following widths: (When not indicated on the Comprehensive Plan or Official Map, if such exists, the classification of streets shall be determined by the Board.)

	Minimum Right-of-Way	Minimum Pavement	Maximum Pavement
Type of Street			
Major	66 feet	24 feet	N/A
Collector	60 feet	24 feet	N/A
Local	50 feet	15 feet	24 feet
Access Laneways	24 feet	15 feet	20 feet

- B. Improvements. Streets shall be graded and improved with pavements, concrete or granite curbs, gutters, sidewalks, storm drainage facilities, water mains, sewers, streetlights and signs, street trees, and fire hydrants, except where waivers may be requested, and the Board may waive, subject to appropriate conditions, such improvements as it considers may be omitted without jeopardy to the public health, safety and general welfare. Pedestrian easements shall be improved as required by the Town Engineer. Such grading and improvements shall be approved as to design and specifications by the Town Engineer.
 - 1. Fire hydrants. Installation of fire hydrants shall be in conformity with all requirements of standard thread and nut as specified by the New York Fire Insurance Rating Organization and the Division of Fire Safety of the State of New York.

- 2. Streetlighting facilities. Lighting facilities shall be in conformance with the lighting system of the Town. Such lighting standards and fixtures shall be installed after approval by the appropriate power company and the authorized Town electrical inspector.
- C. Utilities in streets. The Planning Board shall, wherever possible, require that underground utilities be placed in the public right-of-way between the paved roadway and right-of-way line. The subdivider shall install underground service connections to the property line of each lot within the subdivision for such required utilities before the street is paved.
- D. Utility easements. Where topography is such as to make impractical the inclusion of utilities within the street rights-of-way, perpetual unobstructed easements of at least 20 feet in width shall be otherwise provided with satisfactory access to the street. Wherever possible, easements shall be continuous from block to block and shall present as few irregularities as possible. Such easements shall be cleared and graded where required.
- E. Grades. Grades of all streets shall conform in general to the terrain, and shall not be less than 1/2 nor more than 6% for major collector streets, or 10% for minor streets in residential zones, but in no case more than 3% within 50 feet of any intersection.
- F. Changes in grade. All changes in grade shall be connected by vertical curves of such length and radius as meet with the approval of the Town Engineer so that clear visibility shall be provided for a safe distance.
- G. Curve radii at street intersections. All street right-of-way lines at intersections shall be rounded by curves of at least 20 feet radius. Curve radii at intersections of two local streets or a local and a collector street shall be rounded by curves of *no more than* 25 feet. In all instances, curbs shall be adjusted accordingly.
- H. Steep grades and curves; visibility of intersections. A combination of steep grades and curves shall be avoided. In order to provide visibility for traffic safety, that portion of any corner lot (whether at an intersection entirely within the subdivision or of a new street with an existing street) which is area defined as a triangular area formed by two intersecting street lines and a line connecting points on such street lines 30 feet distance from their point of intersection shall be cleared of all growth (except isolated trees) and obstructions above the level of three feet higher than the center line of the street. If directed, ground shall be excavated to achieve visibility.
- I. Dead-end streets (culs-de-sac). Where dead-end streets are designed to be so permanently, they should not exceed 400 feet in length, and shall terminate in a circular turnaround having a minimum right-of-way radius of 60 feet and pavement radius of 50 feet with a planted and/or landscaped (unpaved) center so as to reduce the amount of impervious surface. At the end of temporary dead-end streets a temporary turnaround with a pavement radius of 50 feet shall be provided, unless the Planning Board approves an alternate arrangement.
- J. Watercourses. Where a watercourse separates a proposed street from abutting property, provisions shall be made for access to all lots by means of culverts or other structures of design approved by the Town Engineer.

Where a subdivision is traversed by a watercourse, drainage way, channel or stream, there shall be provided a storm water easement or drainage right-of-way as required by the Town Engineer, and in no case less than 20 feet.

- K. Curve radii. In general, street lines within a block, deflecting from each other at anyone point by more than 10°, shall be connected with a curve, the radius of which for the center line of street shall not be less than 400 feet on major streets, 200 feet on collector streets and 100 feet on minor streets.
- L. Service streets or loading space in commercial development. Paved rear service streets of not less than 18 feet in width, or in lieu thereof, adequate off-street loading space, suitably surfaced, shall be provided in connection with lots designed for commercial use.

4.5 Street names.

- A. Type of name. All street names shown on a preliminary plat or subdivision plat shall be approved by the Planning Board. In general, streets shall have names and not numbers or letters. Street names should also reflect the established pattern in the town and should refrain from multiple word names (i.e. naming a street after a person and using first and last name). Street names should also reflect the history and character of the community and region and use appellations such as "street" "avenue" "road" "terrace" and "parkway." Appellations such as "drive" "court" "trail" and "run" should be discouraged.
- B. Names to be substantially different. Proposed street names shall be substantially different so as not to be confused in sound or spelling with present names, except that streets that join or are in alignment with streets of an abutting or neighboring property shall bear the same name. Generally, a street that is continuous shall retain the same name (such as a loop street).

4.6 Lots.

- A. Lots to be buildable. The lot arrangement shall be such that in constructing a building in compliance with Section 403 of the Town of Middlesex Zoning Law, there will be no foreseeable difficulties for reasons of topography, or other natural conditions. Lots should not be of such depth as to encourage the later creation of a second building lot at the front or rear except in the instances of corner lots where such a future lot subdivision could be accommodated and accessed by the perpendicular street.
- B. Side lines. All side lines of lots shall be at right angles to straight street lines and radial to curved street lines, unless a variance from this rule will give a better street or lot plan.
- C. Corner lots. In general, comer lots should be larger than interior lots to provide for proper building setback from each street and provide a desirable building site.

- D. Driveway access. Driveway access and grades shall conform to specifications of the Town Driveway Law, if one exists. Driveway grades between the street and the setback line shall not exceed 10%.
- E. Access from private streets. Access from private streets shall be deemed acceptable only if such streets are designed and improved in accordance with these regulations.
- F. Monuments and lot comer markers. Permanent monuments meeting specifications approved by the Town Engineer as to size, type and installation shall be set at such block corners, angle points, points of curves in streets and other points as the Town Engineer may require, and their location shall be shown on the subdivision plat.

4.7 Drainage improvements.

A. Goals of drainage improvements. In keeping with the stated goals and requirements of the Federal Clean Water Act Stormwater Regulations, as administered by the New York State Department of Environmental Conservation, every effort should be made to retain water onsite or within the immediate area. Stormwater and runoff from buildings, roads, and parking areas should be captured to the greatest extent practicable and allowed to infiltrate back into the ground so as to re-charge groundwater resources and prevent large volumes of water flowing offsite. Regional stormwater facilities that can accommodate run-off from an entire development are encouraged, especially in concert with cluster subdivision design.

The subdivider shall be required by the Planning Board to address any spring or surface water that may exist either previous to, or as anticipated as a result of the full development of the subdivision.

- B. Design of drainage improvements. The design of culverts, bridges, and other drainage facilities shall be approved by the Town's consulting engineer based on the criteria and specifications contained in the following technical documents:
 - 1. The New York State Stormwater Management Design Manual (New York State Department of Environmental Conservation, most current version or its successors)
 - 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 successors).

Drainage facilities shall be located in the street right-of-way where feasible, or in perpetual unobstructed easements of appropriate width.

C. Responsibility from drainage downstream. The subdivider's engineer shall also study the effect of each subdivision on the existing downstream drainage facilities outside the area of the subdivision; this study shall be reviewed by the Town's consulting engineer. Where it is anticipated that the additional runoff incident to the development of the subdivision will overload an existing downstream drainage facility during a five-year storm, the Planning Board shall notify the Town Board of such potential condition. In such case, the Planning Board shall not approve the subdivision until provision has been made for the improvement of said condition.

D. Land subject to flooding. Land subject to flooding or land deemed by the Board to be uninhabitable shall not be platted for residential occupancy, nor for such other uses as may increase the danger to health, life or property, or aggravate the flood hazard, but such land within the plat shall be set aside for such uses as shall not be endangered by periodic or occasional inundation or improved in a manner satisfactory to the Board to remedy said hazardous conditions.

4.8 Parks, open spaces and natural features.

- A. Recreation areas shown on Town's Master Plan of 1992. Where a proposed park, playground or open space shown on the Town's Master Plan of 1992 is located in whole or in part in a subdivision, the subdivider shall show such areas on the plat in accordance with the requirements specified in Subsection B below and notify the Planning Board. Such area or areas may be dedicated to the Town or county by the subdivider if the Planning Board approves such dedication.
- B. Parks and playgrounds not shown on Town's Master Plan of 1992. The Planning Board shall require that the subdivider reserve sites of a character, extent, and location suitable for the development of a park, playground or other recreational purpose. For a major subdivision, each reservation shall be of an area equal to 8% of the total land within the subdivision, but in no case shall a reservation be less than two total acres. The area to be preserved shall possess the suitable topography, general character, and adequate road access necessary for its recreational purposes. Small parks, squares, commons, and medians integrated into the subdivision and used for informal community gathering spaces or focal points and passive recreation are encouraged.

Where the Planning Board requires land to be set aside for parks, playgrounds, or other recreational purposes, the Board shall require that the site be graded, loamed and seeded and may require it to be fenced.

C. Preservation of natural features. The Planning Board shall, wherever possible, encourage the preservation of all natural features which add value to residential developments and to the community, such as large trees or groves, watercourses and falls, beaches, historic places and structures, vistas and similar irreplaceable assets. No tree with a diameter of eight inches or more as measured three feet above the base of the trunk shall be removed unless such tree is within the right-of-way of a street shown on the final subdivision plat. Removal of additional trees shall be subject to the approval of the Planning Board.

ARTICLE 5 - Documents to be Submitted

5.1 Minor subdivision plat.

The following documents (A, 1-10, and B) shall be submitted for approval:

A. Five copies of the minor subdivision plat prepared at a scale of not more than 100 feet, but not less than 50 feet to the inch showing:

- 1. The location of that portion which is to be subdivided in relation to the entire tract, and the distance to the nearest existing street intersection.
- 2. The name of the owner and of all adjoining property owners as disclosed by the most recent municipal tax records.
- 3. The Tax Map sheet, block and lot numbers, if available.
- 4. All the utilities available, and all streets which are either proposed, mapped or built.
- 5. The proposed pattern of lots (including lot width and depth) within the subdivided area.
- 6. All existing restrictions on the use of the land including easements, covenants, or zoning lines.
- 7. An actual field survey of the boundary lines of the tract, giving complete descriptive data by bearings and distances, made and certified by a licensed land surveyor. The corners of tract shall also be located on the ground and marked by monuments as approved by the Town Engineer, and shall be referenced and shown on the plat.
- 8. All on-site sanitation and water supply facilities shall be designed to meet the minimum specifications of the State Department of Health, and a note to this effect shall be stated on the plat and signed by a licensed engineer.
- 9. Proposed subdivision name, name of the town and county in which it is located.
- 10. The date, North point, map scale, name and address of record owner and subdivider.
- B. The plat to be filed with the County Clerk shall be in a format that satisfies the filing requirements of the Yates County Clerk's Office.

5.2 Major subdivision preliminary plat and accompanying data.

The following documents (A, 1-15, B, and C) shall be submitted for approval:

- A. Five copies of the preliminary plat prepared at a scale of not more than 100 feet, but not less than 50 feet to the inch showing:
 - 1. Proposed subdivision name, name of town and county in which it is located, date, true North point, scale, name and address of record owner, subdivider, and engineer or surveyor, including license number and seal.
 - 2. The name of all subdivisions immediately adjacent and the name of the owners of record of all adjacent property.

- 3. Zoning district, including exact boundary lines of district, if more than one district, and any proposed changes in the zoning district lines and/or the text of Chapter 155, Zoning, applicable to the area to be subdivided.
- 4. All parcels of land proposed to be dedicated to public use and the conditions of such dedication.
- 5. Location of existing property lines, easements, buildings, watercourses, marshes, rock outcrops, wooded areas, single trees with a diameter of eight inches or more as measured three feet above the base of the trunk, and other significant existing features for the proposed subdivision and adjacent property.
- 6. The location of existing sewers, water mains, culverts and drains on the property, with pipe sizes, grades and direction flow.
- 7. Contours with intervals of five feet or less as required by the Board, including elevations on existing roads; approximate grading plan if natural contours are to be changed more than two feet.
- 8. The width and location of any streets or public ways or places shown on the Official Map or the Comprehensive Plan, if such exists, within the area to be subdivided, and the width, location, grades and street profiles of all streets or public ways proposed by the developer. Rights-of-way that are proposed to be dedicated to the Town or other public entity shall be so identified (see Article 5, Section 5.2, Subsection A4).
- 9. The approximate location and size of all proposed waterlines, valves, hydrants, and sewer lines, and fire alarm boxes; connection to existing lines or alternate means of water supply or sewage disposal and treatment as provided in the Public Health Law; profiles of all proposed water and sewer lines.
- 10. Stormwater Pollution Prevention Plan: A Stormwater Pollution Prevention Plan (SWPPP), consistent with the requirements of Section Eight of the Stormwater Management and Erosion Control Law (Local Law XXXX) and Phase II Stormwater Regulations of the Federal Clean Water Act as administered by the New York State Department of Conservation, shall be required for Preliminary Subdivision Plat approval. The SWPPP, and practices listed within, shall follow the design criteria and standards contained in the following technical documents:
 - a. The *New York State Stormwater Management Design* Manual (New York State Department of Environmental Conservation, most current version or its successor)
 - 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 successors).
- 11. Plans and cross sections showing the proposed location and type of sidewalks, street lighting standards, street trees, curbs, water mains, sanitary sewers and storm drains, and

the size and type thereof; the character, width and depth of pavements and subbase; the location of manholes, basins and underground conduits.

- 12. Preliminary designs of any bridges or culverts, which may be required.
- 13. The proposed lot lines with approximate dimensions and area of each lot.
- 14. Where the topography is such as to make difficult the inclusion of any of the required facilities within the public areas as laid out, the preliminary plat shall show the boundaries of proposed permanent easements over or under private property, which permanent easements shall not be less than 20 feet in width and shall provide satisfactory access to an existing public highway or public open space shown on the subdivision or the Official Map.
- 15. An actual field survey of the boundary lines of the tract, giving complete descriptive data by bearings and distances, made and certified by a licensed land surveyor. The corners of the tract shall also be located on the ground and marked by substantial monuments of such size and type as approved by the Town Engineer, and shall be referenced and shown on the plat.
- B. If the application covers only a part of the subdivider's entire holding, a map of the entire tract, drawn at a scale of not less than 400 feet to the inch showing an outline of the platted area with its proposed streets and indication of the probable future street system with its grades and drainage in the remaining portion of the tract. The part of the subdivider's entire holding submitted shall be considered in light of the entire holdings.
- C. A copy of such covenants or deed restrictions as are intended to cover all or part of the tract.

5.3 Major subdivision final plat and accompanying data.

The following documents (A, 1-10, B, and C) shall be submitted for plat approval:

- A. The plat to be filed with the County Clerk shall be in a format that satisfies the filing requirements of the Yates County Clerk's Office. The plat shall be drawn at the same scale required for the preliminary plat and oriented with the North point at the top of the map. When more than one sheet is required, an additional index sheet of the same size shall be filed showing to scale the entire subdivision with lot and block numbers clearly legible. The plat will show all data required for the preliminary plat (as detailed in Article 5, Section 5.2) as well as:
 - 1. Sufficient data acceptable to the Code Enforcement Officer or the Town's consulting engineer to determine readily the location, bearing and length of every street line, lot line, boundary line, and to reproduce such lines upon the ground. Where applicable, these should be referenced to monuments included in the state system of plane coordinates, and in any event should be tied to reference points previously established by a public authority.

- 2. The length and bearing of all straight lines, radii, length of curves and central angles of all curves; tangent bearings shall be given for each street. All dimensions and angles of the lines of each lot shall also be given. All dimensions shall be shown in feet and decimals of a foot. The plat shall show the boundaries of the property, location, graphic scale and true North point.
- 3. The plat shall also show by proper designation thereon all public open spaces for which deeds are included and those spaces title to which is reserved by the developer. For any of the latter, there shall be submitted with the subdivision plat copies of agreements or other documents showing the manner in which such areas are to be maintained and the provisions made thereof.
- 4. All offers of cession and covenants governing the maintenance of unceded open space shall bear the certificate of approval of the Town Attorney as to their legal sufficiency.
- 5. Lots and blocks within a subdivision shall be numbered and lettered in alphabetical order in accordance with the prevailing Town practice.
- 6. Permanent reference monuments shall be shown and shall be constructed in accordance with specification of the Town's consulting engineer or Code Enforcement Officer. When referenced to the state system of plane coordinates, they shall also conform to the requirements of the State Department of Public Works. They shall be placed as required by the Town's consulting engineer or Code Enforcement Officer and their location noted and referenced upon the plat.
- 7. All lot comer markers shall be permanently located satisfactorily to the Code Enforcement Officer or the Town's consulting engineer at least 3/4 inches (if metal) in diameter and at least 24 inches in length, and located in the ground to existing grade.
- 8. Monuments of a type approved by the Town Engineer shall be set at all corners and angle points of the boundaries of the original tract to be subdivided; and at all street intersections, angle points in street lines, points of curve and such intermediate points as shall be required by the Town Engineer.
- B. Construction drawings including plans, profiles and typical cross sections, as required, showing the proposed location, size and type of streets, sidewalks, street lighting standards, street trees, curbs, water mains, sanitary sewers and storm drains, pavements and sub base, manholes, catch basins and other facilities.
- C. Stormwater Pollution Prevention Plan: Any revisions to the Stormwater Pollution Prevention Plan (SWPPP) submitted as part of the preliminary plat shall be required for Final Subdivision Plat approval.

ARTICLE 6 - Variances and Waivers

6.1 Variances due to extraordinary hardship.

Where the Planning Board finds that extraordinary and unnecessary hardships may result from strict compliance with these regulations, it may vary the regulations so that substantial justice may be done and the public interest secured, provided that such variations will not have the effect of nullifying the intent and purpose of the Official Map, Comprehensive Plan, or the Zoning Law, if such exists.

6.2 Variances due to special circumstances.

Where the Planning Board finds that, due to the special circumstances of a particular plat, the provision of certain required improvements is not requisite in the interest of the public health, safety and general welfare or is inappropriate because of inadequacy or lack of connecting facilities adjacent or in proximity to the proposed subdivision, it may waive such requirements subject to appropriate conditions.

6.3 Conditions of variances to secure objectives of regulations.

In granting variances and modifications, the Planning Board shall require such conditions as will, in its judgment, secure substantially the objectives of the standards or requirements so varied or modified.

ARTICLE 7 - Enforcement

7.1 Penalties for offenses.

The Town Board may provide by local law or ordinance for the enforcement of this article and of any local law, ordinance or regulation made thereunder. A violation of this article or of such local law, ordinance or regulation 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 of 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 article or of such local law, ordinance or regulation 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.

7.2 Enforcement.

These regulations shall be enforced by the Code Enforcement Officer or designee.

Town of Middlesex Subdivision Regulations – Appendix A

Definitions

ACCESS LANEWAY - A public or private right-of-way of limited use intended only to provide access to the rear or side of lots or buildings in hamlet, village, or similar densely built areas.

APPLICANT – Any person, firm, partnership, association, corporation, company or organization of any kind who or which requests the Town Planning Board or Town Board to approve a development.

BLOCK - A piece or parcel of land entirely surrounded by public highways, streets, streams, railroad rights-of-way or parks, etc., or a combination thereof.

COLLECTOR STREET - A street which serves or is designed to serve as a traffic way for a neighborhood or as a feeder to a major street.

COMPREHENSIVE PLAN (MASTER PLAN) A comprehensive plan, (also called a master plan) prepared by the Planning Board pursuant to Section 272-a of the New York State Town Law which indicates the general locations recommended for various functional classes of public works, places and structures and for general physical development of the Town and includes any unit or part of such plan separately prepared and any amendment to such plan or parts therein.

DEAD-END STREET or CUL-DE-SAC - A street or a portion of a street with only one vehicular traffic outlet.

DEVELOPER – see SUBDIVIDER

DRAINAGE FACILITY – All surface water drainage facilities, including, but not limited to, detention and retention basins, storm sewers and their appurtenances, drainage swales and ditches, and any easements through or over which said facilities may be constructed or installed in or in connection with a development.

EASEMENT - The authorization by a property owner for the use by another, and for a specified purpose, of any designated part of his property.

ENGINEER or LICENSED PROFESSIONAL ENGINEER- A person licensed as a professional engineer by the State of New York.

HIGHWAY – The term 'highway' includes a street, avenue, road, square, place, alley, lane, boulevard, concourse, parkway, driveway, overpass and underpass, and also includes all items appurtenant thereto, including but not limited to bridges, culverts, ditches, shoulders, and sidewalks in or in connection with a development.

LOCAL STREET - see 'Minor Street'

MAJOR STREET - A street which serves or is designed to serve heavy flows of traffic and which is used primarily as a route for traffic between communities and/or other heavy traffic generating areas.

MAJOR SUBDIVISION - Any subdivision of a parent parcel of land into four or more lots, or any subdivision requiring any new street, road, or extension of municipal facilities.

MINOR STREET - A street that provides for direct access to residential, commercial, industrial, or other abutting land for local traffic movements and connects to collector and/or major streets.

MINOR SUBDIVISION - Any subdivision of a parent parcel of land not classified as a major subdivision.

OFFICIAL MAP - The map established by the Town Board pursuant to § 270 of New York State Town Law, showing streets, highways, and parks and drainage, both existing and proposed.

PARENT PARCEL – The parcel as on file in the Yates County office of Real Property Services five (5) years previous to the subdivision application.

PLANNER - The duly designated professional planner of the Town, either as a member of the Town staff or as a consultant to the Town, or position assigned with similar duties.

PLANNING BOARD - The Planning Board of the Town.

PRELIMINARY PLAT - A drawing or drawings clearly marked "preliminary plat" showing the salient features of a proposed subdivision, as specified in Article 5 of these regulations, submitted to the Planning Board for the purposes of consideration prior to submission of the plat in final form and of sufficient detail to apprise the Planning Board of the layout of the proposed subdivision.

STREET - Includes streets, roads, avenues, lanes, or other traffic ways, between right-of-way lines.

STREET PAVEMENT - The wearing or exposed surface of the roadway used by vehicular (including bicycle) traffic.

STREET WIDTH - The width of the right-of-way, measured at right angles to the center line of the street.

SUBDIVIDER - Any person, firm, corporation, partnership or association, who shall lay out any subdivision or part thereof as defined herein, either for themselves or others.

SUBDIVISION - The division of any parcel of land into any number of lots, blocks or sites, with or without streets, for the purpose of sale, transfer of ownership, or development. The term "subdivision" shall include any alteration of lot lines or dimensions of any lots or sites shown on a plat on file in the Yates County office of Real Property Services. The term "subdivision is further defined as either a "minor" or "major" subdivision (Please see 'Minor Subdivision' and 'Major Subdivision' for these definitions).

SUBDIVISION PLAT or FINAL PLAT - A drawing, in final form, showing a proposed subdivision containing all information or detail required by law and by these regulations to be presented to the Planning Board for approval, and which if approved, may be duly filed or recorded by the applicant in the office of the County Clerk or Register.

SURVEYOR - A person licensed as a land surveyor by the State of New York.

TOWN BOARD - The legislative body of the Town.

TOWN ENGINEER - The duly designated engineer of the Town, either as a member of the Town staff or as a consultant to the Town, or position assigned with similar duties.

UNDEVELOPED PLAT - Those plats existing at the time of the enactment of this chapter that have been filed in the office of the County Clerk, where 20% or more of the lots within the plat are unimproved.

Appendix E5

Stormwater Management and Sediment and Erosion Control

New York State Department of Environmental Conservation New York State Department of State

Controlling stormwater runoff and the resulting erosion from areas where the soil as been disturbed, such as construction sites, is a key aspect of protecting water quality. The Federal Clean Water Act, which in New York State is administered by the State Department of Environmental Conservation, mandates that all construction activities that disturb one acre or more of soil must demonstrate how the site work will prevent erosion and sedimentation. Procedurally, this is accomplished by having the owner of the parcel being developed file what is called a Notice of Intent' (NOI) with the DEC.

As has been noted, however, the DEC can use assistance in making sure what the developer says will be done is actually done. Municipalities are encouraged (those in urbanized areas, the so-called "Regulated MS4s," are required) to adopt local laws that require developers to get a local permit for construction activities that disturb soil. By implementing a local permitting process, the municipality is able to enforce good development practices and ideally protect water quality. Because so much of the development permitting process, from zoning approval to building permits, happens at the local level, ensuring that the construction process proceeds in an appropriate manner should happen locally.

The following model law was developed by the Department of Environmental Conservation and the Department of State so that municipalities could implement local oversight of construction and ground disturbance activities. For the Regulated MS4s adopting of this law is a requirement (one of the six Minimum Control Measures). Although this law is designed to ensure compliance with the Minimum Control Measures of the Stormwater Phase II Regulations for regulated MS4s, the model law is certainly applicable for any municipality in New York State. However, for non-regulated municipalities, there is the option of adopting a simpler model Stormwater Management law, which can be found in Appendix E6. Regardless of whether your municipality is a regulated MS4 or not, all municipalities should consult the 2004 DEC/DOS publication "Stormwater Management Guidance Manual for Local Officials."

Model Local Law for Stormwater Management and Erosion and Sediment Control

A local law to amend the (Zoning Law/Subdivision Law/Site Plan Review Law/Erosion and
Sediment Control Law) of the ((City/Town/Village) of), Local law Number
of the Year
[Article 1 and Article 2 must be adopted for proper implementation. The municipality and its legal counsel, after reviewing their local codes and this model language, should pick additional provisions from Articles 3, 4, 5 and 6 to ensure review and enforcement of stormwater pollution prevention plans at the local level.]
Be it enacted by the (City Council/Town Board/Village Board of Trustees) of the ((City/Town/Village) 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.

[The above list is a general set of objectives to reduce the impact of stormwater on receiving waters. Section 2.1 applies to regulated MS4s; a municipality not currently under this program may wish to leave this objective out, although the community may become regulated in the future. The advantage to adopting a local law for all municipalities is that the local government then has control over review and approval of Stormwater Pollution Prevention Plans (SWPPPs) during subdivision and site plan review. The local government may also wish to set some more specific objectives, based on priority water quality (refer to New York State 303 (d) list of priority waters at www.dec.state.ny.us/website/dow/303dcalm.html) and habitat problems (e.g., to reduce phosphorus loads being delivered to recreational lakes, to sustain a Class TS trout fishery).]

Section 3. Statutory Authority

In accordance with Article 10 of the Municipal Home Rule	Law of the State of New York, the
(City Council/Town Board/Village Board of Trustees of) has the authority to
enact local laws and amend local laws and for the purpose of	of promoting the health, safety or
general welfare of the ((City/Town/Village) of) and for the protection and

enhancement of its physical environment. The (City Council/Town Board/Village Board of Trustees 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 ((City Council/Town Board/Village Board of Trustees) of the (Town/Village/City) of
Section 5. Exemptions
The following activities may be exempt from review under this law.
[The municipality may elect to include some or all of the exemptions in Section 5]
 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
((City/Town/Village) of) on or before the effective date of this law.

the effective date of this law.

5.6 Land development activities for which a building permit has been approved on or before

- 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

[Municipalities that do not have zoning should add the language in Article 2 to Article 3 (Site Plan Review Law Amendment) or Article 4 (Subdivision Regulation Amendment) as applicable for their municipality.]

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.

[Definitions should be incorporated into the appropriate section of the municipality's zoning law which contains definitions.]

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 SWPPs 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 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.

[A municipality may choose to reduce the amount of land that may be exposed at any one time.]

- 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) 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.

[The New York State technical guidance documents may be ordered from The Department. An order form as well as downloadable versions of the Manuals are available on the Internet at;

http://www.dec.state.ny.us/website/dow/toolbox/escstandards/index.html http://www.dos.state.ny.us/lgss/stormwaterpub/index.html]

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 ((City/Town/Village) 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 ((City/Town/Village) 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 ((City/Town/Village) 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 ((City/Town/Village) 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

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.

and sufficient area, by easement or otherwise, for inspection and regular maintenance.

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 ((City/Town/Village) 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.
[If the municipality has only one requirement for a final plan (no preliminary) then use Paragraph A language only.]
Article 4. Site Plan Review Regulation Amendment
Sections and of the Site Plan Review regulations of the ((City/Town/Village) 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
The Erosion & Sediment Control Law of the ((City/Town/Village) of) is hereby repealed and replaced with the New York State Model Erosion and Sediment Control Ordinance, March 2003.

[The New York State Model Erosion and Sediment Control Law should be tailored to the municipality by inserting municipality name where appropriate and removing comment lines.]

Section ______ of the Erosion & Sediment Control Law of the ((City/Town/Village) 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.

[For both options in Article 5, the municipality must also adopt Articles 1, 2, 3 and 4 (as applicable for their municipality) in order to address post-construction stormwater runoff control in stormwater pollution prevention plans.]

Article 6. Administration and Enforcement

[The following provisions for construction inspection, performance guarantees and bonds, and enforcement are important to include in a stormwater control program, but may already exist in local law. Therefore the municipality and its counsel should review their existing provisions for these activities, compare them with the following provisions, and consider whether revisions or amendments are necessary to achieve the purposes of this local law.]

Section 1. Construction Inspection

- 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 ((City/Town/Village) 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

1.3 Inspection of Stormwater Facilities After Project Completion

management facilities and must be certified by a professional engineer.

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.

[Inspections may be performed by local government staff or the local government may designate an inspector required to have a Professional Engineer's (PE) license or

Certified Professional in Erosion and Sediment Control (CPESC) certificate, as long as the designated inspector is required to submit a report.] 1.4 Submission of Reports The ((City/Town/Village) 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 ((City/Town/Village) 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 ((City/Town/Village) of) in its
approval of the Stormwater Pollution Prevention Plan, the ((City/Town/Village) 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
((City/Town/Village) of) as the beneficiary. The security shall be in an amount
to be determined by the ((City/Town/Village) 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
((City/Town/Village) 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
((City/Town/Village) 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
((City/Town/Village) 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
((City/Town/Village) of) may draw upon the account to cover the costs of
proper operation and maintenance, including engineering and inspection costs.
2.3 Recordkeeping
The ((City/Town/Village) of) may require entities subject to this law to maintain
records demonstrating compliance with this law.
Section 3. Enforcement and Penalties
Section 3. Emortement and renatties
3.1 Notice of Violation.
When the ((City/Town/Village) 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	Ston	Work	Orders
3.4	Stop	WOIK	Orders

The ((City/Town/Village) of) may issue a stop work order	r for violations of this law.
Persons receiving a stop work order shall be required to halt all land de	evelopment activities,
except those activities that address the violations leading to the stop w	ork order. The stop work
order shall be in effect until the ((City/Town/Village) of)	confirms that the land
development activity is in compliance and the violation has been satisf	factorily addressed. Failure
to address a stop work order in a timely manner may result in civil, cri	minal, or monetary
penalties in accordance with the enforcement measures authorized in t	his 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 ((City/Town/Village) 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 ((City/Town/Village) of) may require any person undertaking land development activities regulated by this law to pay reasonable costs at prevailing rates for review of SWPPP inspections, or SMP maintenance performed by the ((City/Town/Village) of) or performed by a third party for the ((City/Town/Village) of)	

Schedule 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.

Schedule B – Stormwater Management Practices

		nagement Practices Acceptable for Water Quality te Stormwater Management Design Manual, Table 5.1)
Group	Practice	Description
	Micropool Extended Detention Pond (P-1)	Pond that treats the majority of the water quality volume through extended detention, and incorporates a micropool at the outlet of the pond to prevent sediment resuspension.
	Wet Pond (P-2) Pond that provides storage for the entire water quality volume permanent pool.	
Pond	Wet Extended Detention Pond (P-3)	Pond that treats a portion of the water quality volume by detaining storm flows above a permanent pool for a specified minimum detention time.
Multiple Pond System (P-4) A group of ponds that collective		A group of ponds that collectively treat the water quality volume.
	Pocket Pond (P-5)	A stormwater wetland design adapted for the treatment of runoff from small drainage areas that has little or no baseflow available to maintain water elevations and relies on groundwater to maintain a permanent pool.
	Shallow Wetland (W-1)	A wetland that provides water quality treatment entirely in a shallow marsh.
	Extended Detention Wetland (W-2)	A wetland system that provides some fraction of the water quality volume by detaining storm flows above the marsh surface.
Wetland	Pond/Wetland System (W-3)	A wetland system that provides a portion of the water quality volume in the permanent pool of a wet pond that precedes the marsh for a specified minimum detention time.
	Pocket Wetland (W-4)	A shallow wetland design adapted for the treatment of runoff from small drainage areas that has variable water levels and relies on groundwater for its permanent pool.
	Infiltration Trench (I-1)	An infiltration practice that stores the water quality volume in the void spaces of a gravel trench before it is infiltrated into the ground.
Infiltration	Infiltration Basin (I-2)	An infiltration practice that stores the water quality volume in a shallow depression before it is infiltrated into the ground.
	Dry Well (I-3)	An infiltration practice similar in design to the infiltration trench, and best suited for treatment of rooftop runoff.
	Surface Sand Filter (F-1)	A filtering practice that treats stormwater by settling out larger particles in a sediment chamber, and then filtering stormwater through a sand matrix.
Filtering	Underground Sand Filter (F-2)	A filtering practice that treats stormwater as it flows through underground settling and filtering chambers.
Practices	Perimeter Sand Filter (F-3)	A filter that incorporates a sediment chamber and filter bed as parallel vaults adjacent to a parking lot.
	Organic Filter (F-4)	A filtering practice that uses an organic medium such as compost in the filter in place of sand.
	Bioretention (F-5)	A shallow depression that treats stormwater as it flows through a soil matrix, and is returned to the storm drain system.
Open	Dry Swale (O-1)	An open drainage channel or depression explicitly designed to detain and promote the filtration of stormwater runoff into the soil media.
Channels	Wet Swale (O-2)	An open drainage channel or depression designed to retain water or intercept groundwater for water quality treatment.

Appendix E6

Erosion and Sediment Control

New York State Department of Environmental Conservation New York State Department of State

Controlling stormwater runoff and the resulting erosion from areas where the soil as been disturbed, such as construction sites, is a key aspect of protecting water quality. The Federal Clean Water Act, which in New York State is administered by the State Department of Environmental Conservation, mandates that all construction activities that disturb one acre or more of soil must demonstrate how the site work will prevent erosion and sedimentation.

Procedurally, this is accomplished by having the owner of the parcel being developed file what is called a 'Notice of Intent' (NOI) with the DEC.

As has been noted, however, the DEC can use assistance in making sure what the developer says will be done is actually done. Municipalities are encouraged (those in urbanized areas, the so-called "Regulated MS4s," are required) to adopt local laws that require developers to get a local permit for construction activities that disturb soil. By implementing a local permitting process, the municipality is able to enforce good development practices and ideally protect water quality. Because so much of the development permitting process, from zoning approval to building permits, happens at the local level, ensuring that the construction process proceeds in an appropriate manner should happen locally.

The following model law was developed by the Department of Environmental Conservation and the Department of State so that municipalities could implement local oversight of construction and ground disturbance activities.

This law does not fulfill the requirements for Regulated MS4s (See Appendix E5). However, for non-regulated municipalities, this simpler model may be useful as a first step towards greater oversight of construction activities in the community. Regardless of whether your municipality is a regulated MS4 or not, all municipalities should consult the 2004 DEC/DOS publication "Stormwater Management Guidance Manual for Local Officials."

APPENDIX A NYS MODEL EROSION AND SEDIMENT CONTROL ORDINANCE

Section I. Introduction/ Purpose

During the construction process, soil is highly vulnerable to erosion by wind and water. Eroded soil endangers water resources by reducing water quality and causing the siltation of aquatic habitat for fish and other desirable species. Clearing and grading during construction add to the loss of native vegetation necessary for terrestrial and aquatic habitat. In addition, eroded soil necessitates repair of sewers and ditches and dredging of lakes.

The purpose of this local regulation is to safeguard persons, protect property, and prevent damage to the environment from erosion and sedimentation in ______(municipality). Compliance with this ordinance will also meet the requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities and promote the public welfare by guiding, regulating, and controlling the design, construction, use, and maintenance of any development, or other activity, that disturbs or breaks the topsoil or results in the movement of earth on land in ______ (municipality).

Section II. Definitions

Certified Professional In Erosion & Sediment Control (**CPESC**) - A person who has received training and is certified by CPESC Inc, to review, inspect, and/or maintain erosion and sediment control practices.

Clearing - Any activity that removes the vegetative surface cover.

Drainage Way - Any channel that conveys surface runoff throughout the site.

Erosion Control - A measure that prevents erosion.

Erosion and Sediment Control Plan - A set of plans indicating the specific measures and sequencing to be used to control sediment and erosion on a development site during and after construction.

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

Perimeter Control - A barrier that prevents sediment from leaving a site by either filtering sediment-laden runoff or diverting the runoff to a sediment trap or basin.

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

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

Site - A parcel of land or a contiguous combination thereof, where grading work is performed as a single unified operation (would include all phases of a single development).

Site Development Permit - A permit issued by the municipality for the construction or alteration of ground improvements and structures for the control of erosion, runoff, and grading.

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

Start of Construction - The first land-disturbing activity associated with a development, including land preparation such as clearing, grading, and filling; installation of streets and walkways; excavation for basements, footings, piers, or foundations; erection of temporary forms; and installation of accessory buildings such as garages.

Watercourse -Any body of water, including, but not limited to lakes, ponds, rivers, streams, tributaries, drainage ways, and/or bodies of water.

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

Section III. Permits

No person shall be granted a site development permit for
land-disturbing activity that would require the uncovering
ofsquare feet of land without the approval of an
Erosion and Sediment Control Plan by
(municipality).

NOTE: The size of the site regulated under the erosion and sediment control ordinance varies widely. The proposed Phase II of US EPA's National Pollutant Discharge Elimination System (NPDES) rules regulates disturbances 1 acre or larger, but communities may regulate sites as small as a few thousand square feet..

No site development permit is required for the following activities:

- Cemetery graves.
- Any emergency activity that is immediately necessary for the protection of life, property, or natural resources. Existing nursery and agricultural operations conducted as a permitted main or accessory use.

NOTE: Communities may choose to exempt other activities, such as mining, from an erosion and sediment control permit, or in some cases include the exempted uses cited above.

Each permit application shall bear the name(s) and address(es) of the owner or developer of the site and of any consulting firm retained by the applicant, including the name of the applicant's principal contact at such firm. The application shall be accompanied by a filing fee.

The applicant will be required to file with _________(municipality) a faithful performance bond, letter of credit, or other improvement security in an amount deemed sufficient by _________(municipality's officer) to cover all costs of improvements, landscaping, maintenance of improvements for such period as specified by __________(municipality), and engineering and inspection costs to cover the cost of failure or repair of improvements installed on the site.

Section IV. Review and approval

______ (municipality's officer) will review each application for a site development permit to determine its conformance with the provisions of this regulation.

Within 30 days after receiving an application,
______ (municipality's officer) shall, in writing:

- Approve the permit application;
- Approve the permit application subject to such reasonable conditions as may be necessary to secure substantially the objectives of this regulation, and issue the permit subject to these conditions; or
- Disapprove the permit application, indicating the reason(s) and/or procedure for submitting a revised application and/or submission.

Failure of _______ (municipality's officer) to act on an original or revised application within 30 days of receipt shall authorize the applicant to proceed in accordance with the plans as filed, unless such time is extended by agreement between the applicant and ______ (municipality's officer).

Pending preparation and approval of a revised plan, development activities shall be allowed to proceed in accordance with conditions established by ____municipality's officer).

Section V. Erosion and Sediment Control Plan

The Erosion and Sediment Control Plan shall include the following:

A natural resources map identifying soils, forest cover, and resources protected under other chapters of this code.

NOTE: This map should be at a scale no smaller than 1"=50'.

- A sequence of construction of the development site, including stripping and clearing; rough grading; construction of utilities, infrastructure, and buildings; and final grading and landscaping. Sequencing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, areas of clearing, installation of temporary erosion and sediment control measures, and establishment of permanent vegetation.
- All erosion and sediment control measures necessary to meet the objectives of this local regulation throughout all phases of construction and after completion of development of the site. Depending upon the complexity of the project, the drafting of intermediate plans may be required at the close of each season.
- Seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, type and rate of lime and fertilizer application, and kind and quantity of mulching for both temporary and permanent vegetative control measures.
- Provisions for maintenance of ESC practices, including easements and estimates of the cost of maintenance.

Modifications to the plan shall be processed and approved
or disapproved in the same manner as Section IV of this
regulation, and may be authorized by
(municipality's officer) through written authorization to the
permittee, and shall include major amendments of the
erosion and sediment control plan submitted to
(municipality's officer).
Field modifications of a minor nature may be approved
varbally by (municipality's officer)

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and noted in the site log book.

Section VI. Design Requirements

- 1) Grading, erosion control practices, sediment control practices, and waterway crossings shall meet the design criteria set forth in the most recent version of the "NYS Erosion Control Standards and Specifications" manual. A copy of the manual is on file in the office of ______ (municipality's officer).
- 2) Clearing and grading of natural resources, such as forests and wetlands, shall not be permitted, except when approved by the ______ (municipality's officer). Clearing techniques that retain natural vegetation and drainage patterns, as described in "NYS Erosion Control Standards and Specifications" manual, shall be used to the satisfaction of ______ (municipality's officer).
- Clearing, except that necessary to establish sediment control devices, shall not begin until all start up erosion and sediment control devices have been installed and have been stabilized.

NOTE: Additional ordinances, such as the stream buffer codes and the forest conservation code in the "Miscellaneous Ordinances <misc.htm \mc>" section, could also restrict clearing.

4) Phasing shall be required on all sites disturbing greater than 5 acres, with the size of each phase to be established at plan review and approved by _____ (municipality's officer).

NOTE: Although many communities encourage phasing, few actually require it. When well designed, phasing construction can reduce erosion significantly. (See Claytor, 1997.)

- 5) Erosion control requirements shall include stabilization measures applied as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. This requirement does not apply in the following instances:
 - a. Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable;
 - b. Where construction activity on a portion of the site is temporarily ceased, and earth-disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures need not be initiated on that portion of the site.

6) If seeding or other vegetative erosion control method does not germinate within *two weeks* _____ (*municipality's officer*) may require the site to be reseeded, or a nonvegetative option employed.

NOTE: Numerical standards regarding the time to stabilization will vary. In particular, the time to establish seeding will depend on the climate.

- 7) Special techniques that meet the design criteria outlined in the "NYS Erosion Control Standards and Specifications" manual for steep slopes and/or drainage ways shall be used. Soil stockpiles must be stabilized. At the close of the construction season, the entire site must be stabilized using a heavy mulch layer or another method that does not require seed germination to control erosion (if seed germination will not occur due to climate limitations).
- 8) Techniques shall be employed to prevent the blowing of dust or sediment from the site.
- 9) Techniques that divert upland runoff past disturbed slopes shall be employed. Sediment control requirements shall include: settling basins, sediment traps or tanks, and perimeter controls.
- 10) Settling basins that are designed for adaptation to long term stormwater management require approval by _____ (municipality's officer).
- 11) The permittee will protect adjacent properties by the use of a vegetated buffer strip in combination with perimeter controls.
- 12) If a wet watercourse will be crossed regularly during construction, a temporary stream crossing practice approved by ______(municipality's officer) will be installed. Stabilization of the watercourse channel and banks before, during, and after any in-channel work will be completed.
- 13) Stabilization adequate to prevent erosion located at the outlets of all pipes, paved channels and all on-site stormwater conveyance channels will be designed according to the criteria outlined in "NYS Erosion Control Standards and Specifications" manual.
- 14) Construction site access requirements shall include a temporary access road provided at all access points in order to ensure that sediment is not tracked onto public streets by construction vehicles or washed into storm drains or watercourses.

Section VII. Inspection

(municipality's officer), or designated
agent	, shall make inspections as
hereinafter require	d and either shall approve that portion of
the work complete	d or shall notify the permittee wherein
the work fails to c	omply with the Erosion and Sediment
Control Plan as ap	proved. Plans for grading, stripping,
excavating, and fi	ling, bearing the stamp of approval of th
(municipality's officer), shall be
maintained at the	ite in the site log book throughout the
duration of constr	ection. To obtain inspections, the
permittee shall no	ify (municipality's
officer) at least tw	working days before the following:

Start of construction
Installation of sediment and erosion measures
Completion of site clearing
Completion of rough grading
Completion of final grading
Close of the construction season
Completion of final landscaping
Successful establishment of landscaping in
public areas.

The permittee shall designate a "responsible party" employed by the contractor who shall be on site on all days when construction or grading activity takes place. This employee will inspect and document the effectiveness of all erosion and sediment control practices. The documentation will be kept in a site log book. Inspection reports will be completed every 7 days and within 24 hours of any storm event producing 0.5 inches of precipitation or more. The reports will be delivered to ______ (municipality's officer) and copied to the site log book. All contractors and subcontractors identified in the Erosion and Sediment Control Plan shall sign a copy of the following certification statement before undertaking any construction activity at the site:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Erosion and Sediment Control Plan. I also understand that it is unlawful for any person to cause or contribute to a violation of water quality standards."

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. Each application shall include a statement that any land clearing, construction, or development involving the movement of earth shall be in accordance with the Erosion and Sediment Control Plan.

Section VIII. Maintenance

The permittee 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 permittee to achieve compliance with the conditions of this permit. Sediment shall be removed from sediment traps or sediment ponds whenever their design capacity has been reduced by fifty (50) percent.

Section IX. Enforcement

Violation and Penalties

No person shall construct, enlarge, alter, repair, or maintain any grading, excavation, or fill, or cause the same to be done, contrary to or in violation of any terms of this ordinance. Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and each day during which any violation of any of the provisions of this ordinance is committed, continued, or permitted, shall constitute a separate offense. Upon conviction of any such violation, such person, partnership, or corporation shall be punished by a fine of not more than \$_______ for each offense. In addition to any other penalty authorized by this section, any person, partnership, or corporation convicted of violating any of the provisions of this ordinance shall be required to bear the expense of such restoration.

NOTE: Specific penalties will vary between communities and should reflect enforceable penalties given the political realities of a jurisdiction.

Section X. Separability

The provisions and sections of this ordinance shall be deemed to be separable, and the invalidity of any portion of this ordinance shall not affect the validity of the remainder.

References

Caraco, D. 1997. Delaware Program Improves Construction Site Inspection. *Watershed Protection Techniques*, 2(3): 440-442. Claytor, R. 1997. Practical Tips for Construction Site Phasing. *Watershed Protection Techniques*, 2(3): 413-417.

Appendix E7

Erosion and Sediment Control with Riparian Protections

Town of Geneseo

Controlling stormwater runoff and the resulting erosion from areas where the soil as been disturbed, such as construction sites, is a key aspect of protecting water quality. The Federal Clean Water Act, which in New York State is administered by the State Department of Environmental Conservation, mandates that all construction activities that disturb one acre or more of soil must demonstrate how the site work will prevent erosion and sedimentation.

As has been noted, however, the DEC can use assistance in making sure what the developer says will be done is actually done. Municipalities are encouraged (those in urbanized areas, the so-called "Regulated MS4s," are required) to adopt local laws that require developers to get a local permit for construction activities that disturb soil. By implementing a local permitting process, the municipality is able to enforce good development practices and ideally protect water quality. Because so much of the development permitting process, from zoning approval to building permits, happens at the local level, ensuring that the construction process proceeds in an appropriate manner should happen locally.

The third and final model for stormwater management, sediment and erosion control laws follows. This draft law, from the Town of Geneseo, is an example of a locally developed Sediment and Erosion Control Law for a non-regulated MS4, with recently proposed amendments to the law that would strengthen protection for riparian areas in the Town. This model of riparian protection contrasts with the model from the Town of Ulysses (see Appendix E2) which integrates riparian buffers into the zoning law.

This draft law for the Town of Geneseo does not fulfill the requirements for Regulated MS4s (See Appendix E5).

However, for non-regulated municipalities, this model may be useful as a first step towards greater oversight of construction activities and riparian protection in the community.

Sediment and Erosion Control Law With Riparian Protection

History: Adopted by the Town Board of the Town of Geneseo 4-11-2002 by L.L. No. 2-2002. Proposed revisions noted in *italics*.

54-1

This chapter shall be known as the "Erosion and Sediment Control Law of the Town of Geneseo."

54-2. Findings of fact.

The town board of the town of Geneseo finds that uncontrolled drainage and runoff associated with land development has a significant impact upon the health, safety and welfare of the community by potentially causing substantial recreational, aesthetic, environmental and economic losses resulting from adverse impacts on community waters specifically:

- A. Construction requiring land clearing and the alteration of natural topography tends to increase erosion;
- B. Storm water runoff can carry pollutants into receiving water bodies, degrading water quality'
- C. Improper design and construction of erosion control devices can increase the velocity of runoff thereby increasing stream bank erosion and sedimentation;
- D. Improper design and construction of erosion control devices can increase the velocity of runoff thereby increasing stream bank erosion and sedimentation;
- E. Siltation of water bodies resulting from increased water, interferes with navigation, and harms flora and fauna;
- F. Development as defined in this chapter and activities associated with development, as well as land grading and earth moving can have a significant and potentially adverse impact on the environment.
- G. Riparian areas require protection to stabilize banks, limit erosion, reduce flood size flows and filter and settle out runoff pollutants.

54-3. Purpose

The Purpose of this local regulation is to safeguard persons, protect property, prevent damage to the environment of the Town of Geneseo, including the Village of Geneseo and Conesus Lake, as well as all bodies of water or watercourses in the Town of Geneseo, and promote the public welfare by guiding and regulating the design, construction, and maintenance of any development or other activity which disturbs or breaks the topsoil or results in the movement of earth on land in the Town of Geneseo.

54- 4. Statutory authority

In accordance with Article 10 of the Municipal Home Rule Law of the State of New York, the Town Board has the authority to enact local laws for the purpose of promoting the health, safety or general welfare of the Town.

54-5. Conformance required.

All site preparation, construction and development activities as defined hereinafter occurring in the Town of Geneseo shall be in conformance with the provisions set forth herein.

54-6. Word Usage.

- A. Unless specifically defined below, words or phrases shall be interpreted so as to give them the meaning s they have in common usage and to give this chapter its most effective application. Words used in the singular shall include the plural and the plural and 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.
- B. As used in this chapter, the following terms shall have the meanings indicated:

AGRICULTURAL OPERATONS (AS DEFINED IN ARTICLE 25AA OF THE NYS AGRICULTURE AND MARKETS LAW) – Land and on-farm buildings, equipment and practices which contribute to the production, preparation and marketing of crops, livestock and livestock products as a commercial enterprise.

CERTIFICATE OF COMPLIANCE ---- A written certificate that is issued to the applicant by the Code Enforcement Officer after all final grading and seeding is completed and all permanent erosion control measures are established as specified in the erosion control permit and the satisfaction of the Code Enforcement Officer.

CERTIFIED PROFESSIONAL ---- A licensed architect, a licensed engineer, a licensed landscape architect, or an International Erosion Control Association (IECA) certified professional in erosion and sediment control.

DEVELOP ---- Any physical alteration of a site or area, including, but not limited to, providing access to a site, clearing of vegetation, grading, earth moving, providing utilities and other services such as parking facilities, stormwater management and erosion control systems, and sewage disposal systems, altering landforms, or construction of a structure on the land.

EROSION ---- The removal of soil particles by the action of the water, wind, ice or other geological agents.

EROSION CONTROL PLAN ---- A document prepared by a certified professional that identifies predevelopment and post development conditions on a site and outlines the erosion control measures that will be used on a site. This document is required for projects exposing more than 10,000 square feet of soil.

FLOOD PLAIN ---- For a given flood event, that area of land temporarily covered by water which adjoins a watercourse.

GARDEN ---- A plot of ground where herbs, fruits, flowers, or vegetables are cultivated, excluding agricultural operations as defined herein.

GABION ---- A galvanized wire basket filled with stone used for structural purposes. When they are fastened together, they are used as retaining walls, slope protection and similar structures.

GRADING ---- Excavation or fill of material, including the resulting conditions thereof.

NATURAL DRAINAGE CHANNEL ---- A swale, watercourse in a gully, ora n unprotected stream.

PERFORMANCE STANDARDS ---- The set of standards outlining the erosion control requirements for construction and soil disturbing activities.

PERIMETER CONTROL ---- A barrier that prevents sediment from leaving a site either by filtering sediment laden runoff, or diverting it to a sediment trap or basin.

PHASING ---- Clearing a parcel of land in distinct phases, with the stabilization of each phase occurring before the clearing of the next.

RIPARIAN AREA ---- Areas that extend beyond stream banks and are at least periodically influenced by flooding. When managed properly riparian areas help to stabilize banks, limit erosion, reduce flood size flows and filter and settle out runoff pollutants.

RIPARIAN SETBACK ---- Distance lines set back from each bank of a stream to protect the riparian area and stream from impacts of development, and streamside residents from the impacts of flooding and land loss from erosion.

RIPRAP ---- A combination of large stone, cobbles and boulders used to line channels, stabilize stream banks, and reduce run off velocities.

STABILIZATION ---- The use of practices that prevent exposed soil from eroding.

START OF CONSTRUCTION ---- The first land disturbing activity associated with a development, including land preparation such as clearing, grading and filling; installation of streets, driveways, parking areas and walkways; excavation for basements, footings, piers or foundations; erection of temporary forms; and installation of accessory buildings such as garages.

STEEP SLOPE ---- Grade change of 15% or more.

STOP-WORK ORDER ---- A written order issued by the Code Enforcement Officer to cease and desist all activity and development on a site until such time as the violation is corrected.

STREAM ---- A surface watercourse with a well-defined bed and bank either natural or artificial which confines and conducts continuous or periodic flowing water in such a way that terrestrial vegetation cannot establish roots within the channel.

STREAM CORRIDOR ---- The landscape features on both sides of a stream, including soils, slope and vegetation, whose alteration can directly impact the stream's physical characteristics and biological properties.

SWALE ---- A natural or man-made depression or wide shallow ditch used to temporarily route or filter runoff.

UTILITIES ---- Public and private services, including but not limited to, public water and sewer connection, private wells and septic systems, and telephone, natural gas, electric, and cable television services.

WATERSHED ---- A region or area bounded by a greater elevation and draining ultimately to a particular body of water.

54-7. Applicability of provisions.

- A. This chapter shall apply to all development, as defined herein, which involves the uncovering, exposure or disturbance of 500 or more square feet of soil. Excepted herefrom are agricultural operations, whether or not within an agricultural district, as defined in Article 25AA of the New York State Agriculture and Market Laws, and private gardens.
- B. No person, corporation, entity, organization, or public agency shall initiate any development activities, land clearing, land grading, or earthmoving activities (hereinafter also collectively referred to as "land disturbance activity") unless in conformity with the regulations of this chapter.
- C. No person, agency, corporation or other entity shall commence any development or land disturbing activities without obtaining n erosion control permit issued by the Town Enforcement Officer.
- D. No person shall be granted an erosion control permit for land disturbing activity that would require the disturbance or uncovering of 10,000 or more square feet without the approval of an erosion control plan by the Town Planning board.
- E. No person shall develop land within any riparian area using riparian setbacks as defined below:
 - (1) 300 feet on each side of all streams draining an area greater than 300 sq. mi.
 - (2) 100 feet on each side of all streams draining an area greater than 20 sq miles up to 300 sq. mi.
 - (3) 75 feet on each side of all streams draining an area greater than 0.5 sq mi (320 Acres) up to 20 sq mi.
 - (4) 50 feet on each side of all streams draining an area greater than 0.05 sq mi.(32 acres) up to 0.5 sq mi (320 Acres).

- (5) 30 feet on each side of all streams draining an area less that 0.05 sq mi. (32 acres)
- (6) If the 100-year floodplain is wider that the designated setback, the setback width will increase to meet the 100-year floodplain.
- F. Exemptions. The following activities are exempt from the erosion control plan requirement but must comply with the performance standards listed in * 54-11 and have the applicable erosion control measures approved by the Code Enforcement Officer:
 - (1) Development or land disturbing activities involving at least 500 square feet of soil, but less than 10,000 square feet of soil;
 - (2) Development of one single family residential structure or one duple unit and accessory structures and utilities thereto;
 - (3) The installation of a lawn for one single-family residential structure; and
 - (4) The installation of a driveway for one single-family residential structure.
 - (5) The installation of all septic systems which are subject to the review, inspection and/or approval of the Livingston County Department of Health. [Amended 8-8-2002 by L.L. No. 4-2002]

54-8. Erosion control permit; inspections; certificate of compliance; certificate of occupancy.

A. Erosion control permit.

- (1) An applicant shall submit an erosion control permit application to the Code Enforcement Officer, who shall inform the applicant within seven days if the application is incomplete.
- (2) The Code Enforcement Officer shall refer all complete erosion control permit applications for lands within the Conesus Lake Watershed District to the Conesus Lake Watershed Inspector within seven days of receipt for review and comment.
 - (a) The Watershed Inspector shall have 14 days to comment on the application and return those comments to the Code Enforcement Officer; and
 - (b) The Code Enforcement Officer shall consider comments from the Watershed Inspector if the comments are received within this period of time.
- (3) If an erosion control plan is not required, the Code Enforcement Officer shall review the application to determine whether the proposed erosion control measures comply with the performance standards outlined in * 54-11 of this chapter and approve or deny the erosion control permit based on that review. A preconstruction meeting with the Code Enforcement Officer, the Conesus Lake Watershed Inspector, and the applicant may be required prior to the issuance of an erosion control permit.
- (4) If an erosion control plan is not required, an erosion control permit must be approved or denied within 60 days of receipt of a complete erosion control application by the Code Enforcement Officer.
- (5) Issuance of an erosion control permit does not authorize development of the site unless and until all other applicable permits or approvals, including a building permit are issued pursuant to federal, state and local law.

- B. Inspections. The applicant shall arrange with the Code Enforcement Officer for scheduling inspections of the site. The Code Enforcement Officer shall inspect the work and either approve it or notify the applicant in writing of any failure to comply with the requirements of the approved erosion control plan and/ or erosion control permit. The Code Enforcement Officer and the Watershed Inspector may conduct inspection at reasonable times to ensure effective control of erosion and sedimentation during all phases of construction. The Code Enforcement Officer ay have the Town Engineer consulted for an inspection, the applicant shall be responsible for the cost of such consultation, pursuant to Article VI of Chapter 106 of the Code of the Town of Geneseo.
- C. A certificate of compliance shall be issued by the Code Enforcement Officer after all final grading and seeding are completed and all permanent erosion control measures are established as specified in the erosion control permit and to the satisfaction of the Code Enforcement Officer.
- D. A Permanent certificate of occupancy shall not be issued until a certificate of compliance is issued for the satisfactory installation and/ or completion of erosion control measures.

54-9. Contents of erosion control plan.

- A. Erosion control plans shall be prepared by a certified professional. Plans must contain the information set froth in this section to enable the Town Planning Board to determine whether the plan will prevent the development from adversely affecting the water quality of the surface water due to erosion. In making this determination, plans shall be evaluated pursuant to the performance standards in * 54-11 hereof, and must therefore contain sufficient information to permit such evaluation.
- B. The erosion control plan shall contain the name, address, and telephone number of the owner, contractor, and developer. In addition, the legal description of the property shall be provided, and its location with reference to such landmarks as major water bodies, adjoining roads, railroads, subdivisions, or towns shall be clearly identified on a map.
- C. The structure and content of the erosion control plan shall be as follows:
 - (1) Background information.
 - (a) Project description which shall include, but not be limited to, a sequence of construction of the development site, including stripping and clearing, rough grading, construction of utilities, infrastructure, and buildings, and final grading and landscaping. Sequencing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, and the sequence of clearing, installation of temporary erosion and sediment measures, and establishment of permanent vegetation.
 - (b) Existing (predevelopment) conditions, including but not limited to, an identification of soils, slopes, and existing vegetative cover and drainage conditions.
 - (c) Proposed future (development) conditions, including, but not limited to, an identification of drainage conditions and changes in vegetative cover anticipated to result from the proposed activity.
 - (2) Erosion and sediment control.

- (a) Identification of temporary erosion and sediment control measures, including, but not limited to, seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, and type and quantity of mulching for both temporary and permanent vegetative control measures.
- (b) Identification of permanent erosion and sediment control measures.
- (3) Implementation schedule and maintenance, including, but not limited to, easements and estimates of the cost of maintenance.

54-10. Erosion control plan review process

- A. The applicant shall submit a complete erosion control plan to the Code Enforcement Officer.
- B. The Code Enforcement Officer shall inform the applicant in writing within 14 days if the erosion control plan is incomplete. The erosion control plan shall automatically be deemed complete if the Code Enforcement Officer does not inform the applicant within 14 days.
- C. When the erosion control plan is determined to be complete, the Code enforcement officer shall then schedule it for review at the next available Town Planning Board meeting, to be held not later than 31 days after the erosion control plan is determined to be complete.
- D. All erosion control plans for development in the Conesus Lake Watershed must be referred to the Conesus Lake Watershed Inspector for review and comment within five days of Code Enforcement Officer receipt of the plan. Comments received from the Conesus Lake Watershed Inspector prior to the Town Planning Board meeting will be considered by the Code Enforcement Officer and the Town Planning Board.
- E. The applicant shall receive written notice of the time and place of the Town Planning Board meeting where the erosion control plan will be reviewed no less than five days prior to the Town Planning Board meeting.
- F. An erosion control plan shall also be reviewed by the Town Engineer or any other certified professional retained by the Town. The Engineer or certified professional may then recommend approval or disapproval of the plan to the Town Planning Board prior to the scheduled Planning Board meeting where the plan will be discussed. A recommendation for approval or disapproval of the plan must be based on conformance to the performance standards listed in 55-11.
- G. The Town Planning Board shall have the authority to impose reasonable condition to ensure that the objectives of this chapter are met.
- H. The Town Planning Board shall approve or disapprove the erosion control plan. Approval or disapproval of the plan must be based on conformance to the performance standards listed in 54-11, so as to protect the water quality of Conesus Lake, and should clearly identify why it does not, in the instance of a disapproval, conform to the performance standards.
- I. The Town Planning Board shall report the decision to the Code Enforcement Officer and the applicant within 10 days of approval or disapproval for the plan.

J. If the erosion control plan is approved, the Code Enforcement Officer shall issue the applicant an erosion control permit within 10 days of receipt of the Town Planning Board decision.

54-11. Performance Standards

The following performance standards must be applied to all land disturbing activities described in this chapter, including those exempted under 54-5 hereof, as well as those for which a permit is required hereunder:

- A. Existing vegetation on a project sites hall be retained and protected as much as possible to minimize soil loss from the project site.
- B. Sediment control practices/measures shall be designed to protect the natural character of water bodies on-site as well as off-site. The practices must be in place before the start of land disturbance activities until the establishment of permanent stabilization.
 - (1) The off-site impacts of erosion and sedimentation from the development site shall not be any grater during and following land disturbance activities than under predevelopment conditions.
 - (2) Water in stream reaches on-site and downstream of construction areas shall not have substantial visible contrast relative to color, taste, odor, turbidity and sediment deposition from the water in reaches upstream of the construction area.
 - (3) Sediment laden runoff shall not be allowed to enter any water body and result in deposition on the bottom of the water body, degrade its natural biological function, or be deleterious to the classified usage of the water.
- C. All erosion and sediment control measures shall be constructed prior to beginning any land disturbance activities. All runoff from disturbed areas shall be directed to sediment control devices. These devices shall not be removed until the disturbed land areas are stabilized.
- D. Specific guidance.
 - (1) Exposure restrictions. No more than 10 acres of unprotected soil shall be exposed at any one time. Previous earthwork shall be stabilized in accord with approved design standards and specifications referenced in Subsection D(8) before additional area is exposed.
 - (2) Grading. Perimeter grading shall blend with adjoining properties.
 - (3) Vegetative protection. Where protection of trees and/or other vegetation is required, the location shall be shown on the erosion control plan or on the drawings for the proposed development project. The method of protecting vegetation during the construction shall conform to the design specifications reference in Subsection D(8).
 - (4) Drainage control.
 - (a) Surface runoff that is relatively clean and sediment free shall be diverted or otherwise prevented from flowing through areas of construction activity on the project site. (This will greatly reduce sediment loading in surface runoff.)
 - (b) A fill associated with an approved temporary sediment control structure or permanent stormwater management structure shall not be created which

- causes water to pond off0-ste on adjacent property, without first having obtained ownership or permanent easement for such use form the owner of the off-site or adjacent property.
- (c) Natural drainage channels shall not be altered. Pursuant to Article 15 of the Environmental Conservation Law, a protected stream and banks thereof shall not be altered or relocated without the approval of the Department of Environmental Conservation.
- (d) Runoff from any land disturbing activity shall not be discharged or have the potential to be discharged off-site or into storm drains or into water courses unless such discharge is directed through a properly designed, installed and maintained structure, such as a sediment trap, rot retain sediment on-site. Accumulated sediment shall be removed when it takes up 60% of the storage capacity of the sediment retention structure. (See Subsection D98 below for design specifications.)
- (e) For finished grading, adequate gradients shall be provided so as to prevent water from standing on the surface of lawns for more than 24 hours after the end of a rainfall, except in a swale flow area which may drain as long as 48 hours after the end of rainfall.
- (f) Permanent swales or other point of concentrate water flow shall be stabilized. Biotechnical approaches using certain types of grasses, such as reed canary grass, are preferable to using sod, gabions and riprap where water quality enhancement is a high priority and the swale design allows. However, sod, gabions, or riprap may be used to stabilize swales where soils and gradient preclude the use of grasses. Use of grasses may require an erosion control matting as provided for in the design specification reference in Subsection D(8) below.
- (g) Surface lows over cut and fill slopes shall be controlled as provided for in the design specification for vegetating waterways reference in Subsection D(8).

(5) Timing

- (a) Except as noted below, all sites shall be seeded and mulched with erosion control materials, such as rye grass, straw mulch, jute, or excelsior (wood shavings), within 15 days of initial disturbance. Of construction has been suspended, or sections completed, areas shall be seeded immediately and stabilized with erosion control materials. Maintenance shall be performed as necessary to ensure continued stabilization.
- (b) For active construction areas, such as borrow or stockpile areas roadway improvements and areas within 50 feet of a building under construction, a perimeter sediment control system consisting, for example, of silt fencing or hay bales, shall be installed and maintained to contain soil.
- (c) On cut sides of roads, ditches shall be stabilized immediately with rock riprap or other non-erodable liners, where appropriate, vegetative measures such as sod. When seeding is approved, an anchor mulch shall be used and soil shall be limed and fertilized in accord with recommendations referenced in Subsection D(8).

- (d) Permanent seeding shall optimally be undertaken in the spring from April 1 through June 15, and in late summer from August 1 to October 15. During the peak summer months an in the fall after October 15 when seeding is found to be impracticable, an appropriate mulch shall be applied. Permanent seeding may be undertaken during summer if plans provide for adequate watering of the seedbed.
- (e) All slopes steeper than 15%, as well as basin or tap embankments, and perimeter dikes shall, upon completion, be stabilized with sod, seed and anchored straw mulch, or other approved stabilization measures. Areas outside of the perimeter sediment control system shall not be disturbed. Maintenance shall be performed as necessary to ensure continued stabilization.
- (f) Temporary sediment trapping devices shall be removed within 30 calendar days following establishment of permanent stabilization in all contributory drainage areas. Stormwater management structures used temporarily for sediment control shall be made permanent within this time period as well. Accumulated sediments removed from temporary sediment traps or permanent stormwater management facilities shall be disposed in a manner so as not to erode and enter a water body.
- (6) Stream corridor management. The bed and banks of all on-site and off-site streams which may be impacted by land clearing, grading, and construction activities shall be protected to prevent sedimentation, stream bank erosion, stream enlargement, or degradation or loss of fisheries habitat. Measures of protecting the bed and/or banks of a stream may include gabion baskets, riprap, log cribbing, or a vegetative measure. Whenever possible, vegetative stream bank stabilization practices, such are recommended over structural practices, such as riprap and gabion linings that may unnecessarily alter the existing stream ecosystem. Native species of vegetation shall be used for stream bank stabilization where practical. In undertaking stream bank stabilization activities for protected streams, the applicant shall comply with appropriate protection of water revisions in Article 15 of the Environmental Conservation Law of the State of New York.

(7) Maintenance.

- (a) All points of construction ingress and egress shall be protected to prevent the deposition of materials onto traversed public thoroughfares either by installing and maintaining a stabilized construction entrance or by maintaining a vehicle wash area in a safe disposal area to wash vehicle shells and undercarriage. All materials deposited onto public thoroughfares shall be removed immediately. Proper precaution shall be taken to assure that the removal of materials deposited onto public thoroughfares will not enter catch basins, storm sewers or water bodies.
- (b) Accumulated sediment shall be removed when 60% of the storage capacity of sediment retention structures is reached. All removed sediment shall be disposed of in a spoil area where it can be graded, mulched and seeded to prevent erosion and sedimentation.

(8) Design specifications. The designs, standards and specifications for controlling erosion and sedimentation found in the most recent version of the following publication are acceptable for use and shall be identified and shown in the erosion control plan: New York Guidelines for Urban Erosion and Sediment Control, Urban Soil Erosion and Sediment Control Committee.

54-12 Performance bond.

- A. In order to ensure the full and faithful completion of all construction activities related to compliance with all conditions set forth by the Town Planning Board in its approval of the erosion control plan, the Town Planning Board may require the applicant and/or the applicant's contractor to provide, prior to construction, a performance bond, escrow account certification, or irrevocable letter of credit from an appropriate financial or surety institution which guarantees satisfactory completion of the project and names the Town as the beneficiary. The security shall be in an amount to be determined by the Town Planning Board based on submission of final design plans, with reference to actual construction costs.
- B. Where erosion and sediment control facilities are to be operated and maintained by the applicant or by any person or entity that owns or manages a commercial or industrial facility, the applicant, prior to construction, may be required to provide the Town with a performance bond or an irrevocable letter of credit from an appropriate financial institution or noted surety to ensure proper operation and maintenance of all erosion control facilities for the life of the project.
- C. The performance bond or letter of credit shall remain in force until the surety is released from liability by the Town.
- D. Per annum interest on the performance bond or letter of credit shall be reinvested in the account until the surety is released from liability.
- E. If the developer or owner fails to properly operate and maintain erosion and sediment control facilities, the Town may draw upon the account or notify the surety to cover the costs of proper operation and maintenance.

54-13 Enforcement.

- A. Any development activity that is commenced without first being granted an erosion control permit, or which is conducted contrary to an approved erosion control plan, or contrary to the performance standards listed in *54-11 hereof may be issued a notice of violation and restrained by a stop-work order issued by the Code Enforcement Officer.
- B. Service of a notice of violation shall be sufficient if directed to the owner, agent of the owner or contractor and left at his or her last known place of business or residence, if within the municipality; and if no place of business or residence can be found, then the notice shall be served by posting in a conspicuous place on the premises which is the subject of the violation.
- C. A stop-work order shall also be issued on the project if any of the following conditions are not met during development of the land:

- (1) There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;
- (2) There shall be no suspended, colloidal and settleable solids that will cause deposition or impair waters in the area for their best usages; and
- (3) There shall be no residue from oil and floating substances, visible oil film, globules, or grease (6 NYCRR, Part 703, Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations).
- D. Civil and criminal penalties. In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this chapter shall be punished by a fine of not less than \$200 per day nor more than \$1,000 per day or by imprisonment for a period not to exceed 60 days, or both such fine and imprisonment. Such person shall be guilty of a separate offense for each day during which the violation occurs or continues.
- E. 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 may take necessary corrective action, the cost of which shall become a lien upon the property until paid.

54-14 Appeals

Any person aggrieved by the action of any official charged with the enforcement of this chapter, as the result of the disapproval or approval of an erosion control permit or an alleged failure by the Code Enforcement Officer to properly enforce the chapter in regard to a specific application, shall have the right to appeal the action to the Town Zoning Board of Appeals. The appeal shall be filed in writing within 20 days of the date of official transmittal of the final decision or determination to the applicant, shall state clearly the grounds on which the appeal is based, and shall be processed in the manner prescribed for hearing administrative appeals under state/local code provisions.

54-15 Variances.

The Town Zoning Board of Appeals may grant a written variance from any requirement of this chapter using the following criteria:

- A. There are special circumstances applicable to the subject property or its intended use; and
- B. The granting of the variance shall not result in:
 - (1) An increase or decrease in the rate or volume of surface water runoff;
 - (2) An adverse impact on a wetland, watercourse or water body;
 - (3) Degradation of water quality; or
 - (4) Otherwise impair attainment of the objectives of this chapter.

Appendix E8

Wetlands and Watercourse Protection

Town of Pawling

Preserving wetlands and undeveloped buffer areas around wetlands and water courses is an important step in protecting water quality. Protecting these areas from development allows them to function closer to their natural state and act as natural filtering systems and retention areas for stormwater runoff. Aside from the many ecological benefits of their preservation, utilizing wetlands and buffer areas for stormwater management can sometimes reduce the costs of having to construct engineered solutions to stormwater problems.

In previous model law examples, riparian protections were integrated into Zoning, as with the Town of Ulysses (Appendix E2) or a Sediment and Erosion Control Law, as with the Town of Geneseo (Appendix E7). In the following example, the Town of Pawling uses a different method to protecting wetlands and watercourses through local law. It is a very thorough approach and one that municipalities may find useful in their communities.

Freshwater Wetlands and Watercourse Protection

- § 111-1. Title and purpose
- § 111-2. Legislative intent
- § 111-3. Definitions and word usage
- § 111-4. Applicability
- § 111-5. Conflicts with other laws
- § 111-6. Permit applications
- § 111-7. Administration of permit application
- § 111-8. Inspection
- § 111-9. Penalties and corrective action.
- § 111-10. Appeals
- § 111-11. Exception
- § 111-12. Compliance with other code and regulation provisions

HISTORY: Adopted by the Town Board of the Town of Pawling 3-9-1993 as L.L. No. 4-1993. Amendments noted where applicable.

§ 111-1. Title and purpose.

This chapter shall be known as the "Freshwater Wetlands and Watercourse Protection Law of the Town of Pawling." Its purpose is to regulate the dredging, filling, deposition or removal of materials, including vegetation; the diversion or obstruction of water flow; the placement of structures in, and other uses of, the ponds, lakes, reservoirs, natural drainage systems and wetlands located in the Town of Pawling; and the requirement of permits therefor, providing for the protection and control of wetlands, waterbodies and watercourses.

§ 111-2. Legislative intent.

A. The Town Board of the Town of Pawling has determined that the public interest, health and safety and the economic and general welfare of the residents of the Town of Pawling will be best served by providing for the protection, preservation, proper maintenance and use of the town's ponds, lakes, reservoirs, waterbodies, rivers, streams, watercourses, wetlands, natural drainage systems and adjacent land areas from encroachment, spoiling, polluting or elimination resulting from rapid population growth attended by commercial development, housing, road construction and/or disregard for natural resources.

B. The wetlands, watercourses and controlled areas adjacent to wetlands and/or watercourses in Pawling are a valuable natural resource which serve to benefit the entire town and the surrounding region by performing one (1) or more of the following functions:

- (1) Providing a common linkage between aquatic systems (aquifers, floodplains. wetlands, lakes, rivers, etc.).
- (2) Preventing watershed diversion of ground- or subsurface water.
- (3) Preventing uncontrolled stormwater drainage.

- (4) Providing drainage and flood control through hydrologic absorption, natural storage and flood conveyance.
- (5) Protecting subsurface water resources, watersheds and groundwater recharge systems.
- (6) Providing a critical living, breeding, nesting and feeding environment for many forms of wildlife, including but not limited to mammals, wildfowl, shorebirds, rare species, especially endangered and threatened species, and other dependent plants and animals.
- (7) Treating pollution through natural biological degradation and chemical oxidation.
- (8) Controlling erosion by sewing as sedimentation areas and filter basins, capturing silt and organic matter.
- (9) Providing sources of nutrients in freshwater food cycles.
- (10) Sewing as nursery grounds and sanctuaries for freshwater fish.
- (11) Providing recreation areas for hunting, fishing, boating, hiking, bird-watching, photography, camping and other uses.
- (12) Serving as an educational and research resource.
- (13) Preserving natural open space which serves to satis& human psychological and aesthetic needs.
- C. Areas adjacent to wetlands and watercourses provide essential protection by serving as mitigation from the impacts of activities taking place on surrounding lands. For the purpose of this chapter, these buffer areas are defined as controlled areas.
- D. The protection of wetlands, watercourses and controlled areas is a mailer of concern to the entire town. The establishment of regulatory and conservation practices for wetlands, watercourses and controlled areas serves to protect the town by ensuring review and regulation of any activity on or along wetlands, watercourses and controlled areas that might adversely affect the town's citizens' health, safety and welfare.
- E. Wetlands, watercourses and controlled areas in Pawling and other areas form an ecosystem that is not confined to any one (1) property owner or neighborhood. Experience has demonstrated that effective wetlands protection requires consistency of approach to preservation and conservation efforts throughout the town.
- F. Loss of wetlands or any activity along watercourses and their controlled areas can cause or aggravate flooding, erosion, sedimentation, diminution of water supply and water quality for drinking and waste treatment and may pose a threat to the health, safety and welfare of the people of Pawling and the surrounding region.
- G. Regulation of wetlands. watercourses and controlled areas is consistent with the legitimate interests of farmers to graze and water livestock, make reasonable use of water resources. harvest natural products of wetlands, watercourses and controlled areas, selectively cut timber and fuel wood and otherwise engage in the use of land for agricultural production.
- H. The State of New York has enacted legislation entitled the "Freshwater Wetlands Act," found in Article 24 of the Environmental Conservation Law, which authorizes local governments to establish their own procedures for the protection and regulation of wetlands lying within their jurisdiction. The New York State Department of Environmental Conservation has promulgated

implementing regulations for local government adoption of Article 24 authority, found in Part 665 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR Part 665). It is not the intent of this chapter to regulate wetlands under NYSDEC jurisdiction.

- I. This chapter is enacted pursuant to the above-referenced law and any and all applicable laws, rules and regulations of the State of New York, and nothing contained herein shall be deemed to conflict with any such laws, rules or regulations.
- J. It is the intent of this chapter to incorporate the consideration of wetlands and watercourse protection, as well as that of their controlled areas, into the town's land use and development approval procedures, so as to provide a reasonable balance between the rights of the individual property owners to the use of their property and the rights of present and future generations.

§ 111-3. Definitions and word usage.

- A. Except where specifically defined herein, all words used in this chapter shall carry their customary meanings. Words used in the present tense include the future, and the plural includes the singular. The word "shall" is intended to be mandatory.
- B. As used in this chapter, the following terms shall have the meanings indicated:

AGRICULTURE - All activities directly related to the grazing, growing or raising of crops or livestock, including but not limited to horticulture and fruit production, which operates on ten (10) acres or more and produces average annual gross sales of agricultural products valued at ten thousand dollars (\$10,000.) or more. Timber harvesting and drainage or permanent alteration of wetlands, watercourses or controlled areas is not included in agricultural activities.

ALTER -To change, move or disturb any vegetation, soil, drainageway or other natural material or system within a wetland, watercourse or controlled area as defined by this chapter.

APPLICANT -Any individual or individuals, firm, partnership, association, corporation, company, organization or other legal entity of any kind, including municipal corporations, governmental agencies or subdivisions thereof, who has a request for a permit to conduct a regulated activity before the Code Enforcement Officer or who has an application pending pursuant to § I 1-6 of this chapter before the Planning Board.

AQUACULTURE - Cultivating and harvesting products, including fish and vegetation, that are produced naturally in freshwater wetlands, and installing cribs, racks and other in-water structures for cultivating these products, but does not include filling. dredging. peat mining or the construction of any buildings or any water-regulating structures, such as dams.

CLEAR CUTTING - Complete cutting and removing of an entire stand of trees, replaced by natural or planted regeneration.

CODE ENFORCEMENT OFFICER - The individual designated by the Pawling Town Board and charged with the enforcement of zoning, building and fire codes.

COMPLETE APPLICATION - An application which has been declared to be complete by the Environmental Director or which has been deemed complete as a result of the Environmental Director's failure to evaluate it for completeness within the required time period.

CONSERVATION ADVISORY BOARD (CAB) - The duly appointed Conservation Board of the Town of Pawling as created pursuant to § 239 of the General Municipal Law.

CONTROLLED AREA - A buffer area surrounding a wetland or watercourse that is also subject to the regulations of this chapter, determined as follows:

- (1) For all wetlands, the "controlled area" shall extend to the greater of the following: one hundred (100) feet away from the edge of the wetland boundary, or, in cases where the wetland is bounded with a steep slope twenty-five percent (25%) or greater, the buffer shall extend one hundred (100) feet from the top of the steep slope.
- (2) The "controlled area" of a watercourse shall extend to all adjacent surfaces for one hundred (100) feet as measured from the top of the bank of the watercourse.

DATE OF RECEIPT OF COMPLETE APPLICATION - A complete application shall be deemed received by the Planning Board on the date of the first regular meeting of the Planning Board following the filing of the complete application and supporting plans with the Planning Board by the Code Enforcement Officer pursuant to the provisions of § 111-6 of this chapter.

DAMS AND WATER CONTROL MEASURES AND DEVICES -Bathers used to obstruct the flow of water to raise, lower or maintain the water level in wetlands.

DEPOSIT -To fill, place, eject or dump any material, but not including stormwater.

ENVIRONMENTAL DIRECTOR - The individual designated by the Pawling Town Board and charged with reviewing and evaluating the environmental impacts of all wetland permit applications as well as determining their "completeness" in accordance with the provisions of this chapter.

FRESHWATER WETLANDS MAP — The Town of Pawling Freshwater Wetlands and Watercourse Map prepared by the Dutchess County Environmental Management Council dated February 24, 1993, was produced from digitized natural resource data of Pawling and is intended to be used as a guide. Finite wetland/watercourse boundaries shall be determined by field investigation using criteria described in this chapter.

MATERIAL-Liquid, solid or gaseous substances, including but not limited to soil, silt, gravel, rock, sand, clay, peat, mud, debris and refuse; any organic or inorganic compound. chemical agent or matter, including sewage, sewage sludge or effluent; and agricultural, industrial or municipal solid waste.

NYSDEC-The New York State Department of Environmental Conservation.

PERMIT or WETLANDS PERMIT- That form of town approval required by this chapter for the conduct of a regulated activity within any wetland, watercourse or controlled area.

PERSON- See "applicant."

PLANNING BOARD-The duly appointed Planning Board of the Town of Pawling.

POLLUTION-The presence in the environment of human-induced conditions or contaminants in quantities or characteristics which are or may be injurious to human, plant or animal life or to property.

PROJECT- Any action resulting in direct or indirect physical or chemical impact on a wetland, watercourse or controlled area, including but not limited to any regulated activity.

REMOVE-To dig, dredge, suck, bulldoze, dragline, blast or otherwise excavate or regrade, or the act thereof.

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.

STRUCTURE-Anything constructed or erected, the use of which requires location on or in the ground or attachment to something having location on the ground. The term includes but is not limited to tennis courts and swimming pools.

TIMBER HARVESTING- Any activity which may alter the physical characteristics of any forested land, including but not limited to any activity involving or associated with the cutting of trees, except that the following activities shall not be considered to be 'timber harvesting:"

- (1) The routine maintenance of roads, easements and rights-of-way and the clearing of farm fence lines; and
- (2) The clearing of approved subdivision roads, site plans and public utility easements.

TOWN BOARD-The duly elected Town Board of the Town of Pawling.

TOWN CLERK- The duly elected Town Clerk of the Town of Pawling.

TOWN ENGINEER- Any person or firm employed by the Town of Pawling as the Town Engineer.

WATERBODY-Any natural or artificial pond, lake, reservoir or other area which usually or intermittently contains water and which has a discernible shoreline.

WATERCOURSE- Any natural or artificial, permanent or intermittent, public or private waterbody or water segment, such as ponds, lakes, reservoirs, rivers, streams, brooks, waterways or natural drainage swales, that is contained within, flows through or borders on the Town of Pawling.

WETLANDS:

- (1) All geographic areas greater than one-fourth (1/4) acre, but not including wetlands regulated by the NYSDEC, and characterized by any or all of the following:
- (a) Marshes, swamps, bogs or other areas of permanent water retention fed by springs or natural drainage systems.
- (b) Soil types that are poorly drained or very poorly drained, alluvial or floodplain soils or potential hydric soils as defined by the updated Soil Survey of the United States Department of Agriculture, Soil Conservation Service, and the Dutchess County Soil and Water Conservation District, including but not limited to the following:

Hydric Soils Potential Hydric Soils*

Canandaigua (Ca) Kingsbury and Rhinebeck (Kn)

Carlisle (Cc) Linlithgo (Ln)
Fluvaquents (Ft) Massena A (MnA)
Halsey (Ha) Massena B (MnB)

1-lydraquents (Ky) Punsit (Pz)
Livingston (Lv) Udorthents (Ue)
Medisaprists (Ky) Fredon (Fr)

Palms (Pc) Raynham Silt Loam (Ra)

Sun(Su) Wayland (Wy)

NOTES:

*Those soils found by field determination to contain any

- (c) Lands and submerged lands commonly called marshes, swamps, sloughs, bogs and flats, supporting aquatic or semiaquatic vegetation of the following vegetative types:
- [1] Wetland trees, which depend upon seasonal or permanent flooding or sufficiently waterlogged soils to give them a competitive advantage over other trees; including, among others, red maple, (Acer rubrum), willows (Salix spp.), black spruce (Picea mariana), swamp white oak (Quercus bicolor), red ash (Fraxinus pennsylvanica), American elm (Ulmus americana) and larch (Larix laricina);
- [2] Wetland shrubs, which depend upon seasonal or permanent flooding or sufficiently waterlogged soils to give them a competitive advantage over other shrubs; including, among others, alder (Alnus spp.), buttonbush (Cephalanthus occidentalis), bog rosemary (Andromeda giaucophylla) and leatherleaf(Chamaedaphne calyculata);

Emergent vegetation, including, among others, cattails (Typha spp.), pickerelweed (Pontederia cordata), bulrushes (Scirpus spp.), arrow-arum (Peltandra virginica), arrowheads (Sagittaria spp.), reed (Phragmites communis), wild rice (Zizania aquatica), bur reeds (Sparganium spp.), purple loosestrife (Lythrum salicaria), swamp loosestrife (Decodon verticillatus) and water plantain (Alisma plantago-aquatica);

Rooted, floating-leaved vegetation; including, among others, water lily (Nymphaea odorata), water shield (Brasenia Schreberi) and spatterdock (Nuphar sppj;

Free-floating vegetation; including, among others, duckweed (Lemna spp.), big duckweed (Spirodela polyrhiza) and watermeal (Wolffia sppj;

Wet meadow vegetation, which depend upon seasonal or permanent flooding or sufficiently waterlogged soils to give them a competitive advantage over other open land vegetation;

including, among others, sedges (Carex spp.), rushes (Juncus spp.), cattails (Typha spp.), rice cut-grass (Leersia oryzoides), reed canary grass (Phalaris arundinacea), swamp loosestrife (Decodon verticillatus) and spikerush (Eleocharis sppj;

Bog mat vegetation; including, among others, sphagnum mosses (Sphagnum spp.), bog rosemary (Andromeda glaucophylla), leatherleaf (Chamaedaphne calyculata), pitcher plant (Sarracenia purpurea) and cranberries (Viccinium macrocarpon and V. oxycoccos);

Submergent vegetation; including, among others, pondweeds (Potamogeton spp.), naiads (Naias spp.), bladderworts (Utricularia spp.), wild celery (Vallisneria americana), coontail (Ceratophyllum demersum), water milfoils (Ivlyriophyllum spp.), musk grass (Chara spp.), stonewort (Nitella spp.), waterweeds (Elodea spp.) and water smartweed (Polygonum amphibium).

(2) Finite boundaries of wetlands shall be established on each parcel or parcels by the DCSWCD or an appropriately qualified individual, as approved by the Planning Board.

§ 111-4. Applicability.

A. Regulated acts which require a wetlands permit. Except as otherwise provided in § II 1-4B or 111-61 below, it shall be unlawful, in the absence of a permit issued pursuant to this chapter, to do any of the following activities in any wetland, watercourse or controlled area:

- (1) Place or construct any structure.
- (2) Conduct any fomi of draining, dredging, excavation or removal of material, either directly or indirectly.
- (3) Conduct any form of dumping, filling or depositing of material, either directly or indirectly.
- (4) Install any service lines or cable conduits.
- (5) Introduce any form of pollution, including but not limited to the installing of a septic tank, the running of a sewer outfall or the discharging of sewage treatment effluent or other liquid wastes into, or so as to drain into, a wetland or watercourse; deposit or introduce organic or inorganic chemicals, such as fertilizers, herbicides, pesticides, etc.
- (6) Alter or grade natural and/or existing man-made features and contours, alter drainage conditions or divert any flow of a wetland, watercourse or waterbody.
- (7) Construct dams, other water-control devices (including swales), pilings or bridges, whether or not they change the ebb and flow of the water.
- (8) Install any pipes or wells.
- (9) Construct a driveway or road.
- (10) Strip any area of vegetation, including clear cutting.
- (11) Conduct any other activity that impairs or may impair any of the functions that wetlands, watercourses and controlled areas perform as described in § 11 1-2B of this chapter.
- B. Acts allowed without a permit. The following acts are allowed without a permit within wetlands, watercourses or controlled areas, provided that they do not constitute a pollution or erosion hazard, interfere with proper drainage or adversely affect reasonable water use by others. Such acts must conform to Chapter 215, Zoning, and any and all other applicable laws and statutes.
- (1) Normal ground maintenance, including mowing, trimming of vegetation and removal of dead

or diseased vegetation around a residence.

- (2) Repair of existing walkways and walls.
- (3) Maintenance and repair of preexisting structures (excluding expansion of any existing facilities).
- (4) Decorative landscaping and planting, excluding those items regulated in § 11 1-4A, which regulates the use of fertilizers.
- (5) Operation and maintenance of existing dams and water control devices in lakes, involving the adjustment of water elevations less than eighteen (18) inches in height for periods of less than one (I) week, after which the water level is returned to its previous level.
- (6) Construction of wooden docks.
- (7) Public health activities, orders and regulations of the Department of Health for emergencies only.
- (8) The depositing or removal of the natural products of wetlands through recreational or commercial fishing, aquaculture, hunting or trapping where otherwise legally permitted.
- (9) Agricultural activities, as defined in § 11 1-3B.

§ 111-5. Conflicts with other laws.

If, in any case, the provisions of this chapter conflict with any other provisions of the Code of the Town of Pawling, the provisions which impose the more stringent requirement shall apply.

§ 111-6. Permit applications.

- A. Wetlands/watercourse permit application.
- (1) Any person proposing to conduct or causing to be conducted a regulated activity requiring a permit under this law shall file five (5) copies of an application for a permit with the Code Enforcement Officer, together with the filing fee established by resolution of the Town Board. All costs incurred by the town in the review of this application shall be borne by the applicant.
- (2) All permit applications must include the following:
- (a) The name, address and telephone number of the owner.
- (b) The street address and tax map designation of the property.
- (c) A statement of authority from the owner for any agent making application.
- (d) A list of adjacent landowners.
- (e) A sketch of wetland boundaries and site soil designations.
- (f) A description of proposed work and purpose.
- (g) A completed Environmental Assessment Form.
- (h) Copies of any correspondence and/or any Article 24 Wetland Permit from the NYSDEC with reference to an adjacent New York State regulated wetland.
- B. Single application required. Where an application has been made to the Code Enforcement Officer, Town Board or Planning Board for an action that is subsequently determined to require a permit pursuant to this chapter, a copy of the said application may be submitted as the permit application.

- C. Additional information. Where deemed appropriate and necessary, the applicant may be required to submit more detailed information and submit pians for the proposed site alterations. Said plans may be required to be certified by an engineer, architect, land surveyor or landscape architect licensed in the State of New York, and such additional information may include any or all of the following:
- (1) The location of Construction or area proposed to be disturbed and its relation to property lines, roads, wetlands, watercourses and controlled areas.
- (2) Mapping of soils, wetlands, watercourses and controlled areas on the parcel to be disturbed.
- (3) Estimated quantities of material for excavation or fill, computed from cross sections and location of disposal sites for excavated materials.
- (4) Location of any well and the depth, if known, and any subsurface sanitary disposal system within two hundred (200) feet of the proposed disturbed area.
- (5) Existing and adjusted contours at two-foot intervals in the proposed disturbed area, to a distance of fifty (50) feet beyond the disturbed area, and at one-foot intervals on those parts of a plan where one-foot intervals are deemed necessary in order to analyze the impact of the alteration.
- (6) Details of any drainage system proposed both for conduct of the work and after completion thereof and measures proposed to control erosion both during and after the work.
- (7) A detailed assessment of the functions and values of the affected wetlands, watercourses and controlled areas and the potential impact of the proposed project on each.
- (8) A completed Long Environmental Assessment Form (EAF).
- (9) A written narrative explaining the nature of the proposal, including any future development proposals for the properly, and whether alternative locations exist for the proposed activity.
- D. Fees for technical review. In the event that an application requires the town to incur additional expenses for technical assistance in the review of an application, the applicant shall pay the reasonable expenses incurred by the town. The applicant shall be notified of the expenses and shall deposit said necessary funds prior to the cost being incurred.
- E. Review of applications. The Code Enforcement Officer shall refer all applications and related plan materials to the Environmental Director within five (5) business days of receipt. The Environmental Director may conduct such site inspections as deemed necessary in order to evaluate the application. The review of all applications by the Environmental Director shall involve a two-step process. First, within fourteen (14) days of receipt, the Environmental Director shall determine the following and submit a written report to the Code Enforcement Officer:
- (1) What additional information, described in § 11 1-6C above, is required in order to process the application.
- (2) Completeness of the application. If the application is incomplete, the specific information necessary to make the application complete shall be identified.
- (3) If the application is deemed complete, this report shall include a recommendation on whether referrals should be made to the Town Engineer, the Conservation Advisory Board and/or the DCSWCD.
- (4) If the Environmental Director's report finds that the application is incomplete, then within ten (10) business days of the receipt of this report, the Code Enforcement Officer shall notify the

applicant, in writing, of the information which must be filed in order to make the application complete. Upon the receipt of this subsequent information, the Code Enforcement Officer shall make the same referrals as specified in this section. If the Environmental Director's report finds that the application is complete, then within ten (10) business days of the receipt of this report, the Code Enforcement Officer shall refer the complete application and supporting documents and all referral letters to the Planning Board for its review and action. If the Environmental Director does not file a report on the application within the required time period, the application shall be deemed complete, and the Code Enforcement Officer shall process the application as provided in this section. Once the Environmental Director deems an application complete, a detailed review of the permit application will be performed. As Step 2, the Environmental Director shall make a report to the Code Enforcement Officer and Planning Board within thirty (30) days of receipt of the application and supporting materials from the Code Enforcement Officer. The report from the Environmental Director shall address, at a minimum, the following matters:

- (a) A recommendation of approval, disapproval or approval with conditions of the application, based upon an evaluation of the values and functions of the wetland, watercourse and/or controlled area and the potential impact on each.
- (b) A recommendation on whether any waivers permitted under § 111-61, Waiver of requirements, should be granted by the Planning Board.
- (c) If deemed appropriate by the Environmental Director or the Code Enforcement Officer, the application and supporting documents may also be referred to the Town Engineer, the Conservation Advisory Board and Jor the DCSWCD. If performed, all such referrals shall be made within ten (10) business days of an application being deemed complete. All outside agencies receiving the application materials shall submit a written report to the Planning Board within thirty (30) days of receipt. If an application is referred to the Town Engineer, the report from the Town Engineer should address, as a minimum, the following items:
- [1] A recommendation of approval, disapproval or approval with conditions of the application, based upon an evaluation of the values and functions of the wetland, watercourse and/or controlled area and the potential impact.
- [2] A recommendation on whether any waivers permitted under § 111-61, Waiver of requirements, should be granted by the Planning Board.
- [3] A recommendation as to the amount of the performance bond to be posted to guarantee completion of work, including stabilization and site restoration.

F. Duty of Planning Board.

- (1) During its review of the application, the Planning Board shall:
- (a) Review the application to determine that the requirements of this chapter have been satisfied and to ensure that applicable State Environmental Quality Review Act (SEQRA)* (*Editor's Note: See Art. 8 of the Environmental Conservation Law) regulations are met.
- (b) Hold a public hearing on the application, unless waived in accordance with § 111 -6(1)(b)
- (c) Approve, approve with conditions or deny applications, in accordance with this chapter.
- (d) Establish the amount of a performance bond or other security as a condition of approval, he amount of such bond or other security to be approved by the Town Board, in accordance with procedures contained in Chapter 171, Soil Erosion, Sediment Control and Steep Slopes Protection. No more than one (1) performance bond shall need to be posted in order to fulfill

these requirements pursuant to both chapters.

- (e) Mail a copy of their decision to the applicant and file a copy in the offices of the Planning Board, the Code Enforcement Officer and the Town Clerk.
- (2) The Planning Board shall have the right to delegate any or all of the above-mentioned duties to the Code Enforcement Officer. If the Code Enforcement Officer is so delegated, he or she is subsequently responsible for all applicable written reports related to a particular delegated duty. In addition, the Code Enforcement Officer shall provide a monthly written status report to the Planning Board on any applications so delegated.
- G. Public hearing and notification.
- (1) Within forty-five (45) days after receipt of a complete application from the Code Enforcement Officer, the Planning Board shall hold a public hearing on such application.
- (2) The applicant shall noti& the adjacent landowners of the public hearing via certified United States mail, return receipt requested, no less than ten (10) days prior to the date of hearing. At the public hearing, the applicant shall provide to the Planning Board certification of mailing of the required notice.
- (3) The Planning Board shall publish notice of the public hearing in the official newspaper of the town no less than five (5) days prior to the date of hearing.
- (4) This public hearing should be coordinated with any other public hearings required by the applicant in order to expedite the application wherever possible.
- H. Wetlands and watercourses in more than one (1) jurisdiction. Where a regulated wetland lies within two (2) or more municipalities, the Code Enforcement Officer shall provide copies of the application to the other neighboring municipality(ies).
- I. Waiver of requirements.
- (1) Should the Planning Board determine, after review of said application and upon recommendation of the Environmental Director, that an action proposed for a regulated area is insignificant, the Planning Board shall have the power to:
- (a) Waive any information requirements contained in § Ill -6A and C.
- (b) Waive the public hearing required in § III -6(F6)
- (c) Waive referrals to outside agencies.
- (d) Waive the requirement for a performance bond.
- (e) Suspend the permitting process for the action and authorize the immediate issuance of the permit.
- (2) Where the Planning Board finds that any waivers are appropriate, it shall set forth its decision and reasons therefor in writing and file the same with the Code Enforcement Officer, the Conservation Advisory Board (CAB), the Office of the Planning Board and the Town Clerk.
- J. Inactive applications. Applications must be diligently pursued by the applicant. Should any application before the Planning Board remain inactive for six (6) months while awaiting receipt of information as requested by either the Code Enforcement Officer or the Planning Board, the

application shall be considered abandoned. The Planning Board may consider the granting of no more than one (1) six-month extension for the submittal of the requested information, and only upon the written request of the applicant if, in its opinion, particular circumstances warrant it. The declaration of an application as abandoned shall not prevent the submission of a subsequent new application, including fees, which shall be considered without reference to the prior application.

K. Time extensions. Any time period referenced in these regulations can be extended by mutual consent of the applicant and the Planning Board.

§ 111-7. Administration of permit application.

A. Public hearing. Within forty-five (45) days after its receipt of a complete application for a permit regarding a proposed regulated activity and after the publication of a notice of application pursuant to § 11 1-6G above, the Planning Board shall hold a public hearing on such application, unless waived. To the greatest extent practicable, said public hearing will be incorporated with any other hearing required by other local law or by the New York State Environmental Quality Review Act. (*Editor's Note: See Art. 8 of the Environmental Conservation Law)

B. Time to act. Within sixty (60) days of the date of receipt of a complete application from the Code Enforcement Officer, the Planning Board must approve, approve with conditions or deny applications, in accordance with this chapter.

C. Permit decisions.

- (1) In approving, denying or conditioning any permit, the Planning Board shall consider the effect of the
- proposed activity with reference to the protection or enhancement of the several functions of the affected wetlands, watercourses and/or controlled areas and the benefits they provide, which are set forth in § 111-2 of this chapter and in § 24-0103 of the Environmental Conservation Law.
- (2) In granting, denying or conditioning any permit, the Planning Board shall consider the following:
- (a) All evidence offered at any public hearing;
- (b) Any reports from other commissions and/or federal, county, state or town agencies;
- (c) Additional requested information by the Planning Board; and
- (d) All relevant facts and circumstances, including but not limited to the following:
- [1] The environmental impact of the proposed action;
- [2] The alternatives to the proposed action;
- [3] Irreversible and irretrievable commitments of resources that would be involved in the proposed activity;
- [4] The character and degree of injury to, or interference with, safety and/or health or the reasonable use of property that is caused or threatened;
- [5] The suitability or unsuitability of such activity to the area for which it is proposed;
- [6] The availability of further technical improvements or safeguards that could feasibly be added to the plan or action;

- [7] The possibility of further avoiding reduction of the wetlands', watercourse's and/or controlled area's natural capacity to support desirable biological life, prevent flooding, supply water, control sedimentation and/or prevent erosion, assimilate wastes, facilitate drainage and provide recreation and open space.
- (3) No permit shall be approved by the Planning Board and issued by the Code Enforcement Officer pursuant to this law unless the Planning Board shall find that:
- (a) The proposed regulated activity is consistent with the policy of this law to preserve, protect and also conserve freshwater wetlands, watercourses, associated controlled areas and the benefits derived therefrom, to prevent the despoliation and destruction of freshwater wetlands, watercourses and controlled areas and to regulate the development of such wetlands, watercourses and controlled areas in order to secure the natural benefits derived therefrom, consistent with the general welfare and the, beneficial economic and social development of the Town of Pawling.
- (b) The proposed regulated activity is compatible with the public health and welfare.
- (c) The proposed regulated activity is reasonable and necessary.
- (d) There is no practicable alternative for the proposed regulated activity on a site which is not a freshwater wetland, watercourse or controlled area or which cannot practicably be relocated on the site so as to eliminate or reduce the intrusion into the wetland and/or controlled area.
- (e) The proposed regulated activities are in compliance with the standards set forth in 6 NYCRR Part 665.7(e) and 665.7(g).
- (4) The applicant shall have the burden of proof with regard to the required findings set forth in Subsection C(3) of this section.
- (5) Duly filed written notice by the state, agency or subdivision thereof to the Planning Board that the state or any such agency or subdivision is in the process of acquiring the affected area on which a proposed regulated activity would be located by negotiation or condemnation shall be sufficient basis for denial of a permit for such regulated activity. Such notice shall be in accordance with 6 NYCRR, Part 665.7(i), and may be provided at any time prior to the Planning Board's decision to issue or deny a permit for the regulated activity.
- D. Permit issuance. A permit granted pursuant to this chapter shall be issued by the Code Enforcement Officer in accordance with the decision rendered by the Planning Board.

E. Permit conditions.

- (1) Every permit issued pursuant to this chapter shall contain the following general conditions:
- (a) The Planning Board, Code Enforcement Officer and/or Environmental Director have the right to inspect the project at any reasonable time, including weekends and holidays.
- (b) The permit holder shall notify the Code Enforcement Officer of the date on which project construction is to begin at least five (5) days in advance of such date.
- (c) The permit shall be prominently displayed at the project site during the undertaking of the activities authorized by the permit.
- (d) The boundaries of the project shall be clearly staked or marked.
- (e) All permits shall be valid for a period of one (1) year, unless otherwise indicated, but shall expire upon completion of the acts specified.

- (2) Any permit issued pursuant to this chapter may also be issued with specific conditions beyond those listed above. Such conditions may be attached as are necessary to assure the preservation and protection of affected freshwater wetlands and to assure compliance with the policy and provisions of this law and the provisions of the Planning Board's rules and regulations.
- F. Permit renewal. Upon written request of the applicant, the Code Enforcement Officer may renew a permit for a period of one (1) year, if authorized by the Planning Board. The fee for a permit renewal will be determined by resolution of the Town Board.
- G. Bonding requirements. In accordance with the requirements of § 11 1-6F(1)(d), the Planning Board may require posting of a performance bond or collateral as a condition of approval.

§ 111-8. Inspection.

- A. General procedure. The Planning Board, Code Enforcement Officer and/or the Environmental Director may enter upon the lands or waters for the purpose of inspections to determine compliance with this chapter and/or for the purpose of undertaking any investigations, examinations, surveys or other activities necessary for the purposes of this chapter. When at all possible, the landowner shall be notified prior to field investigation.
- B. Inspection fee. Where the Planning Board deems inspections to be necessary, an applicant shall be required to pay an inspection fee in an amount set forth in a fee schedule established by resolution of the Town Board.4
- C. Notification. The applicant shall notil3' the Code Enforcement Officer when reaching stages of the activity as may be required in the permit. No activity requiring inspection will be approved without such notification. Advance notice of at least two (2) working days shall be given whenever possible.

§ 111-9. Penalties and corrective action.

A. Stop-work order. The Code Enforcement Officer may issue a stop-work order when he or she finds that the permittee is in violation of the provisions of applicable laws, ordinances and/or regulations, has not complied with any term of such permit issued pursuant to this chapter, has exceeded the authority granted in the permit or has failed to undertake or complete the project in the manner set forth in the permit. A stop-work order shall be issued by nothing the permittee performing the work to suspend all work. Any person served with a stop-work order shall forthwith suspend all activity until the stop-work order has been rescinded. Such order and notice shall be in writing, shall state the conditions under which work may be resumed and shall be served upon the person to whom it is directed either by delivering it to the individual personally or by posting the same upon a conspicuous portion of the area and sending a copy of the same, by registered or certified United States mail, return receipt requested, to the permittee at the address shown on the permit or approval. The Code Enforcement Officer shall immediately noti& the Environmental Director and the Planning Board when a stop-work order has been issued. The Environmental Director must inspect and approve corrective actions prior to any

lifting of a stop-work order issued.

Editor's Note: Specific fee amounts are oil tile and available for inspection in the office or the Town Clerk.

Editor's Note: Specific fee amounts are on file and available for inspection in the office of the Town Clerk.

- B. Corrective action. If, upon inspection, it is found that any of the activities have not been undertaken in accordance with the permit, the applicant shall be responsible for completing those activities according to the permit. Failure of the Code Enforcement Officer to carry out inspections shall not in any way relieve the applicant or the bonding company of their responsibilities. When any person has been found violating any provision of this chapter or conditions imposed by the Planning Board upon an approved permit and whose permit has been suspended or upon whom a stop-work order has been issued, corrective action shall be carried out as follows:
- (1) When the terms of an approved permit have been violated and a stop-work order has been issued, the Code Enforcement Officer may provide a reasonable and specified time within which corrective action shall be completed by the violator to restore, insofar as possible, the affected wetland, watercourse and/or controlled area to its condition prior to the violation.
- (2) When the violation of the terms of the permit is of such a serious nature that the Code Enforcement Officer has suspended the permit or recommends the revocation of the permit, the Code Enforcement Officer shall refer the mailer to the Planning Board for its determination.
- C. Civil sanctions. Any person who violates, disobeys or disregards any provisions of this chapter, in addition to a criminal sanction, shall be liable to the people of the Town of Pawling for a civil penalty.

D. Criminal sanctions.

- (1) Any infraction of the provisions of this chapter by failure to comply with any of its requirements, including any infraction of a condition of a permit issued pursuant to this chapter, shall constitute a violation.
- (a) Any person violating any order of the town regulating wetlands shall, for the first offense, be guilty of a violation punishable by a fine not exceeding three hundred fifty dollars (\$350) or a term of imprisonment not to exceed fifteen (15) days.
- (b) Each day's continued violation shall constitute an additional offense.
- (2) A second infraction of the provisions of this chapter, as per the stipulations mentioned above, shall constitute a misdemeanor. For a second and each subsequent infraction by any person within a three-year period, the aforesaid shall be guilty of a Class A misdemeanor punishable by a fine not exceeding one thousand dollars (\$1,000.) or a term of imprisonment of not less than fifteen (15) days nor more than six (6) months, or both.
- (3) The town shall prosecute persons alleged to have violated the provisions of the law and may seek equitable relief to restrain any violation or threatened violation of its provisions.

E. Injunctions and orders to show cause. Notwithstanding any of the penalties or fines hereinabove provided, the Town of Pawling may maintain any action or proceeding in a court of competent jurisdiction to compel compliance with or to restrain by injunction the noncompliance of any provision of this law or permit issued thereunder.

§ 111-10. Appeals.

- A. Any person aggrieved by any order or decision by the Code Enforcement Officer may seek relief from the Town Zoning Board of Appeals.
- B. Any person aggrieved by any order or decision of the Planning Board may seek judicial review pursuant to a petition in accordance with Article 78 of the Civil Practice Law and Rules in the Supreme Court for the County of Dutchess. Such petition shall be brought within thirty (30) days after the date of the filing of such order or decision with the Town of Pawling Town Clerk.

§ 111-11. Exception.

- A. The provisions of this chapter shall not apply to any development, alteration or improvement of property for which final approval shall have been obtained and not expired and the approved work not completed prior to the effective date of this chapter.
- B. As used in this section, the term "final approval" shall mean:
- (1) In the case of the subdivision of land, final plat approval or conditional approval of a final plat as such terms are defined in § 276 of the Town Law.
- (2) In the case of a site plan not involving the subdivision of land, adoption by the Planning Board of a resolution granting approval.
- (3) In those cases not covered above, the issuance of a building permit or other authorization for the commencement of the development, alteration or improvement of property or for those developments, alterations or improvements for which the Town of Pawling does not require such permits, the actual commencement of the development, alteration or improvement of property.

§ 111-12. Compliance with other code and regulation provisions.

All development and improvement allowed by right or allowed by permit shall also conform with all rules and regulations contained in the Code of the Town of Pawling and all other applicable laws and regulations.

Appendix E9

Timber Harvesting

Canandaigua Lake Watershed Council

Any time vegetation is removed and soil exposed, the potential for damaging erosion and sedimentation exists. Most of the time, soil disturbance is thought of in association with development and construction. But harvesting timber is another activity that disturbs soil and which municipalities can regulate.

Timber Harvesting Model Law

I - Purpose

The purpose of this chapter is to promote the health and safety of the residents of the Town of _______ by protecting the natural environment as affected by timber harvesting. The town recognizes that timber resources are of significant value and will be harvested. The town also recognizes that if harvesting practices are carried out poorly, they can result in significant and direct environmental damage to the property and to the adjacent lands and waters. This chapter requires the landowner and his agent to be responsible for implementation of the best management practices as outlined in this chapter. Proper management practices will limit subsequent environmental damage, particularly from soil erosion and sediment-laden run-off. Therefore, the following requirements are intended to regulate those harvesting activities that are most likely to cause environmental damage, such as stream crossings, location of landings, haul roads and skid trails and reclamation efforts.

II - Conflict with other provisions

Whenever the requirements of this chapter are at variance with the requirements of any other lawfully adopted rules, regulations, ordinances or laws, the most restrictive shall govern.

III - Definitions

For the purpose of this Chapter, the following terms shall apply:

ACE – Army Corps of Engineers.

APPLICANT – The landowner in conjunction with his/her (landowner's) agent.

BEST MANAGEMENT PRACTICES – devices and procedures to be considered and used as necessary to protect the values and functions of forested land during harvesting and other forest management operations.

BUFFER STRIP – Strip of land containing grass and/or vegetation/ground cover and/or woods that separates an area of concern from an intensive land use area (logging).

BOARD FOOT - A measure of lumber twelve by twelve by one (12 x 12 x 1) inches.

CLASSIFIED STREAM – A stream protected under Article 15 of the Environmental Conservation Law. A permit is required from the NYS DEC for any work disturbing a classified streams bed or banks.

CLEARCUTTING – A method of timber harvesting where virtually all trees on a site are removed.

CODE ENFORCEMENT OFFICER (CEO) – The official designated by the Town Board to enforce the provisions of the Chapter.

COMMERCIAL TIMBER HARVESTING (LOGGING) – Timber harvest activity that fells trees whose volume is greater than twenty-five (25) standard cords or ten thousand (10,000) board feet of timber as measured by the International Log Rule. The clearing of lands for agricultural, development purposes or utility right-of ways which shall fell trees greater than the aforesaid volumes shall specifically be included within this definition.

HAUL ROADS – A constructed road of dirt and/or gravel utilized for moving cut trees from the point where they are loaded on a truck to exit from the site.

INTERNATIONAL ¼" LOG RULE – The legally recognized NYS method for estimating the amount of lumber in board feet that can be obtained from logs or trees.

LANDINGS – An open or cleared area used for loading logs onto trucks or used for any purpose such as storing logs or servicing equipment.

LANDOWNERS AGENT – The logger, forester and/or consultant representing the landowner.

LOGGING SLASH AND DEBRIS – Any residue of trees or of the associated cutting left on the site after harvesting, including but not limited to trunks, tops and vegetative litter.

STANDARD CORD - Cut wood stacked four feet high by four feet wide by eight feet long.

STREAM – A body of running water flowing continuously or intermittently in a channel on the ground surface.

IV - Permit Requirements

It is hereby required that a timber harvesting permit application is to be filed with the Town CEO by anyone desiring to harvest timber in quantities greater than 25 standard cords of wood or 10,000 board feet of timber as measured by the International Log Rule in any one year within the town. The property owner and the logger shall apply for such permit jointly.

No person, firm, partnership, corporation or other entity shall engage in any logging activity whether the same shall be for profit or otherwise unless the aforesaid entity complies with the provisions of this Chapter and the following:

- A. A timber-harvesting permit, to be issued by the Town Code Enforcement Officer, shall be required before any logging operation is conducted within the town.
- B. A registration fee to be paid in an amount deemed reasonable and set through resolution of Town Board and updated as necessary.

V - Standard Operating Procedures

All timber harvesting pursuant to this Chapter shall comply with the following standards:

- A. 1) No forest haul road or skid road to exceed a slope of 15% for a distance of more than 200 feet. 2) The applicant shall take appropriate measures (waterbars, dips) to divert running water from the roads at intervals in order to minimize erosion. Temporary waterbars are to be installed to protect any stream (including road ditches) on skid roads, landings or other areas of considerable disturbance as forecasted wet weather deems necessary.
- B. There shall be no skidding up and down any stream channel, and all logging slash and debris shall be promptly removed from any such channels.
- C. All streams are to be crossed only when necessary and by the most direct route, at a right angle to the stream channel. All streams to be crossed will have crossing appropriate structures installed to prevent damage to the bed and banks of the stream, i.e. temporary bridges, fords, culverts etc. The landowner and/or agent will be responsible for complying with all NYSDEC and ACE permitting requirements on classified streams.
- D. 1) No harvesting allowed within 15 feet of streams or other surface waters except necessary maintenance. 2) No haul or skid roads (except direct route stream crossing) within a 100-foot set back distance from streams or other surface waters, i.e. lakes and ponds. Trees harvested within this area should be directionally felled away from stream channel. 3) No landings shall be located within buffer strips abutting streams.
- E. Directionally fell trees, within the stream set back distance, so tops land away from waterways.
- F. 1) No haul or skid roads (except main route to landing) within a 100-foot set back from public roads. 2) Landings located in buffer strips abutting roads shall be properly graded and waterbarred to prevent sediment from washing into the drainage ditches along the public roads.
- G. The entrance of haul roads onto town roads shall be done in compliance with town regulations.
- H. All trash and garbage are to be removed on a daily basis.
- I. **Site reclamation** To be performed by the applicant upon completion of the harvesting activity.
 - 1. Haul roads and primary skid trails shall have permanent erosion control and drainage structures installed. Waterbars should be placed at the following intervals:

Grade percent	<u>Feet</u>
<5%	200'
6-15%	150'
>16%	100'

- 2. Manage and divert overland flow on haul roads and skid trails by properly shaping, sloping, and ditching to prevent erosion.
- 3. All disturbed areas, such as roadways and landings, prone to erosion, will be stabilized by seeding and mulching.
- 4. All temporary culverts and bridges at stream crossings shall be removed and stream banks restabilized and protected with waterbars. All reclamation efforts shall be subject to inspection by the town to assure compliance with this provision.

VI - Permit application procedure

The permit application package will include a basic application, a full application, a copy of this chapter, and a "New York State Forestry Best Management Practices for Water Quality, Field Guide".

- 1. The **Basic Timber Harvest Application** requires the following information;
 - a. Applicants certificate of insurance for \$250,000/\$500,000 property damage and personal liability, specifically covering damage to roadways and culverts.
 - b. Name/addresses of landowner and logger/forester (agent).
 - c. Physical description of property to be logged, copy of USGS Topographic maps with property boundaries, streams, landings and area to be logged clearly marked.
 - d. Local and county roads to be used for transport by log trucks and heavy equipment.

If the area to be harvested is less than 15% slope and no streams are present in or contiguous to the harvest area, the above steps will complete the information needed and the Town CEO will issue a permit within 5 business days.

If the grade is over 15% and/or a stream is included or adjacent to the harvest area then a full timber harvest plan will be required in addition to the basic application.

- 2. In addition to the above, the **Full Timber Harvest Application** will require;
 - a. A description of the Best Management Practices applied to the basic plan pertaining to the stream crossings, skid and haul roads and landings.
 - b. The BMP locations will be identified on the project maps in the basic application, described in narrative and subject to inspection by the Town CEO.
- 3. A copy of all approved permits will be sent to NYSDEC Region #8 Office, Ontario County Soil and Water Conservation District, the Town Highway Superintendent and the contiguous landowners. Notice will also be sent to town and county highway departments whose roads are intended to be used for transport of heavy equipment.

VII - Regulation and penalties for offenses.

- A. It shall be the duty of the Code Enforcement Officer to enforce the provisions of this chapter.
- B. The Code Enforcement Officer, may with due cause and without hindrance, reasonably enter, examine and survey all grounds affected by the timber harvest in a prudent manner, upon complaint or administrative warrant in order to ascertain whether such rules and regulations in this section are complied with by any person regulated by this chapter.
- C. Upon notification by the CEO to the applicant of any violation hereunder, the timber-harvesting permit granted to such applicant shall be suspended and/or revoked. Upon suspension or revocation, as the case may be, all operations shall immediately cease, and the applicant shall take immediate steps to implement the restoration of the property and remove the debris, all as set forth in the application and timber-harvesting permit. Such suspension or revocation notice may contain conditions to be met to obtain reinstatement of the permit.

- D. Any person violating any provision of this chapter shall be guilty of an offense punishable by a fine not to exceed \$300.00 or imprisonment for a period not to exceed fifteen days, or both.
- E. Pursuant to 150.20 of the Criminal Procedure law and in accordance with section 10(4)(a) of the Municipal Home Rule Law, the CEO of the town is hereby authorized to issue and serve appearance tickets in respect to any violation of this chapter.
- F. In addition to or as an alternative to the above provided penalties, the Town Board may also maintain an action in the name of the town in a court of competent jurisdiction to compel compliance with or restrain by injunction any violation of this chapter.

Appendix E10

On-site Wastewater System Model Law

Ontario County Planning Department

On-site wastewater treatment systems are widely used in rural areas not served by public sewer systems. When designed and maintained properly, on-site wastewater treatment is an effective way to deal with the issue. However, on-site systems do require regular maintenance and have finite life spans. Municipalities can regulate on-site systems to ensure there is a procedure in place for regular inspections and maintenance.

On-site Wastewater Treatment Model Law

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ARTICLE 1 INTRODUCTORY PROVISIONS

Section 101 Title

1. This local law shall be known as the "On-Site Individual Wastewater Treatment System Law of the City, Town, Village of ______.

Section 102 Applicability

1. This local law shall govern the treatment of sewage by regulating all on-site individual wastewater treatment systems (hereinafter referred to as a wastewater treatment system).

Section 103 Purpose

1. The purpose of this local law is to promote the health, safety, and general welfare of the community, including the protection and preservation of the property of its inhabitants, by regulating wastewater treatment systems so that human sewage and other wastes are disposed of in a manner that will not create a health hazard, adversely affect the environment, create a nuisance, or impair the enjoyment or use of property.

Section 104 Authority

1. Enactment of this local law is pursuant to Article 2 of Municipal Home Rule Law, and Article 3 of the Public Health Law.

ARTICLE 2 DEFINITIONS

Section 201 Words and Terms

1. In addition to the definitions contained in the *New York State Public Health Law and Uniform Fire Prevention and Building Code*, which are incorporated herein by reference, the following words and terms shall be defined as follows:

ADEQUATELY FUNCTIONING shall mean a wastewater treatment system inspected pursuant to section 502 of this local law that is determined by the authority having jurisdiction as not posing a public health threat by virtue of above ground seepage, or contamination of surface or ground water. For the purpose of this local law an "adequately functioning" system shall always include a watertight vessel.

AUTHORITY HAVING JURISDICTION shall be the Code Enforcement Officer, Health Officer, Watershed Inspector, or other official(s) designated by a local municipality, or other regulatory agency, having the responsibility to enforce the provisions of this local law.

CHANGE OF USE shall mean a use of land with an associated building and wastewater treatment system that is modified so as to likely cause an increase in hydraulic loading (e.g. – change from an existing commercial use to residential use; change of an existing residential use to commercial use; change of a commercial use to a different type of commercial use). A change of use shall also include the removal and replacement of a manufactured or mobile home dwelling.

CONVEYANCE OF REAL PROPERTY shall mean the transfer of the title of real estate from one to another, in the form of a deed or other legal instrument, filed in the Office of the County Clerk.

DESIGN PROFESSIONAL shall mean a person licensed or registered in the State of New York and authorized by *New York State Education Law* to design the systems described in *10NYCRR Appendix 75-A*.

LOCAL GOVERNING BODY shall mean the municipal corporation charged with authority to act as the Local Board of Health as defined by *New York State Public Health Law*.

MINOR ALTERATIONS shall mean routine maintenance and repairs to the wastewater treatment system, including but not limited to the following: replacement of septic tank covers or baffles, replacement of distribution box covers, replacement of cracked pipes, pumping of the

septic tank, and replacement of mechanical pumps and devices. "Minor alterations" shall not include replacement of a septic tank, distribution box, or any addition, alteration or rearrangement of water distribution or drainage piping. Like examples of "minor alterations" not specifically listed in this definition shall be determined by the authority having jurisdiction.

NEW CONSTRUCTION shall mean any building constructed or placed on an undeveloped site requiring the installation of a wastewater treatment system and currently not utilizing the same.

ON-SITE WASTEWATERTREATMENT SYSTEM PERMIT shall mean a written permit issued by the authority having jurisdiction.

ON-SITE WASTEWATER TREATMENT SYSTEM shall mean a complete system of piping, watertight vessels or other facilities for the on-site collection, transport and treatment of sewage.

SEWAGE shall mean the combination of human and household waste with water which is discharged to the plumbing system, including the waste from a flush toilet, bath, shower, sink, lavatory, dishwashing or laundry machine, or the water-carried waste from any fixture, equipment or machine.

ARTICLE 3 GENERAL REGULATIONS AND REQUIREMENTS

Section 301 Prohibitions

- 1. It shall be unlawful to install, construct, alter, replace, enlarge, extend, or otherwise modify any wastewater treatment system unless a wastewater treatment permit is issued by the authority having jurisdiction, except as specifically exempted in section 304 of this local law.
- 2 It shall be unlawful to change the use of real property, convey real property, or expand a building or dwelling, including its use, by greater than fifty (50) percent, without an inspection of the wastewater treatment system by the authority having jurisdiction, pursuant to sections 501 and 502 of this local law.
- 3. It shall be unlawful to use or maintain any wastewater treatment system that is not adequately functioning.
- 4. It shall be unlawful to discharge anything but sewage into a wastewater treatment system. Surface and subsurface water including roof, cellar, foundation and storm drainage shall not be discharged into the wastewater treatment system and shall be disposed of so as to in no way affect the proper functioning of the system.

Section 302 Design Standards for Wastewater Treatment Systems – New Systems

- 1. Individual Household Systems
- (a) Any wastewater treatment system for new individual household construction shall be designed and built according to the requirements of this local law and the requirements, as they may from time to time be amended, of the NYSDOH standards for sewage disposal for individual household systems. Those design requirements are found in *Appendix 75-A of Part 75*

of Title 10 of the New York Code of Rules and Regulations (10 NYCRR).

2. Intermediate-sized Sewerage Systems

(a) Any wastewater treatment system for new commercial or institutional construction, as well as cluster housing or other multi-home developments, shall be designed and built according to the requirements of this local law and the requirements, as may be from time to time be amended, of the NYSDEC standards for sewage disposal for intermediate-sized sewerage facilities. Those design requirements are found in NYSDEC manual "Design Standards for Wastewater Treatment Works: Intermediate-sized Sewerage Facilities."

Section 303 Design Standards for Wastewater Treatment Systems – Existing Systems

1. Individual Household Systems

(a) Any installation, construction, alteration, replacement, enlargement, extension, repair, or other modification of an existing on-site individual household wastewater treatment system shall be designed and built according to the requirements of this local law and the requirements, as they may from time to time be amended, of the NYSDOH standards for sewage disposal for individual household systems. Those design requirements are found in *Appendix 75-A of Part 75 of Title 10 of the New York Code of Rules and Regulations (10 NYCRR)*.

2. Intermediate-sized Sewerage Systems

(a) Any installation, construction, alteration, replacement, enlargement, extension, repair, or other modification of an existing intermediate-sized sewerage system, shall be designed and built according to the requirements of this local law and the requirements, as may be from time to time be amended, of the NYSDEC standards for sewage disposal for intermediate-sized sewerage facilities. Those design requirements are found in NYSDEC manual "Design Standards for Wastewater Treatment Works: Intermediate-sized Sewerage Facilities."

Section 304 Exemptions

- 1. Minor alterations to wastewater treatment systems shall not require a wastewater treatment permit provided such repairs are made with like or similar materials so as to replace existing conditions in need of repair, and are done in a safe and sanitary manner.
- 2. The design standards found in section 303 of this local law shall not apply to existing wastewater treatment systems legally installed, repaired or approved by the authority having jurisdiction, prior to the date of adoption of this local law and after the dates identified in *Paragraphs a and b* identified below, or those systems determined by the authority having jurisdiction to be adequately functioning.
- (a) Individual Household Wastewater Treatment Systems legally installed or repaired prior to December 1, 1990.

(b) Intermediate-sized Wastewater Treatment Systems legally installed or repaired prior to January 1, 1988.

Section 305 Site Limitations

- 1. On sites with topographic, physiographic or other limitations, the authority having jurisdiction shall utilize current technology and design methods to remedy failed or improperly functioning systems, provided that applicable state standards, to the greatest extent possible, are complied with. In considering site limitations, the authority having jurisdiction shall take the following into consideration:
- (a) Distance separations to drinking water supplies and watercourses;
- (b) The imminent health hazards resulting from a currently failed system;
- (c) Existing lot line setbacks and area requirements as related to individual properties; and
- (d) The extent to which the limitations are self-created.

Section 306 Maintenance and Protection

1. Wastewater treatment systems shall be maintained in good working order. There shall be no activities or conditions permitted which would interfere with the proper operation of wastewater treatment systems. It is specifically prohibited to construct or place buildings, to install paving, to plant trees or shrubs, to regrade or place fill, to allow crossing by vehicles, to install above ground pools, or to install driveways or parking areas over sanitary disposal fields.

Section 307 State or Other Agency Approvals

- 1. In addition to approvals required herein, a review and approval by the New York State Department of Health (NYSDOH) or the New York State Department of Environmental Conservation (NYSDEC), if appropriate, shall be required for the following conditions:
- (a) Any realty subdivision as defined by Article 11, Title II of the NYS Public Health Law or Article 17, Title 15 of the NYS Environmental Conservation Law;
- (b) Any alternative system as defined by *Appendix 75-A of Part 75 of Title 10 of the New York Code of Rules and Regulations (10 NYCRR);*
- (c) Any facility required to be permitted by the NYSDOH; and
- (d) Any on-site individual wastewater treatment system or other system with effluent in excess of 1,000 gallons per day.
- 2. In addition to approvals required herein, wastewater treatment systems are subject to review and approval by the Canandaigua Lake Watershed Inspector pursuant to *New York State Public Health Law, Section 132.1 of Part 132 of Title 10 of the New York Code of Rules and Regulations (10 NYCRR)*.

Section 308 Use of Design Professionals and the Ontario County Soil and Water Conservation District

- 1. The authority having jurisdiction shall have the right to require that the property owner retain the services of a design professional to conduct site and soil appraisals (percolation tests and deep holes) and to design and certify that the wastewater treatment system meets the requirements of this local law and the standards of applicable state laws.
- 2. The local governing body shall have the right to contract with the County Soil and Water Conservation District through its *Uniform Inspection Procedures Program* for site and soil appraisals and inspections performed pursuant to section 501of this local law.
- 3. Wastewater treatment systems that are defined as an alternative system pursuant to 10 NYCRR Appendix 75-A shall be certified by a design professional.

Section 309 Access

- 1. The authority having jurisdiction shall be permitted by the property owner to make a physical inspection of the lands and premises for which a wastewater treatment system permit or inspection has been requested, in order to determine that all of the requirements of this local law have been complied with.
- 2. The authority having jurisdiction, upon complaint or show of cause, shall be permitted by the property owner to make a physical inspection of the lands and premises for which a wastewater treatment system is believed to be a cause or potential cause of pollution, or health hazard.

ARTICLE 4 REQUIREMENTS FOR NEW WASTEWATER TREATMENT SYSTEMS

Section 401 Application Material

- 1. Applications for wastewater treatment system permits shall be by the property owner or a duly authorized agent, accompanied by the appropriate fee, to the authority having jurisdiction, which shall include the following information:
- (a) The name, address and telephone number of the applicant;
- (b) Specific location of the property on which the wastewater treatment system is located or proposed, including the tax map number for said property;
- (c) A sketch plan on a tape location map or survey map of the premises on which the wastewater treatment system is located or proposed, showing the location of wells, springs and other sources of water supply, and the location of all watercourses on the premises;
- (d) Evidence to demonstrate that there is no public sewer available into which the sewage can be discharged or that it is impractical to discharge sewage into a community sewerage

system;

- (e) Documentation of substantiating data relating to site conditions, percolation tests, deep hole data, and topography of land; and
- (f) The authority having jurisdiction may conduct such investigations, examinations, tests and site evaluations as it deems necessary to verify information contained in the application.

Section 402 Administrative Review

- 1. The authority having jurisdiction shall not issue a wastewater treatment system permit unless:
- (a) All pertinent site data has been submitted, verified and certified as required by this local law; all permit fees have been paid and that the wastewater treatment system complies with all specifications of state and local laws.
- 2. The authority having jurisdiction may disapprove an application if it is determined that any of the following requirements have not been met:
- (a) That the wastewater treatment system, as proposed, will not conform to the requirements of state and local laws;
- (b) That the applicant has failed to supply all the data necessary to make a determination as to whether or not such wastewater treatment system conforms to state and local laws; and
- (c) The applicant has failed to pay all necessary fees.
- 3. When the authority having jurisdiction shall deny the application for a wastewater treatment permit, within seven (7) working days after taking such action, the authority having jurisdiction shall furnish the applicant with a written notice of denial setting forth in detail the reason for such action.
- 4. No Certificate of Occupancy shall be issued and no persons shall occupy any building unless the wastewater treatment system has been approved in accordance with the provisions of this local law.

Section 403 Inspection Certifications

- 1. Installation of the wastewater treatment system shall be under the direct supervision of the authority having jurisdiction.
- 2. The applicant shall be prohibited from covering any component of the system without proper authorization. Any change of construction approved by the authority having jurisdiction shall be noted on the original drawings before the system is back filled. As built plans shall be provided to the authority having jurisdiction.
- 3. The authority having jurisdiction may, by written notice, order all work stopped on any wastewater treatment system, which is in violation of this local law.

Section 404 Fees

1. The fees for any permit or inspection performed pursuant to this local law shall be determined from time to time by the local governing body.

ARTICLE 5 REQUIREMENTS FOR EXISTING WASTEWATER TREATMENT SYSTEMS

Section 501 Circumstances Requiring Inspection of Existing Systems

- 1. The authority having jurisdiction shall conduct an on-site inspection of an existing wastewater treatment system as follows:
- (a) Prior to a change of use The owner of the property shall arrange for a wastewater treatment system inspection before any change of use is undertaken. The authority having jurisdiction shall determine whether the change represents an increased hydraulic loading to the system. In instances where a site plan approval, special use permit, or variance is required the authority having jurisdiction shall incorporate the wastewater treatment system inspection report into the review process of the appropriate Planning Board, Zoning Board of Appeals, or Board of Appeals;
- (b) Prior to a conveyance of real property The owner of the property shall arrange for a wastewater treatment system inspection prior to the conveyance of real property. In addition, property owners may request a wastewater treatment inspection for real estate transactions or other certifications to lending institutions, purchase offer conditions of buyers of real property, or other requests, or investigations; and
- (c) Expansion greater than fifty (50) percent The owner of the property shall arrange for a wastewater treatment system inspection as an integral part of the building permit application process. The authority having jurisdiction shall determine whether expansion of the building or dwelling, including its use, represents an increased hydraulic loading to the system. For the purpose of this local law an existing wastewater treatment system shall be defined as an accessory structure and as such subject to regulation pursuant to *Part 1230 of Subchapter E*, *Conversions, Alterations, Additions and Repairs to Existing Buildings of the New York State Uniform Fire Prevention and Building Code*.

Section 502 Inspection Procedure

- 1. All existing on-site wastewater treatment systems requiring an inspection pursuant to this local law shall be performed by the authority having jurisdiction in accordance with the specifications established as follows:
- (a) The septic tank, inspection ports, distribution boxes, or other distribution devices shall be uncovered and accessible to the inspector. In the event any component of the system cannot be reasonably located, the inspector shall so note on the inspection report;
- (b) Sanitary disposal fields shall be staked out or otherwise identified by general area of location;

- (c) At the discretion of the authority having jurisdiction, the septic tank shall be pumped at the expense of the property owner, in order to ensure that the tank is not leaking, and that the inlet and outlet baffles are in place and properly functioning;
- (d) At the discretion of the authority having jurisdiction, drop and distribution boxes shall be checked for blockages and function;
- (e) The authority having jurisdiction shall visually inspect buildings on the property noting the number of bedrooms, the layout and location of all water-using fixtures and plumbing, including but not limited to faucets, sinks, toilets, drains, overflows, laundry equipment, floor drains, sump pumps, water softeners, and related systems that may impose an improper or potential adverse hydraulic loading on the disposal field;
- (f) Verify connection of all drains to an appropriate disposal system;
- (g) All outside areas, to include nearby lawns, slopes, hillsides, ditches and watercourses, swales, and the shoreline of ponds, lakes and wetlands shall be observed for above ground seepage and to note the quantity and general quality of surface water where it occurs;
- (h) Conduct dye testing, and other methods as may be necessary to determine system function.

Section 503 Report of Findings

- 1. Upon completion of the inspection, the authority having jurisdiction shall document all procedures and furnish the owner with a report of findings.
- 2. The report of findings shall contain, at a minimum, the location, address, name of owner, representative present, dates of testing/inspection, procedures used, observations and sketches showing fixture, drain and system layout to adequately document the wastewater treatment system inspection.

ARTICLE 6 COMPLIANCE AND REPORTING

Section 601 Deficiencies and Corrections

- 1. Upon discovery of a wastewater treatment system which is not adequately functioning or determined to have been illegally installed, the authority having jurisdiction, shall immediately notify the property owner in writing of the failure or unacceptable condition. It shall be the responsibility of the property owner to forward notice of such report to other involved or interested parties. As part of the report, the authority having jurisdiction shall determine a course of corrective action and establish a reasonable time frame for completion of necessary remedies.
- 2. Upon receipt of such notice the property owner shall be given thirty (30) days to obtain a wastewater treatment permit.
- 3. Remedy of a wastewater treatment system, which is not adequately functioning or determined to have been illegally installed, shall require the property owner to submit an

application for a wastewater treatment permit in accordance with section 401 of this local law.

ARTICLE 7 COMPLAINTS

Section 701 Notification

- 1. Complaints shall be made to the authority having jurisdiction with supporting information that a wastewater treatment system may be deficient (i.e. observed failure to ground water, surface water, or aboveground seepage, odor, or otherwise creating a public nuisance).
- 2. Upon receipt of a bonafide complaint or upon personal observation of said wastewater treatment system, the authority having jurisdiction shall notify the property owner and the inhabitants of said property in writing, within seven (7) business days of receipt of the complaint or personal observation, that an inspection pursuant to section 502 of this local law is required. A copy of such notice shall be sent to the Clerk of the local governing body.

ARTICLE 8 ADMINISTRATIVE RELEIF

Section 801 Appeals

- 1. Appeals of any actions, omissions, decisions or rulings of the authority having jurisdiction shall be made to the Clerk of the local governing body and must be instituted within (30) days of the act, omission, decision, or ruling from which relief is sought.
- 2. Within thirty (30) days of receipt of a written appeal of an action, omission, decision, or ruling of the authority having jurisdiction the local governing body, convening as the Local Board of Health, shall give notice of a public hearing to be held on the appeal.
- 3. Within thirty (30) days of final adjournment of a public hearing, the local governing body shall affirm, modify or deny the action, decision or ruling of the authority having jurisdiction or correct any omission, approve, or approve with conditions or disapprove the appeal.
- 4. The decision of the local governing body shall be in writing and shall contain findings and the factual basis for each finding from the record of the hearing, which shall support the decision of the local governing body. The local governing body's discretion in considering an appeal under this local law shall not extend to granting variances from this local law but shall rather be limited to reviewing the authority having jurisdiction's interpretation or applications of the terms hereof. Variances from the substantive requirements (e.g. septic tank sizes, setback distances, etc.) remain under the jurisdiction of the NYSDOH and the NYSDEC.

ARTICLE 9 ENFORCEMENT

Section 901 Violation

1. In any instance where a wastewater treatment system is located, installed, constructed, altered, enlarged, or extended in violation of this local law, or in any instance where this local law is otherwise violated, the local governing body may maintain an action or proceeding in the name of the municipality in a court of competent jurisdiction to compel compliance with the terms of this local law or to restrain by injunction, the violation of this local law.

Section 902 Alternative Remedies

1. Any violation or threatened violation of any of the provisions of this local law, in addition to other remedies herein provided, the local governing body may institute any appropriate action or proceeding to prevent unlawful construction, alteration, repair, or reconstruction, to restrain, correct or abate such violation to prevent the use of the wastewater treatment system or to prevent any illegal act, conduct, business or use regarding such wastewater treatment system.

Section 903 Misrepresentation

1. Any permit or approval granted under this local law which is based upon or is granted in reliance upon any material misrepresentation, or upon failure to make material fact or circumstances known, by or on behalf of an applicant, shall be void.

Section 904 Penalties

1. Any person who violates any provision of this local law shall be subject to a fine not to exceed the sum of \$250 or by imprisonment of not more than seven (7) days, or both. Each week such violation continues after notification to the person in violation shall constitute a separate violation. Such violation notice shall be served by certified mail, return receipt requested, or by personal service.

ARTICLE 10 MISCELLANEOUS PROVISIONS

Section 1001 Conflict of Law

1. In any case where a provision of this local law is found to be in conflict with a provision of any ordinance or local law, or with a provision of any statute, rule, regulation, or order of the State of New York, the provision which established the higher standard for the promotion of the health, welfare and safety of the citizens of the municipality shall prevail. In any case where a provision of this local law is found to be in conflict with a provision of any other ordinance or local law existing on the effective date of this local law, which established a lower standard for the promotion of the health, welfare and safety of the citizens of the municipality, the provisions of this local law shall be deemed to prevail.

Section 1002 Severability

1. The provisions of this local law shall be several, and if any clause, sentence, paragraph, subdivision, section, or part of this local law shall be judged by competent jurisdiction as being invalid, such judgement shall not affect, impair, or invalidate the remainder thereof, but shall be confined to the part thereof directly involved in the controversy in which such judgement shall have been rendered.

Section 1003 Savings Clause

1. The adoption of this local law shall not affect or impair any act done, offense committed or right accrued or acquired or liability, penalty, forfeiture or punishment incurred prior to the time this local law takes effect.

Section 1004 Effective Date

1. This local law shall take effect immediately upon filing with the New York State Secretary of State pursuant to *Article 3 of Municipal Home Rule Law*

Appendix E11

Junk Storage Model Law

Town of Groveland

While junkyards may not be the first thing that is thought of when dealing with water quality issues, how and where junk is stored does impact a municipality's waterways. Junk – cars, other vehicles, appliances – all can leak toxic substances which can find their way into the nearest waterbody.

Careful consideration of how and where junk is permitted to be stored is a component of a municipality's overall local water quality strategy.

Junk/Rubbish Storage Law

of

the Town of Groveland, Livingston County, New York

Article 1: Introduction

Section 1. Authority

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

The Town of Groveland Junk/Rubbish Storage Law is adopted pursuant to the authority granted the Town in Section 10 of the New York State Municipal Home Rule Law and in Section 130 (6) of New York State Town Law.

Section 2. Title

This local law shall be known as the "Junk/Rubbish Storage Law of the Town of Groveland, New York."

Section 3. Purpose

By adoption of this law the Town of Groveland declares its intent to regulate and control the storage or keeping of junk and rubbish on both residential and commercial properties. The Town Board hereby declares that a clean, wholesome, and attractive environment is of vital importance to the continued welfare if its citizens, and that junk/rubbish can constitute a hazard to property, persons, and water resources, and can be a public nuisance. The presence of junk/rubbish is unsightly and tends to detract from the value of surrounding properties.

The purpose of this law is to further;

- Avoid, prevent and eliminate conditions, which if permitted to exist or continue will depreciate or tend to depreciate the value of adjacent or surrounding properties.
- Preserve property values in the Town of Groveland
- Maintain the value and economic health of the commercial properties and businesses that serve and support the Town of Groveland and its citizens

Section 4. Prior Existing Junk Law

This local law shall replace and supersede any prior existing law regarding property maintenance and junk/rubbish storage within the Town of Groveland.

Section 5. Interpretation

Where the conditions imposed by any provision of this law, are either more restrictive than comparable conditions imposed by any other law, ordinance, resolution, rule or regulation of any

kind, the regulations which are more restrictive or which impose higher standards or requirements shall govern.

Section 6. Definitions

As used in this chapter, the terms defined in Appendix A shall have the meanings indicated. Please refer to Appendix A.

Article 2: Junk Maintenance Regulations

The exterior of all premises shall be kept free of the following matter, material, or condition:

- Rubbish or junk as defined in this law
- Rodents, vermin, pest infestations or rodent harborages.
- Nuisance as herein before defined.

Article 3: Exclusions

Article B shall not apply to the storage or placement on the premises of the following material:

- Wood intended for consumption in a wood burning stove, furnace or fireplace located in a building on the premises.
- Lawn or yard or garden ornaments and implements.
- Lawn and patio furniture.
- Operable farm, garden and yard machinery and apparatus used on the premises.
- Standing fences.
- Hoses and sprinklers used for watering lawns or gardens.
- Storage or placement and accumulation of materials in connection with a
- commercial operation duly conducted on the premises where such storage, placement and accumulation is expressly permitted by the laws of the municipality.
- Construction materials and equipment used for the construction or renovation of a building on the premises for which a building permit has been issued.

Article 4: Administration and Enforcement

Section 1. Enforcement Officer

The code enforcement officer and/or building inspector of the Town are hereby designated, unless otherwise designated by the Town, as the officer(s) charged with the enforcement of this chapter and is hereinafter referred to as the enforcement officer.

The enforcement officer shall make periodic inspections of the Town to ensure that violations of this statute do not exist, and the requirements of this law are met. Any observed violations shall be noted and the property owner contacted for compliance.

The enforcement officer shall enter the premises of any private property with the consent of the owner or upon a proper court order, or may make an evaluation from any public way.

Section 2. Notice of violation; Issuance of Summons

Whenever the enforcement officer determines that there is a violation of any provision of this chapter, he shall give notice of such violation to the person, persons or entities responsible therefore under this chapter.

Such notice shall be in writing and shall include a concise statement of the reason for the issuance.

Such notice shall be deemed to be properly and sufficiently served if a copy thereof is sent by certified mail to the last known address of the person or entity upon which the same is served, as shown by the most recent tax lists of the municipality, or a copy thereof handed to such person or persons, or copy thereof left at the usual place or abode or office of such person or entities.

Notice shall be given as aforesaid within or without the municipality.

The notice shall also state that unless the violation is abated, removed, cured, prevented, or desisted from within thirty (30) days of the date of the service of such notice (exclusive of the date of service) a summons shall be issued for such violation

The enforcement officer may, at any time he issues the notice, extend the period for compliance with the violation stated in the notice for period in excess of the foresaid thirty (30) days if, in his judgment, the abatement, removal, prevention, cessation of or cure of the condition violated cannot reasonably be effected within the thirty (30) day period. In such cases, the enforcement officer shall state such reasonably required extended period in the notice, which shall then be applicable instead of the aforesaid thirty (30) days.

In the event that the violation is not abated, removed, cured, prevented or desisted from or successfully remedied within the thirty (30) day period or within such period as set forth in the notice pursuant to foregoing, a summons shall then be issue against the person, persons, or companies so notified.

Section 3. Penalties

A. Any person who shall violate any of the provisions of this local law shall be guilty of an offense and subject to a mandatory fine

- not to exceed one hundred dollars (\$100.00) for the first violation
- and two hundred and fifty dollars (\$250.00) for each offense after
- and up to fifteen (15) days in jail.

B. Every persons shall be deemed guilty of a separate offense for each day such violation, disobedience, omission, neglect or refusal shall continue.

Article 5: Severability

If any clause, sentence, paragraph, section or article of this local law shall be adjusted by any court of completive jurisdiction to be invalid, such judgment shall not affect, impair or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, section or article thereof directly involved in the controversy in which such judgment shall have been rendered.

Article 6: Effective Date

This law shall be effective upon filling with the Secretary of State

Appendix A

ENFORCEMENT OFFICER - Any person appointed by the Town Board to represent them in particular matters pertaining to this local law

JUNK - The outdoor storage or deposit of any, but not limited to, of the following shall constitute junk.

MOTOR VEHICLES - Two or more inoperative or unlicensed, uninsured, uninspected, motor vehicles, or the used parts or waste materials from motor vehicles which, taken together, equal in bulk two or more such vehicle, shall not be parked, kept or stored on any premises, except as provided for in statute or other regulations. No vehicle shall at any time be in a state of major disassembly, disrepair, or in the process of being stripped or dismantled. Painting of vehicles is prohibited unless contained inside an approved spray booth.

Exception: A vehicle of any type is permitted to undergo major overhaul, including body work, provided that such work is performed inside a structure or similarly enclosed area designed and approved for such purposes.

Exception: Vehicles regularly operated and used onsite in the day-to-day activities of a commercial and/or industrial premises shall not be construed as junk.

APPLIANCES - One or more abandoned or inoperable appliance including but not limited to any stove, washing machine, dryer, dish washer, refrigerators, freezers, television, computer equipment, hot water heaters, water purification units or other household device or equipment abandoned, junked, discarded, or wholly or partially dismantled, or otherwise left un-housed or otherwise left exposed to the elements, no longer intended or in the condition for ordinary use.

FURNITURE - One or more abandoned or irreparably damaged pieces of indoor or outdoor furniture including but not limited to sofas, lounge chairs, mattresses, bed frames, desk, tables, chairs, and chest of drawers

LAWN EQUIPMENT - One or more items of abandoned, discarded, or obviously unusable lawn or garden equipment.

RECREATIONAL VEHICLE - One or more boat, water craft, recreational equipment, four-wheeler, all-terrain vehicle, mini bike, snowmobile, not able to be used.

FIXTURES - One or more kitchen or bathroom fixtures, including but not limited to sinks, toilets, tubes, showers, faucets, counter tops.

MANUFACTURED HOME/MOBILE HOME - A structure, transportable in one or more sections, built on a permanent chassis and designed to be used as a dwelling unit, which

is currently not inhabited and is no longer habitable under the New York State Uniform Fire Protection and Building Code.

JUNK YARD - A commercial enterprise that recycles material and/or sells used parts of all sorts. Any junkyard will require a junkyard permit from the Town of Groveland. The junkyard enterprise must demonstrate the possession of all applicable town, county, state, and federal permits for this type of operation.

MOTOR VEHICLE - All vehicles propelled or drawn by power other than muscular power originally intended for use on public highways.

NUISANCE - Any public or private condition that would constitute a nuisance according to the statutes, laws and regulations of the State of New York or its governmental agencies or the ordinances or local laws of the Town.

Any physical condition existing in or the exterior of any premises, which is potentially dangerous, detrimental, or hazardous to the life, health or safety of persons on, near or passing within the proximity of the premises where such condition exist.

PERSONS - Any individual, firm, partnership, association, corporation, company, or organization of any kind.

RUBBISH - All discarded, useless, unusable, unused or worthless solid waste matter or materials, including but limited to garbage, trash, ashes, paper, paper goods and products, wrappings, cans, bottles, containers, yard clippings, garden waste, debris, junk, glass, boxes, crockery, wood, mineral matter, plastic, rubber, tires, leather, furniture, household goods, appliances, bedding, scrap metal, construction material. Inoperable machinery or parts thereof, garden equipment, and supplies, dead or rotting vegetation, abandoned, inoperative, or unusable automobiles and vehicles and solid commercial or industrial waste.

STORAGE AREA - The areas of any parcel of land or body of water used for the placement, storage or deposit of junk other than a commercial junkyard.

Appendix E12

Municipal Practices

Warren County Soil and Water Conservation District, Lake George Association Not all water resource protection has to occur under the local laws. The procedures and practices that municipalities follow as part of the regular activities, such as road and bridge maintenance and snow removal, can also help to improve water quality.

A great example of this is a program from the Adirondack region to stabilize roadside drainage ditches and swales as routine road maintenance is conducted. The Warren County Soil and Water Conservation District serves as project manager for the scheduling and use of a state-of-the-art, mobile hydro-seeding unit. This equipment is used to quickly establish a vegetative cover on soil surfaces, particularly those recently excavated, to reduce erosion. In its first year of operation, Soil and Water Conservation District staff spread over 2,000 pounds of seed on 25 sites. This initiative has been made possible by a \$40,000 grant from the New York State Environmental Protection Fund-Local Waterfront Revitalization Program. The hydro-seeding service is provided free of charge to all communities within the Lake George Watershed as part of the ongoing campaign to reduce non-point source pollution.

Another example of good municipal practices is the shared use of a mobile hydro-vacuum. Under the guidance of the Lake George Association, municipalities are encouraged to use a mobile hydro-vacuum unit to clean sediment catch basins throughout the watershed. Use of this equipment has been progressing rapidly, as municipalities incorporate it into their annual maintenance programs. The periodic cleaning of such facilities allows them to work more effectively to collect sediment that would otherwise enter the Lake. Purchase of this equipment was financed through a \$55,000 grant from the New York State Environmental Protection Fund-Local Waterfront Revitalization Program, with matching funds provided by the Lake George Association.

Appendix E13

Inter-municipal Agreement Model

The natural flow of water does not reflect or respect the political boundaries that humans have drawn on the landscape. Therefore, working cooperatively with the other municipalities in a given watershed is a crucial step towards meaningful action. Regardless of whether your community lies within a lake watershed, a stream or river watershed, or the direct drainage watershed to Lake Erie, Lake Ontario, or the Atlantic Ocean, there is opportunity for cooperation.

What follows is a model for setting up a formalized structure for inter-municipal cooperation.

Inter-municipal Agreement Model

Governments may form joint municipal survey committees to study and plan cooperative measures. Article 12-C of New York State General Municipal Law authorizes formation of joint survey committees for this purpose. Survey committees may be formed by any combination of two or more of the following: counties outside the City of New York, cities, towns, villages or school districts. The statute authorizes governments to make surveys and studies to aid the cooperative solution to local government problems.

Consideration of entering into a formal intergovernmental cooperative agreement:

- Economies of scale
- Convenience
- Unequal distribution of natural resources
- Surplus facilities
- Duplication of services
- Service Agreements vs Joint Agreements

Most cooperative agreements are entered into pursuant to Article 5-G of the General Municipal Law, which provides broad authority for the joint provision of any municipal facility, service, activity, project or undertaking, or the joint performance or exercise of any function or power which each municipal corporation has the power to perform or exercise by itself. However, several specific statutes may be utilized to enter such agreements in particular areas. Examples of these statutes are:

- Common water supply: General Municipal Law, Article 5-B
- Common drainage facilities: General Municipal Law, Article 5-F

Following are examples of introductory clauses, which set the stage for the more technical operative clauses of the agreement.

Parties

Agreement made (date), by and between the Town of, a municipal corporation	
WHEREAS, the Board of Trustees of the Village of	_ and the town boards of the
Towns of, all located in the Count	ty of, New York,
deem it in the best interest of the residents of the respective gov operation for use by and for their respective resid	3 3 1
This Agreement entered into this (date) between the Town of _	hereinafter
known as the Party of the First Part and the County of	hereinafter known as the
Party of the Second Part;	

An Agreement between the County of and certain municipalities located therein for the establishment of a cooperative means of conducting activities;
This Agreement made and entered into this (date) by and between the following municipalities, the Village of, the Village of referred to as Parties, all municipal corporations of the State of New York; reason for which the agreement is entered into or the problem which the agreement hopes to solve.
WHEREAS, the purpose of the Agreement to establish a legal mechanism through which the receive and disburse federal funds available to such urban counties under (federal statute) and to take such actions in cooperation with the participating
WHEREAS, the Town owns and maintains an incinerator and dump for the incineration, disposal and dumping of garbage and refuse; and (Whereas) the Village provides garbage and refuse means and place for the disposal of such waste; and (Whereas) the Town is willing to make available to the Village its incinerator and dump;
WHEREAS, there is no public swimming facility available for residents within the and the Town of hereinafter
Rationale
Often, other rationale appear to set forth the County may act as an urban county to apply for, municipalities herein as may be necessary to participate in such federal program; collection service for its residents and requires a geographic limits of the Town or Village;
WHEREAS, it has been determined that the proposed cost of creating, maintaining and operating a satisfactory disposal site and operation thereof would be too costly to be carried on by any one of the parties hereto;
WHEREAS, the Village maintains a Police Department, as a general Village expense to all residents of such Village; and (Whereas) the Town is desirous of obtaining certain police services for the benefit of residents of the Town, outside the Village;
WHEREAS, in order to promote the general welfare and provide for the public health by providing sewer treatment and collection services for residents and taxpayers at the least possible cost, according to professional engineering criteria;
WHEREAS, the City owns and operates a plant for the production and supply of water and is willing to sell surplus water to the Town, and (Whereas) the Town proposes to form a Water Improvement Area for the entire Town of consisting of facilities for water storage and a bulk water transmission system with a source from the City, and (Whereas) the Town proposes to sell said City water to the residents of and other users in the Town Water Improvement Area, and also to third parties outside the Town Water Improvement Area, and (Whereas) the City agrees to sell surplus water to the Town and the Town agrees to purchase

same;

Statutory authority

The contract's statutory source should be set forth to avoid confusion about the authority under which local governments are acting.

WHEREAS, pursuant to Article 5-G of the New York State General Municipal Law the Village and Town are authorized to enter into a Municipal Cooperation

WHEREAS, Section 135-a of the New York State Highway Law provides that a County or its Superintendent of Highways may contract with any Town for the removal of snow from roads or for sanding or removing the danger of snow and ice;

THIS AGREEMENT, for the furnishing of fire protection and emergency ambulance services to a fire protection district pursuant to the provisions of Section 184 of New York State Town Law and Sections 209

WHEREAS, the parties hereto have established a joint recreation commission pursuant to Section 244-d of New York State General Municipal Law.

WHEREAS, in a spirit of	f cooperation and pursuant to the provisi	ons of Section 256 of New
York State Education La	w, the residents of the Town of	shall have free access to the
City of Public l	Library and be entitled to all the privilege	es thereof; 1 to April 20 of each
year that this contract is	in Agreement with respect to police serv	ices; otherwise treating them for
the purpose of and 209-c	l of New York State General Municipal I	Law; parties hereto have
reached an agreement wi	hereby	

Service provided or jointly performed.

Planned services should be set forth as specifically as possible so that each of the parties is fully aware of its duties and responsibilities under the agreement.

The Town agrees to remove the snow from, apply sand and salt, or other material on, and where the (Highway) Superintendent deems it necessary, erect snow fences within the right-of-way of county roads during the period September effect.

The Town agrees to supply all labor, machinery, tools and equipment in the performance of the work under this contract.

The Village hereby agrees to and shall provide to the Town, emergency police services required by sudden, unexpected happenings or by unforeseen occurrences or conditions as defined herein.

The Village shall provide to the Town the services of a "juvenile officer" in the same manner and to the same extent that the services of said "juvenile officer" are available to the Village.

WHEREAS, all parties hereto have certain highway, non-highway and specialty equipment which is not always being used, and (Whereas) it is possible to make such equipment available for use by the other Parties, and (Whereas) such exchange of equipment may result in more effective work performance at minimal extra cost, and (Whereas) all parties will have authorized their respective highway, public works and/or fire alarm superintendents as the case may be, hereinafter referred to as the Superintendents, to act pursuant to this Agreement;

The Party of the Second Part shall, for a period of one year from January 1st, to December 31st, furnish and provide said fire district with fire protection, and shall be subject to call for attendance upon any fires occurring in said district and shall promptly respond and attend upon such fires and at such fires shall proceed diligently to the extinguishment of the same and the saving of life and property in connection therewith.

such fires and at such fires shall proceed diligently to the extinguishment of the same and the saving of life and property in connection therewith.
The Party of the Second Part shall provide general ambulance service for the Fire District for the purpose of transporting any sick, injured or disabled persons found within the area of the Fire District to a local hospital, and such sick, injured or disabled persons may be transported to any hospital, clinic, sanitarium or any other place within a radius of miles as measured in a straight line from the Fire House located at
The Village agrees to furnish water to the Town for said Water Districts and to pump into the existing reservoir or mains of the Town. In times draining of reservoir, the Village shall be permitted to draw water from the Town's reservoir.
The City agrees to supply the Town with filtered according to present or future requirements of the State Department of Health or any other governmental body having jurisdiction or control The Town agrees to install a transmission main located at, in the City of and the Town shall therefore install a master meter at or near a point where the Town shall construct
The County does hereby grant to the Town and Village the right, license, privilege and permission to maintain a landfill operation in and on a certain tract of land described herein with the right and ashes, and refuse, until said land is property filled, but in no event for a term of more than ten years.
The Parties of the Second Part will operate a joint landfill operation on the premises described herein, and each of said municipalities shall be jointly and severally responsible for the proper conduct and operation of such landfill.

Financial arrangements.

Financial duties and obligations should be set forth specifically in all intergovernmental agreements.

The Town and Village agree to jointly purchase the	school property owned by the
Central School District for the sum of \$	·

The formula for allocating the costs of said capital acquisition shall be on an equal fifty percent basis; the levying of taxes or assessments to pay such costs and whether said cost shall be borne by the entire area of the respective municipality or on a part thereof which is to benefit shall be determined upon the adoption of any appropriate resolution.

The Town of will annually contribute the sum of \$ to said program.
The Village of will annually contribute the sum of \$ to said program.
The Village Treasurer of the Village of will be the custodian of the funds for said program and provide annually an account of said fund to each of the parties.

It is estimated that it will cost approximately \$15,000 to prepare and operate the pool for the 20__ season. The parties agree to equally share all costs of preparation, operation, maintenance and staffing and for that purpose shall appropriate the monies necessary therefor, which shall be expended in accordance with the estimated budget annexed hereto as Exhibit A. Any additional monies necessary to properly operate, maintain and staff the pool shall be paid only upon the consent and agreement of both municipalities.

The Town agrees to keep, during the period of this contract, an itemized record of daily operations, on a form to be provided by the Superintendent of Highways, and to submit such completed form together with a certified voucher noting the cost of labor, machinery, tools and equipment herein to the Superintendent between April 20 and July 1 of each year that this contract is in effect. It is understood by the Town that no payment will be made pursuant to this contract until said form and voucher are approved by the Superintendent. It is further made for those costs which are determined by the Superintendent to be within the intent and scope of this contract.

The cost of the sanitary landfill shall be allocated among the several governmental units herein as follows:

Each unit shall pay its share based on the population of the unit, as such population shall be a
percentage of the total population of the area be used to compute such figures. Each sick or
injured person found within its boundaries and transported by the Village basic charge of
dollars plus dollars for each mile traveled, measured from the point of pickup
of the sick or injured person to the point of destination; (2) for each person destination outside
the Village a basic charge of dollars plus dollars for each mile traveled
measured from the point of pickup to a point of destination; (3) a sum equal to the charge set
forth in (1) above, if the ambulance is called to the Town but the patient either refuses to be
transported or cannot be found; (4) for each resident of the Town transported from the
Hospital or other medical or nursing facility within the Village to a destination outside the
Village a basic charge of dollars and from the point of pickup to the point of destination
and if to a destination inside the Village a basic charge of dollars and dollars
each mile traveled measured from the point of pickup to the point of destination.

Local costs of annual operation and maintenance of said Sewage Treatment Plant shall

be shared by the parties hereto in proportion to the annual sewage flow contributed by each. Sewage understood by the Town that payment will only be covered, and the 20__ Federal Census shall -- The Town agrees to pay the Village: (1) for ambulance to a destination inside the Village a transported by the Village ambulance to a ____ dollars for each mile traveled, measured flow shall be monitored at appropriate points for the purpose of determining the gallonage contributed by the Village and by the Town. The annual share of operation and maintenance expenses to be contributed by the Town shall be computed on the basis of flow contributed by each party during the Village's fiscal year, or any fraction thereof.

The parties hereto further agree that the Town shall annually reimburse the Village for a portion of the Village's capital costs of said Sewage Treatment Plant, which annual reimbursement shall be based upon the following formula:

Village's Capital Costs (Local Share) x Percent of Flow Contributed by Town

=

Annual Reimbursement by Town Estimated Useful Life of Sewage Treatment Plant

Indemnification.

Finally, the agreement should spell out provisions for insurance or for the indemnification of one or more of the parties.

The Village hereby agrees to save the Town harmless from any claim or cause of action which may arise out of this Agreement and the Town in like manner agrees to hold the Village harmless.

When the School District grants permission to the Town to use facilities of the School District, the Town will notify its insurance carrier or carriers that the School District is to be named as an additional insured on its liability policy or policies for the duration of the swimming, athletic, or educational program.

The Party of the Second Part agrees to provide and carry adequate insurance approved by the Party of the First Part, protecting and indemnifying the Town fire protection district from any and all liability or claims for injury or damage to third persons or property as a result of actions of the fire company or its members. The cost of providing insurance for fire fighter benefits payable under Section 205 of New York State General Municipal Law or any amendments thereto or substitute therefor shall be assessed to said fire protection district.

Party of the First Part covenants and agrees that it will obtain and maintain in full force and effect throughout the term of this agreement, or any extension thereof, insurance providing benefits State of New York for the benefit of the Party of the Second Part, or in the alternative, Party of the First Part will by virtue of participation in a county plan, or otherwise, cause to be obtained and maintained in full force and effect throughout under the Workers' Compensation

Law of the term of this agreement, or any extension thereof, insurance providing benefits under the Workers' Compensation Law of the State of New York for the benefit of the Party of the Second Part.

Each Party shall carry liability insurance covering its own equipment, including the operator. Such insurance shall protect both the owner of the equipment and the Party receiving or accepting service from any liability in the event of any claim arising during any exchange pursuant to this Agreement.

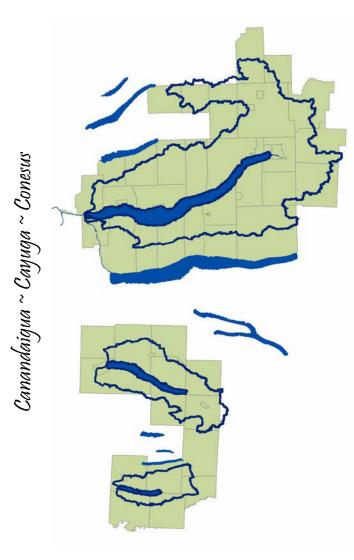
The Village of _____ shall save and hold harmless the County of _____ and shall assume all risk and liability for such signs, signals and markings installed by the County and for the use and operation thereof and for damage for injuries or death to persons or property however arising therefrom or because thereof, excepting the active negligence of the County.

Appendix F

Municipal Nonpoint Assessment Form

Genesee/Finger Lakes Regional Planning Council

Local Laws to Protect Finger Lakes Water Quality



Municipal Nonpoint Assessment Form

Introduction

This assessment form has been developed by the New York State Department of State and Genesee/Finger Lakes Regional Planning Council in order to gain a thorough understanding of existing local laws, ordinances, and practices that impact water resources in the Finger Lakes. Please take a moment to review the form. The form is divided into six sections based on subject area. Some of the sections are, in urn, organized into parts. See the Table of Contents on the following page for more detail. There is a three column format throughout the entire form. Column 1 describes an action or practice that is known and understood any practices that implements the action described in Column 1. Column 3 is to be filled in based on the level of implementation indicated in Column 2. Column 3 can be filled in simply by indicating the number (2, 1, 0, or n/a) that corresponds to the level of to promote good water quality. Column 2 is to be filled in based on whether a municipality enforces any local laws, or performs mplementation described below:

- codified in municipal code; b) included in internal operating procedure guidelines or manuals; c) included in specification manu-2 - Fully: The municipality implements the practice or its equivalent across the entire area of the municipality. The practice is a) als, or d) is part of a special municipal initiative.
- he practice or its equivalent. The practice is a) routinely followed but not codified in municipal code; or b) routinely followed but 1 - Partially: The municipality implements the practice or its equivalent in a specific area of the municipality or implements part of not included in written internal operating procedure guidelines or manuals which may or may not include specifications.
- 0 Not at all: The municipality does not implement the practice or its equivalent.

Not applicable: (n/a) The practice does not appear to be relevant to the municipality.

The following charts contain many possible practices. Not every practice needs to be implemented to ensure the control of nonpoint source pollution. Note: Where the practice is under the jurisdiction of and fully or partially implemented by another entity such as the federal or State government, the County Department of Health or a special sewer district, please indicate this.

Section 1 - DevelopmentPart A - Existing Development

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
1-01	Identify retrofit opportunities		
1-02	Identify habitat and natural conveyance system restoration opportunities		
1-03	Establish retention/detention areas		
1-04	Acquire additional land for locating treatment facilities		
1-05	Encourage homeowners to place cornpost piles away from waterbodies and roadways		
1-06	Encourage proper use and disposal of lawn and other household chemicals		
1-07	Institute turf management practices on golf courses and parks and recreation areas		
1-08	Undertake storm drain stenciling		
1-09	Encourage volunteer programs, such as adopt-a-highways and adopt-a-stream, etc.		
1-10	Include high percentage of indigenous plants in new landscaping on privately-owned properties (excluding arboretums, horticultural gardens, and sites requiring turt grasses)		
1-11	Encourage water conservation		
1-12	Develop outreach programs targeted at specific problems related to water quality management & resource conservation		
1-13	Encourage proper control of pet wastes		
1-14	Encourage continued operation of private storm water runoff control structures		
1-15	Discourage feeding of waterfowl		
1-16	Discourage the introduction of exotic aquatic species (Eurasion water milfoil, zebra mussels, water chestnut, etc		

Section 1 - Development

Part A continued - Existing Development

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc.)	Degree of Implementation
-17	Encourage continuted (periodic) operation and maintenance of private septic disposal systems		
-18	Effective and consistent application and enforcement of stormwater regulations & requirements		
-19	Require certification of existing on site septic systems for property transfers or builing expansions.		
-20	Require entire property (existing as well as proposed) to be included in stormwater analysis/calculation.		

Section 1 - Development

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	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc.)	of entation
-21	Minimize the amount of land disturbed and the duration of disturbance		
-22	Preserve natural features and conform substantially with the natural boundaries and alignment of waterbodies		
-23	Retain and protect trees and other natural vegetation on and near disturbed sites		
-24	Account for topography and soil type in efforts to minimize erosion potential		
-25	Maintain runoff rates similar to pre-construction levels		
-26	Minimize the creation of impervious areas		
-27	Control increased runoff caused by changed surface conditions to minimize the danger of flooding, erosion, sedimentation and pollutants entering waterbodies prior to, during and affer construction		
-28	Use temporary vegetation and mulching to protect exposed and critical areas during development		
-29	Redistribute topsoil within the boundaries of the disturbed land for seeding and planting		
-30	Stabilize disturbed soils as soon as possible		
-31	Minimize the use of cut and fill operations. Conform such operations to topography and soils to minimize erosion potential and adequately accommodate runoff		

Section 1 - DevelopmentPart B continued - New Development and Substantial Redevelopment

	Best Management Practices (BMP)	Existing Means of Implementation Deg (law, regulation, practice, etc) Imp	Degree of Implementation
1-32	Use appropriate solid and hazardous waste generation and disposal practices including source controls and recycling		
1-33	Encourage construction site management techniques which include the proper handling and disposal of pesticides and petroleum products and containers		
1-34	Ensure proper operation and maintenance of runoff management facilities		
1-35	Target training for contractors, inspectors and zoning and planning officials.		
1-36	Require tree surveys and/or cutting plans.		
1-37	Develop priority list for BMP's - use of vegetative low areas for retention/infiltration.		
1-38	Encourage cluster development.		
1-39	Require connection to and/or extension of existing water & sewer if project is within 500 feet of existing infrastructure		
1-40	Enact limits on driveway grades.		
1-41	For redevelopment, employ regulations that provide for technologically advanced (on and off) site wastewater treatment systems to optimize effeciencies and address "challenging" sites		
1-42	Implement Federal/State Stomwater (SPDES) Phase II requirements		

Section 2 - Forestry and AgriculturePart A - Forestry

		-	
	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc.)	Degree of Implementation
2-01	Consider potential water quality impacts when selecting silviculture system (yarding system, site preparation, pesticides employment, etc.)		
2-02	Consider harvesting practices		
2-03	Seasonal preference for logging operations		
2-04	Have specialists (geologist, soil scientist, geotechnical engineer, wildland hydrologist) review plans in high erosion hazard areas		
2-05	Preplan harvest areas, skid trails, and access so as to be on stable soils, avoiding steep gradients, multiple stream arossings, poor drainage areas, etc.		
2-06	Limit grades of access roads.		
2-07	Require stabilization of roads/drives to forestry site.		
2-08	Employ natural topography and contour for design of road network		
2-09	Require stormwater controls for increased runoff from ground cover modification		
2-10	Consider site restoration		

Section 2 - Forestry and Agriculture

Part B - Agriculture

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc.)	Degree of Implementation
2-11	Use Agricultural Environmental Management (AEM)		
2-12	Require farms seeking agricultural value assessment to participate in AEM		

Section 3 - Waterways and Wetlands

Part A - Modified Waterways

	Best Management Practices (BMP)	Existing Means of Implementation (Iaw, regulation, practice, etc.)	Degree of Implementation
-	Develop an operation and maintenance program for existing modified streams that indudes identification of opportunities and actions to restore habitat and the physical and chemical characteristics of these streams.		
-02	Improve stream quality by controlling instream sedimentation and selectively clearing debris		
-03	Establish or reestablish riparian buffers		
-04 -04	Prevent animal wastes from entering waterbodies		
-05	Attempt vegetative stablization before undertaking structural measures		
90-	Design and construct share erosion control facilities, in accordance with an erosion and sedimentation control plan, in areas where marsh creation and soil bioengineering are ineffective or where existing protection methods are being flanked or are falling		
-07	Schedule the periodic maintenance of sedimant control measures, and inspect and repair them as needed in conformance with established schedule.		

Section 3 - Waterways and WetlandsPart A continued - Modified Waterways

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
3-08	Protect streambanks through direct nonstructural means, such as new vegetation or protection of existing vegetation; direct structural means, such as revetments and bulkheads; indirect nonstructural means, such as regulating inigation near streambanks or rerouting overbank drainage; or indirect structural means, such as deflecting channel flow away from streambanks with dikes, board fences and gabions		
3-09	Use setbacks to minimize disturbance of land adjacent to streambanks and shorelines		
3-10	Prevent discharges to waterbodies in amounts that would adversely affect the taste, color or odor of the waters, or would impair the waters for their best usages		

Section 3 - Waterways and Wetlands

Part B - Wetlands and Riparian Area Management and Restoration

	Best Management Practices (BMP)	Existing Means of Implementation De (law, regulation, practice, etc.)	Degree of Implementation
3-11 po sc	Consider wetlands and riparian areas and their non point source (nps) control potential on a watershed scale		
	Identify existing functions of those wetland and riparian areas with significant nps control potential when implementing nps management practices. Do not alter wetlands or riparian areas to improve their water quality at the expense of their other functions		
S-13 no	Conduct permitting, licensing, certification and nonregulatory nps pollution activities in a manner that protects wetland functions		
3-14 SF	Special zoning considerations to protect wetland areas		
10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	Use appropriate pretreatment practices such as vegetated systems or detention or retention basins to prevent adverse impacts to wetland functions that affect nps pollution abatement from hydrologic changes, sedimentation, or contaminants		
3-16 A	All projects should require wetlands cerfitication.		

Section 4 - Marinas

Part A - Existing Marinas

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
4-01	Clean maintenance areas regularly preferably by vacuuming to remove trash, sandings, paint chips, etc.		
4-02	Prevent residue from being carried into surface waters by performing abrasive blasting within plastic tarp enclosures on windless days ar within spray booths.		
4-03	Provide proper disposal/recycling facilities to marina patrons, preferably covered receptades		
4-04	Establish fish cleaning areas, and implement rules governing the conduct of fish cleaning operations		
4-05	Educate boaters on the importance of proper fish deaning practices		
4-06	Implement fish composting where appropriate		
4-07	Store materials in areas impervious to the type of material stored. Build curbs, berms, or other barriers around the areas to contain spills		
4-08	Use separate, clearly labeled containers for the disposal of oil, gasoline, antifreeze, clesel, kerosene, and mineral spirits		
4-09	Target outreach programs about proper disposal at marina patrons through the use of signs, mailings, and other means		
4-10	Promote the use in bilges of oil-absorbing materials, and replace them as necessary, preferably recycling, or disposing of them in accardance with petroleum disposal regulation		
4-11	Use a container under the air vent while refueling inboard tanks if the tank vents are not equipped with a fuel/air separator		
4-12	Prohibit in-water hull saraping or any underwater process to remove paint from boat hulls		

Section 4 - MarinasPart A continued - Existing Marinas

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
4-13	Wash the boat hull above the waterline by hand, using only necessary amounts of detergents and cleaning compounds that are phosphate-free and biodegradable		
4-14	Prohibit the use of detergents and cleaning compounds containing ammonia, sodium hypochloride, chlorinated solvents, petroleum distillates, alcohol, or lye		
4-15	Educate individuals about the importance of trash reduction and recycling through: interpretive and instructional signs placed at marinas and boat-launching sites, pamphlets or flyers, newsletters, inserts in billings, meetings and presentations, workshops, and certification programs		
4-16	Inspect pumpout facilities regularly, and repair them, if practical, under a maintenance contract with a competent contractor		
4-17	Add language to slip lease agreements mandating the use of pumpout facilities and specifying penalties for failure to comply		
4-18	Place dye tablets in holding tanks to identify and discourage illegal disposal		
4-19	Prohibit motorized vessels from areas (define areas) that contain important shallow-water habitats		
4-20	Establish and enfarce no-wake zones to decrease turbidity and reduce erosion potential from boat wakes		

Section 4 - MarinasPart B - New Marinas

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
4-21	Design and site marinas to maximize exchange of marina basin water. Limit basins and channels with square corners that tend to trap flotsam, and place dock structures in a manner that promotes circulation		
4-22	Perform a preconstruction assessment, which includes a water quality monitoring and modeling methodology, to predict post construction water quality conditions		
4-23	Monitor water quality during construction to protect ambient water quality to the maximum practicable extent		
4-24	Develop a marina siting policy to discourge development in areas containing important habitat designated by local, State, or federal agencies		
4-25	Conduct surveys and employ rapid bioassessment techniques to assess historic habitat function (e.g. spawning, nursery, and migration pathways) and potential impacts to these and other biological functions and resources		
4-26	Encourage the redevelopment or expansion of existing marina facilities that have demonstrated minimal environmental impacts instead of developing new marina facilities		
4-27	Consider alternative sites with minimal potential environmental impacts when the use of previously disturbed sites is not feasible		
4-28	Minimize disturbance of indigenous vegetation in the riparian area		
4-29	Use soil bioengineering or plants, wherever conditions allow, to restore damaged habitat along shorelines and streambanks		

Section 4 - MarinasPart B continued - New Marinas

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
4-30	Use properly designed and constructed engineering practices that minimize shoreline disturbance in areas where soil bioengineering and plants are ineffective		
4-31	Use appropriate share erasion control methods, such as returns or return walls, in areas where existing protection methods are being flanked or are falling		
4-32	Plan and design all steambank, shoreline, and navigation structures so that they do not transfer erosion energy to or otherwise cause visible loss of surrounding streambanks or shorelines		
4-33	Locate and design fuel stations so that spills can be contained in a limited area		
4-34	Design and install underground fuel storage tanks according to State regulations, including the provision of detection systems and automatic fuel tank and pump leak shut-offs		
4-35	Provide aboveground fuel tanks and fueling areas with a curbed or diked storage area to handle containment volumes meeting State (and local) codes and inspect regularly		
4-36	Use preferred pumpout systems: fixed-point, portable, dedicated slipside, and pumpout boats		
4-37	Design onsite wastewater treatment systems to specifically handle waste from vessels		
4-38	Post pumpout facility location and regulations at the marina. Charge fees that encourage rather than discourage facility use. Consider offsetting the cost of maintaining pumpout facilities by fuel sales where these facilities are conveniently located in dose proximity to one another		

Section 4 - Marinas

Part C - All Marinas (existing and new)

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
4-39	Restrict boat repair and maintenance activities to clearly marked designated areas to prevent debris from falling into the water and preventing invasive species		
4-40	Secure all fueling facilities and storage areas with appropraite shut-off devices and security locks and inspect regularly		
4-4]	Design fueling stations with spill containment equipment that is stored in a clearly marked location, accessible to work and storage areas. Post emergency phone numbers in a prominent location		
4-42	Design a spill contingency plan		
4-43	Inspect and maintain all containment berms or devices in accordance with State regulations. Investigate immediately signs of leakage or spillage, and undertake cleanup in accordance with applicable best management practices		
4-44	Have a trained operator present and prepared to respond to accidental spills		
4-45	Maintain daily inventory records to identify abnormal loss or gain of liquid		
4-46	Prohibit the cleaning of hoses, fittings, pumps, and other accessory equipment on piers, docks or adjacent upland to prevent runoff into the marina basin or other surface or groundwater		
4-47	Create and/or maintain a dedicated fund for maintenance in the case of government-owned facilities		
4-48	Restrict the operation of pumpout facilities to trained marina personnel only		

Section 5 - Roads and BridgesPart A - Existing Roads and Bridges

		Existing Means of Implementation	Deciree of
	Best Management Practices (BMP)		Implementation
5-01	Conduct road and bridge maintenance (deicing material usage and starage, pot-hale repair, bridge washing, scraping and painting, etc) according to best management practices		
5-02	Conduct right-of-way activities (mowing, brush removal, pesticide and fertilizer use, etc.) - according to best management practices		
5-03	Include high percentage of indigenous plants in new landscaping on public-owned properties (excluding arbaretums, harticultural gardens, and site requiring turf grasses)		
5-04	Implement a regular inspection and maintenance plan of existing structures		
5-05	Develop and identify erosion/sediment control areas (examples include steep slopes, easily erodible soils, and nearby sensitive areas) and retrofit opportunities		
90-9	Require percentage of roads to be tested with non-ice and non-sand deicing.		

Section 5 - Roads and BridgesPart B - New Roads and Bridges

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
2-07	Minimize the amount of land disturbed and the duration of disturbance		
5-08	Preserve natural features and conform substantially with the natural boundaries and alignment of waterbodies		
2-09	Retain and protect trees and other natural vegetation on and near disturbed sites		
5-10	Retain additional runoff sites		
5-11	Minimize the creation of impervious areas		
5-12	Treat increased runoff caused by changed surface conditions to minimize the danger of flooding, erosion and pollutants entering waterbodies prior to, during and after construction		
5-13	Use temporary vegetation and mulching to protect exposed and critical areas during development		
5-14	Redistribute topsoil within the boundaries of the disturbed land for seeding and planting		
5-15	Stabilize disturbed sails as soon as possible		
5-16	Minimize the use of cut and fill operations. Conform such operations to topography and soils to minimize erosion potential and adequately accommodate runoff		
5-17	Control erosion and sedimentation prior to, during and after site preparation and construction		
5-18	Require long term stormwater management plan.		
5-19	Require long term sedimentation control & maintenance.		

Section 5 - Roads and BridgesPart C - All Roads and Bridges (existing and new)

	Best Management Practices (BMP)	Existing Means of Implementation Degree of (law, regulation, practice, etc.)	Degree of Implementation
-20	Target existing public haldings, such as parks, for removing unecessary impervious surfaces		
-21	Incorporate New York State Department of Transportation design and guidance documents, standard specifications, and procedural manuals (Highway Design Manual, Environmental Procedures Manual, Maintenance Guidelines, etc.) into local laws and operating procedures		
-23	Ersure application of appropriate solid and hazardous waste generation and disposal practices including source controls and recycling		
-23	Ersure proper operation and maintenance of runoff management facilities		
-24	Participate in Carnell Local Roads Program activities and training		
-25	Target training programs at highway officials, contractors, construction workers, inspectors, zoning and planning officials		
-28	Target training and outreach programs about the proper handling of materials, leakage and spill prevention and spill response procedures at maintenance staff and workers		

Section 6 - Onsite Wastewater Treatment Systems

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
6-01	Conduct regular inspections of OWIS at a frequency adequate to determine failure and undertake required maintenance		
6-02	Institute setback guidelines		
6-03	Promulgate plumbing codes that require practices that are compatible with OWIS		
6-04	Target outreach programs at homeowners, contractors and developers		
9-02	Inspection of all OWTS at property transfer or within 1 year prior to transfer		
90-9	Require all properties within 500' of municipal service to connect.		
20-9	Set goals for effluent limits (nitrogen, phosphorous, BOD, etc)		

Glossary

Agriculture Environmental Management (AEM): A voluntary, multi-agency New York State program that provides farm operators with assistance in protecting land and water resources and sustaining their agricultural markets. Usually administered through the county Soil and Water Conservation Districts

Berm: A linear mound or series of mounds of earth, planted with, and maintained as, grass

sest Management Practice (BMP): (1) A measure that is implemented to protect water quality and reduce the potential for pollution associated with stormwater runoff. (2) Any program, technology, process, siting criteria, operating method, measure, or device that controls, prevents, removes, or reduces pollution. Cluster Development: A subdivision where houses are sited on smaller parcels of land, while the additional land that would have been allocated to individual lots is

Cut and Fill: When the terrain is not flat, it may be necessary to level spots for a proposed road. This is done by taking soil (cut) from high areas and placing it (fill) in the ow areas. Cuts and fills should be balanced to minimize the need for extra material and to maximize roadbed stability.

g Generally **Detention Area/Pond/Basin:** A low-lying area that is designed to temporarily hold a set amount of water while slowly draining it into another location. signed for purposes of flood control when large amounts of rain could cause flash flooding if allowed to flow unrestrained

Gabion: Steel wire-mesh basket to hold stones or crushed rock to protect a stream bank or bottom from erosion

mpervious/Impermeable Areas: Areas where the infiltration of water or other liquids (gasoline, oil, antifreeze, etc.) into the ground is difficult or impossible, contributng to increased runoff, especially of rain or melting snow (Examples include streets, sidewalks, paved driveways and parking lots, roofs, etc.)

ment, and deposits them into water bodies. (By contrast, "Point Source Water Pollution" is generally discharged from an outflow or pipe that should be reviewed and permitted by the New York State Department of Environmental Conservation. Point Source Pollution is typically thought of as "traditional" sources of pollution such as moves, it picks up pollutants such as residential and agricultural chemicals, petroleum residue and de-icing materials from roads and parking lots, and dust and sedi-Non-point Source Water Pollution: Pollution coming from many diffuse sources; caused by rainfall or snowmelt moving over and through the ground. As the runoff ndustrial waste and sewage). Retention Area/Pond/Basin: Area intended to capture diverted stormwater runoff from streets and gutters and hold the runoff indefinitely. Secondary benefits include pollutant removal through settling and biological uptake as well as habitat creation for various types of organisms

Return/Return Wall: A facing, usually made of stone or concrete, installed to protect an eroding shoreline from the force of water (see also revetment)

Revetment: Sloping surface of stone, concrete or other material used to protect an embankment, natural coast or shoreline against erosion (see also return wall)

Riparian Buffer: Zone of vegetation along a river or stream that works to trap and filter pollutants and stabilize bank sediments

silviculture: The science, art, and practice of caring for forests with respect to human objectives

soil Bio-engineering: Techniques used to stabilize land by using live plant materials to provide erosion control, slope and stream bank stabilization, landscape restoraiion, and wildlife habitat. Used alone or in conjunction with conventional engineering techniques

Wing Wall attached to the headwall of a culvert, set at an angle with the centerline, which prevents earth from spilling into a channel and improves hydraulic

farding system: A method of log transport that allows for the harvesting of timber in an environmentally sound manner. A tractor with a mounted tower and winches moves through forests to preplanned locations, while a "yarding" cable is run down to an anchor tree. There are no wide landing areas to bulldoze and no excessive ground disturbances. Narrow skid trails replace the high disturbance skid roads of the past

Appendix

There are a total of 56 municipalities in the three watersheds participating in this project. Municipalities with less than three square miles and six percent of their land area in the watershed where not included.

Name	Туре	County	Total Land Area* (sq. miles)	Percent of municipality in watershed*
Aurelius	Town	Cayuga	29.8081	57.53%
Aurora	Village	Cayuga	0.8937	100.00%
Caroline	Town	Tompkins	53.9978	37.06%
Cayuga	Village	Cayuga	0.9165	91.03%
Cayuga Heights	Village	Tompkins	1.7353	100.00%
Covert	Town	Seneca	30.8318	100.00%
Danby	Town	Tompkins	52.7825	52.52%
Dryden	Town	Tompkins	92.3265	91.24%
Dryden	Village	Tompkins	1.6391	100.00%
Enfield	Town	Tompkins	36.1198	93.49%
Fayette	Town	Seneca	53.9786	20.79%
Fleming	Town	Cayuga	21.4174	23.43%
Freeville	Village	Tompkins	1.0671	%26.66
Genoa	Town	Cayuga	38.9210	89.00%
Groton	Town	Tompkins	48.5212	42.56%
Harford	Town	Cortland	23.7324	20.95%
Hector	Town	Schuyler	100.6269	43.55%
Interlaken	Village	Seneca	0.2600	100.00%
Ithaca	City	Tompkins	5.3923	100.00%
Ithaca	Town	Tompkins	28.6521	100.00%
Lansing	Town	Tompkins	59.5913	97.15%
Lansing	Village	Tompkins	4.4412	%68'66
Ledyard	Town	Cayuga	35.5841	100.00%
Lodi	Town	Seneca	33.6140	25.84%
Newfield	Town	Tompkins	57.8111	54.07%
Ovid	Town	Seneca	30.3367	%62'09
Romulus	Town	Seneca	37.1454	46.86%
Scipio	Town	Cayuga	35.8666	62.37%
Sempronius	Town	Cayuga	28.8346	12.52%
Seneca Falls	Town	Seneca	23.8686	15.05%
Springport	Town	Cayuga	21.1793	100.00%
Summerhill	Town	Cayuga	25.5393	80.28%
Trumansburg	Village	Tompkins	1.1971	100.00%
Ulysses	Town	Tompkins	32.4275	100.00%
Union Springs	Village	Cayuga	1.7625	100.00%
Varick	Town	Seneca	31.6412	45.79%
Venice	Town	Cayuga	40.3210	80.13%
Virgil	Town	Cortland	46.4564	39.61%

Cayuga Lake Watershed 38 Municipalities

Percent of municipality

Total Land Area*

County

Type

Name

(sq. miles)

in watershed*

59.82% 8.50% 42.13% 92.26%

47.9622

Ontario Ontario

Ontario

Ontario

4.5919

55.8367

35.0181

39.3509

Yates

52.66%

80.34%

38.9163

30.3481

100.00%

13.36%

36.5187

0.5707

Ontario/Yates

Village

Town

South Bristol

Rushville

1 Municipalities

Ontario

Ontario

Yates

Ontario

Village Town Town Town Town Town Town Town Ċ Sanandaigua Canandaigua **Middlesex** Hopewell Sorham daples daples Potter <u>†</u> Canandaigua Lake Watershed

Name	Туре	County	Total Land Area* (sq. miles)	Percent of municipality in watershed*
Conesus	Town	Livingston	32.2880	77.50%
Geneseo	Town	Livingston	43.2119	20.95%
Groveland	Town	Livingston	38.4710	19.91%
Livonia	Town	Livingston	37.5753	30.59%
Livonia	Village	Livingston	1.0019	65.91%
Sparta	Town	Livingston	27.2970	25.61%
Springwater	Town	Livinaston	52.1658	7.45%

Conesus Lake Watershed 7 Municipalities

About Genesee/Finger Lakes Regional Planning Council

unit under New York State's General Municipal Law. It provides planning, economic development, and data services Genesee/Finger Lakes Regional Planning Council (G/FLRPC) was established as a special purpose local government for its nine member counties: Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming and Yates.

Contact:

Genesee/Finger Lakes Regional Planning Council 50 West Main Street, Suite 8107 Rochester, New York 14614 General Website: www.gfirpc.org Project Website: www.gfirpc.org/LLPFLWQ/index.htm

Jason Haremza, Senior Planner and Local Laws Project Coordinator 585-454-0190 x15, jharemza@gflrpc.org

Brian Slack, Planner 585-454-0190 x21, bslack@gflrpc.org Municipal Nonpoint Assessment Form, Page 21 of 21 Local Laws Project, Genesee/Finger Lakes Regional Planning Council Assessment Form Version 1 - 2/6/2004

Appendix G

Local Law Review Chart

	Water Related Issue	Why address at the local level? (benefits)	How to address It? (practices)	How to implement? (models)
	1 Agricultural Practices	Ag can have significant impacts on water quality; while many ag issues are regulated at the State level (Ag & Mkts, DEC), local knowledge and support of good ag practices can greatly assist water quality efforts	Agricultural Districts, Right to Farm Laws, Agriculture , Environmental Management (AEM) I, Conservation Reserve Enrollment Program (CREP), Conservation Plan, Ag Preservation Plan (stand alone or part of Comprehensive Plan)	AEM II-VIII, Buffer Strips, Environmental Quality Incentive Program (EQIP)
	2 Boating/Marinas	Boating can have significant impacts on water quality; Adoption and rigorous enforcement of a some boating infrastructure (launches, marinas) and moorings L undergo local permitting processes	MD.	Dockings and Moorings model (Canandaigua Lake) (note: special state legislation may be required; G/FLRPC is currently researching this issue)
•	3 Erosion and Sediment Control	3 Erosion and Sediment Activities that are regulated by the municipality, such as construction of roads or buildings, can create significant erosion and sedimentation issues	Adoption and rigorous enforcement of Sediment and Erosion and Sediment Control model law Erosion Control Law	Erosion and Sediment Control model law
	H	Substantial filling and grading not associated with landscaping can create significant erosion and sedimentation issues	Adoption and rigorous enforcement of Sediment and Erosion and Sediment Control model law Erosion Control Law	Erosion and Sediment Control model law
	5 Flood Prevention	Required by NYS Environmental Law; allows participation in National Flood Insurance Program (NFIP); benefits property owners	Adoption and rigorous enforcement of Flood Prevention Ordinance (FPO)	Flood Prevention Ordinance model (DEC)
	6 Flood Plain Management	Improves public safety and property protection. Increases participation in NFP and Community Rating System. Property owners receive lower Flood Insurance Premiums	Most municipalities have their floodplains mapped. Most municipalities do not have a detailed base flood is elevation mapped. Therefore, all communities should to be mapped so that there is a defined base flood elevation (A Zone). If there is no defined base flood selevation an engineer should be used, along with design standards for siting of every new development in the floodplain.	Municipality should designate and publicize a Flood Plain Administrator (as required by the FPO). The Flood Plain Administrator should attend training sessions provided by NYSDEC, FEMA, and other agencies.
	7 Forest Management	Municipalities can and do regulate timber harvesting since it, like any land disturbance, can create water quality problems.	There are several ways to address this issue, from property owner education, to registration of large timber harvests, to enforcement of existing public highway laws. There is also the possibility of adopting a well thought out Timber Harvesting Law	Timber Harvesting model law (Canandaigua Lake); enforcement of existing public highway laws; education and outreach through County Soil and Water Conservation Districts and/or Comell Cooperative Extensions

	Water Related Issue	Why address at the local level? (benefits)	How to address it? (practices)	How to implement? (models)
ω	8 Impervious Surfaces	Impervious surfaces such as roofs and parking lots allow stomwater to run off much more quickly and without the benefit of filtering impurities through vegetation and soil. Watersheds can begin to degrade with as little as 10% impervious cover. Impervious surfaces are regulated by the municipality when it promulgates zoning ordinances and issues building permits.	Adoption of appropriate language in zoning regulations and subsequent enforcement through Zoning Officer and Site Plan Review. There is also the possibility of adopting a Water Protection Overlay district, which covers all zoning areas but more strictly regulates activities near streams and lakes.	Zoning language models; Water Protection Overlay model (Skaneateles)
٥	9 Intermunicipal Cooperation	Promotes dialogue, cooperation and sharing of services among municipalities on an issue (water resources) that are multi-jurisdictional in nature (watershed-wide). See NYSDOS guidebook - Intergovernmental Cooperation	Article 12-C of the General Municipal Law authorizes formation of joint survey committees for this purpose	Intermunicipal Agreement (IA), several models available
01	10 Junkyards	In addition to aesthetic reasons, junkyards can have significant impacts on water quality; junkyards undergo will not impact water quality as much as other areas. local permitting processes; Abandoned vehicles and appliances might leak oil or other hazardous and toxic appliances, might leak oil or other hazardous and toxic appliances, household waste, or uninhabitable liquids waste will eventually reach the groundwater aspects of junk not covered by state law and to ensure greater compatibility with surrounding landuses.	Revising zoning to limit junk yards to certain areas that Model zoning language will not impact water quality as much as other areas. A municipality may (and should) expand the state definition of "junk" to encompass such things as old appliances, household waste, or uninhabitable mobile homes. Such an action helps to regulate aspects of junk not covered by state law and to ensure greater compatibility with surrounding landuses.	Model zoning language
=	11 Lake Access	Public access to lakeshores is important as a community amenity and tourism benefit. If all citizens have access to the lake, they are more apt to care about water quality issues and see the lake as a community amenity, not just an amenity for those who own property along it. Lake access also helps maintain at least a small portion of the lakefront as greenspace	Open space plan or include an assessment of lakefront open space resources as part of the comprehensive plan. Categorize open space resources, examine their use and function within the community, set priorities for their protection, and consider the best way to use and protect open spaces.	It is important to ensure that the open space policies of the comprehensive plan are implemented through the municipality's land use controls. General Municipal Law Section 247 authorizes acquisition of open land in fee (purchase) or by easement for public purposes

Water Related Issue	Why address at the local level? (benefits)	How to address it? (practices)	How to implement? (models)
12 Mining	Mining operations can have significant impacts on surface and groundwater resources. Improper practices can lead to contamination of these resources.	Enforcement of NYS Environmental Conservation Law. Code enforcement officer training on NYS Local municipalities also have the option of prohibited mining outright through zoning.	Code enforcement officer training on NYS Law; model zoning language
13 Onsite Wastewater	Onsite wastewater (septic) systems are regulated by county and state health laws, but localities can offer an additional level of regulation of these crucial pieces of the community's infrastructure. Septic systems are the number one source of nonpoint source pollution within New York State. A high percentage of private wells are contaminated by improperly functioning septic systems. This poses not only a threat to water quality but also an immediate public health hazard.	A locality can amend their existing lows to include the provisions of a on-site waste water system model ordinance. They can also customize a model ardinance to address situations that may be unique to their community. County Health Departments, Soil and Water Conservation Districts, and Cornell Cooperation Estensions can be valuable partners on this issue.	Uniform onsite wastewater management model law (Seneca Lake Watershed)
14 Open Space Preservation	Open space, i.e. vacant land and land without significant structural development, is often valued by community residents for its aesthetic qualities. In addition, open space can serve important water quality and natural resource goals (open space should not be confused with farmland)	Open space plan or include an assessment of open space resources as part of the comprehensive plan. Categorize open space resources, examine their use and function within the community, set priorities for their protection, and consider the best way to use and protect open spaces	It is important to ensure that the open space policies of the comprehensive plan are implemented through the municipality's land use controls. General Municipal Law Section 247 authorizes acquisition of open land in fee (purchase) or by easement for public purposes
15 Purchase of Development Rights	The PDR system, which has been used extensively in Dutchess and Suffolk Counties to preserve farmland, can also protect ecologically important lands or scenic parcels essential to rural character of the community. This is a form of open space preservation without the municipality having purchase the property outlight.	Involves the purchase by a municipal or county government of development rights from private landowners whose land it seeks to preserve in its current state without further development.	There are local, state, and federal programs. Non-profit organizations such as the Finger Lakes Land Trust (Ithaca and Canandaigua) and the Trust for Public Land (New York City) can offer assistance with models that have worked in communities across New York State
15 Riparian Buffers	Prevents encroachment of new development upon water resources; natural buffer areas improve water quality, in part by limiting the effects of erosion and sediment transport	Adoption of appropriate language in zoning regulations and subsequent enforcement through Zoning Officer and Site Plan Review. There is also the possibility of adopting a Water Protection Overlay district, which covers all zoning areas but more strictly regulates activities near streams and lakes.	Zoning language models; Water Protection Overlay model (Skaneateles)
17 Road Ditching	Roadside ditches collect water from the public road but also abutting private properties. There are many ways the locality can improve the construction, operation and maintenance of these drainage structures, which in turn leads to less damage to both private and public (roads, bridges, etc.) property and improved water quality	Make certain that the local highway department follows best management practices; regulate new road ditches through Subdivision Regulations and Site Plan Review	Road and Water Quality Handbook (G/FLRPC), many other options for best management practices. Typically ensuring the use of these practices is the greatest challenge.

How to implement? (models)	Dialogue, outreach, involvement. Having on an up to date Comprehensive Plan that is consulted and enforced is very important. the and	Model zoning language and model ance. ordinance (Canandaigua Lake, Livonia)	Local law (NYSDOS revision language); Regional or municipal-wide drainage age, district models (Town of Ogden) ces	of the Development of local program with local, a state, and/or federal funds. There are several community models in New York abe State. To State.
How to address it? (practices)	ure is usually approved by and/or built by the careful review of all such ity. Careful review of all such is important since new sewers can sewer and water provision such as water authorities and watershed councils. Specifically state in comprehensive plans where the community would like to see such infrastructure and and potential water quality problems areas where it should be kept out of	Zoning and/or site plan review. There is also the Model zoning language and model option of adopting a specific steep slopes ordinance. ordinance (Canandaigua Lake, Livonia)	Knowledge and enforcement of Stormwater Phase II Regulations. Drainage districts. Using wetlands, detention and retention facilities, regional drainage, and other stormwater best management practices (BMPs)	Under the state zoning enabling statutes, areas of the municipality which have been identified through the planning process as in need of preservation (e.g., ogiacultural land) or in which development should be avoided (e.g., municipal drinking water supply protection areas) are established as "sending districts." Development of land in such districts may be heavily restricted, but owners are granted rights under the TDR regulations to sell the rights to develop their lands. Those development rights may thereby be transferred to lands located in designated "receiving districts." Transferable development rights usually take the form of a number of units per acre, or gross square footage of floor space, or an increase in height. The rights are used to increase the density of development in a receiving district.
Why address at the local level? (benefits)	This infrastructure is usually approved by and/or built by the municipality. Careful review of all such infrastructure is important since new sewers can significantly improve water quality in an area with failing septic systems, but also lead to increased development and potential water quality problems that are associated with development	Disturbance of steep slopes for construction or other purposes can significantly increase erosion; many of these disturbances must undergo the local permitting process	Once water runs off of private property, it tends to become the problem of the local municipality. There are many ways the locality can improve drainage, which in turn leads to less damage to both private and public (roads, bridges, etc) property and improved (BMPs) Kagulations. Drainage districts. Using wetlands, atlantage detention and retention facilities, regional drainage and other stormwater best management practices (BMPs)	The 'transfer' of development rights is similar to the 'purchase' of development rights (see #15). Transferring development rights can protect ecologically important lands or scenic parcels essential to rural character of the community. This is a form of open space preservation without the municipality having to purchase the property outright.
Water Related Issue	18 Sewer and Water Infrastructure	19 Steep Slopes	20 Stomwater Management and Drainage	21 Transfer of Development Rights

Water Related Issue	Why address at the local level? (benefits)	How to address it? (practices)	How to implement? (models)
Vegetation Retention	22 Vegetation Retaining natural vegetation is an important factor in limiting erosion and sedimentation, especially during construction activities. Local governments have the ability to control the disturbance of vegetation through more comprehensive sediment and erosion control condictions and the issuance of permits. A local law specifically addressing vegetation and sedimentation especially during retention can be adopted and enforced. A local law specifically addressing vegetation and sedimentation and enforced. Alternatively, the issue can be addressed as part of ability to control the disturbance of vegetation.	A local law specifically addressing vegetation retention can be adopted and enforced. Alternatively, the issue can be addressed as part of a more comprehensive sediment and erosion control law, zoning revisions, and/or site plan review.	Vegetation retention model or combination with other model laws such as sediment and erosion control.
23 Waste Storage	Storing of waste (hazardous waste, garbage, etc.) can hove water quality impacts when rainwater runs-off such materials and into local water bodies. Whether dealing with their own facilities or regulating private property, municipalities can enforce waste storage regulations	e (hazardous waste, garbage, etc.) can Knowledge and enforcement of State and Federal Appropriate CEO training with the ballity impacts when rainwater runs-off regulations is important. Similar to junk yards, and into local water bodies. Whether municipalities can enforce stricter requirements at the stringent than federal and state regulations.	Appropriate CEO training with the possibility of a new local law that is more stringent than federal and state regulations.
24 Wells	The siting and drilling of gas, oil, brine, and other types Knowledge and enforce of wells can impact water quality. Local knowledge of regulations is important. state regulations in this matter is important.	Knowledge and enforcement of State and Federal regulations is important.	Appropriate CEO training with the possibility of a new local law that is more stringent than federal and state regulations.
25 Weflands	Wetlands, including temporary wetlands known as vernal ponds' contribute an important natural habitat, are often a scenic amenity, and act as a natural stormwater retertion system, often lessening the need for costly man-made systems.	Wetlands are often in flood plains, so limiting flood plain development has the added benefit of protecting wetlands. Local knowledge of appropriate state and federal regulations (especially training is important on the part of the Code Enforcement Officer or whoever issues the building permits) is very important. They can be seen as the "first line of defense" in protecting our resources and can encourage property developers to file for all appropriate permits with the Army Corps of Engineers and the DEC	Knowledge of and effective enforcement of all zoning and building codes, especially the Flood Prevention Ordinance. CEO training is important

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How to implement? (models)		Department of State and G/FLRPC guidance	Department of State and G/FLRPC guidance	Department of State and G/FLRPC guidance, Town of Canandaigua model	Department of State and G/FLRPC guidance
How to address it? (practices)		Well conceived comprehensive plan that is inclusive, concise, well written, frequently consulted, enforced, and periodically reviewed	Concise, easy to understand zoning that is a direct result of goals and objectives expressed in the comprehensive plan and used to enforce these objectives.	Concise, easy to understand subdivision ordinance that is a direct result of goals and objectives expressed in the comprehensive plan and used to enforce these objectives.	Concise, easy to understand site plan review process pepartment of State and G/FLRPC that is a direct result of goals and objectives expressed in the comprehensive plan and used to enforce these objectives.
Why address at the local level? (benefits)	In New York State, all of the land use tools listed below MUST occur at the local level. Because local municipalities enjoy many rights of "home rule" they also bear many responsbilities	Since comp plans set out the broad goals of a community, and land use decisions ultimately occur at the local level in NYS, good municipal comprehensive and periodically reviewed plans make the most sense	Zoning is the most commonly and extensively used local technique for regulating use of land as a means of accomplishing municipal goals. According to a 1994 survey by the Legislative Commission on Rural Resources, 100% of cities, 67% of towns and 87% of villages in New York had adopted zoning laws or ordinances.	One of the most common forms of land use activity is the subdivision of land. The subdivision process controls the manner by which land is divided into smaller tracts of land. Subdivision regulations ensure that when adevelopment does occur, streets, lots, open space and infrastructure are adequately designed and the municipality's land use objectives are met.	The site development review process is one of several means of plan implementation that communities may utilize. It is commonly considered supplemental to other land development guidance controls.
Water Related Issue	Land Use Tools	Comprehensive Plan		Subvision Ordinance (this includes the option for Conservation Subdivision')	Site Plan Review
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