

STORMWATER MANAGEMENT PROGRAM PLAN

NYSDEC SPDES Permit Number – NYR20A298

VILLAGE OF WALDEN
ORANGE COUNTY, NEW YORK

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REVISION HISTORY

| <u>DATE</u> | <u>REVISIONS</u> |
|--------------------|--|
| May 10, 2010 | Original draft of the report. |
| June 16, 2011 | Add active construction site inventory, SW practice inventory, SW maintenance procedures, annual report, and additional public outreach material. Update with additional info from new MS4 GP. |
| March 15, 2012 | Reorganize Appendices, corrections to report text, update forms and logs. |
| April 29, 2016 | Update permit references. |
| May 19, 2017 | Update Contacts |
| May 6, 2020 | Update Zoning |
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1.0 INTRODUCTION

On December 8, 1999, the U.S. Environmental Protection Agency (USEPA) promulgated Phase II of its National Pollution Discharge Elimination System (NPDES) stormwater regulations. Phase I of the USEPA stormwater program established regulations for stormwater discharges from municipal separate storm sewer systems (MS4s) in municipalities with populations of 100,000 or greater, construction activities disturbing five or more acres of land, and ten categories of industrial facilities. The Phase II Final Rule expands the Phase I program by requiring smaller communities with MS4s in urbanized areas to implement programs and practices to control polluted stormwater runoff through the use of NPDES permits. The latest urbanized areas are based on the 2010 census.

The Village of Walden is located in an Urbanized Area automatically designated under the Phase II program. In New York, Phase II regulated communities are required to apply for a State Pollutant Discharge Elimination System (SPDES) permit (first permit GP-02-02, latest GP-0-15-003, see [Appendix A](#) for a copy of GP-0-15-003) which was issued by the New York State Department of Environmental Conservation (NYSDEC). These communities are required to reduce the discharge of pollutants from their storm sewer systems to the “maximum extent practicable” to protect water quality.

As part of the permitting process, these regulated municipalities are required to develop a Stormwater Management Program (SWMP) Plan that address how the regulated MS4 will comply with six Minimum Control Measures (MCMs). These six MCMs are:

- 1. Public Education and Outreach
- 2. Public Involvement/Participation
- 3. Illicit Discharge Detection and Elimination (IDDE)
- 4. Construction Site Stormwater Runoff Control
- 5. Post-Construction Stormwater Management
- 6. Pollution Prevention/Good Housekeeping for Municipal Operations

Under the first SPDES General Permit for Stormwater Discharges from a MS4 (GP-02-02) the Village of Walden submitted a Notice of Intent (NOI). It has been included in [Appendix B](#) of this SWMP Plan. Additionally, organizational charts for this program are included in [Appendix C](#).

2.0 MCM 1 - PUBLIC EDUCATION AND OUTREACH

2.1 Responsible Party(ies) and/or Department(s)

| | |
|------------------------|---------------------------|
| <u>Village Manager</u> | <u>Building Inspector</u> |
| John Revella | Dean Stickle |
| 1 Municipal Square | 1 Municipal Square |
| Walden, NY 12586 | Walden, NY 12586 |
| (845) 788-2177 | (845) 788-2177 |

2.2 State and Federal Regulatory Requirements

The success of any stormwater management program hinges on educating the public about the impacts of certain behaviors and practices on surface water quality in their watershed. In addition, public education will improve the MS4s ability to gain support to implement this program as well as secure required funding. For this reason, the United States Environmental Protection Agency (USEPA) has included public education and outreach as a minimum control measure of the Phase II regulations. The requirements to satisfy this minimum control measure are:

1. Identify pollutants of concern (POCs), waterbodies of concern, geographic areas of concern, target audiences;
2. Develop and implement an on-going public education and outreach program designed to describe to the general public and target audiences:
 - a. The impacts of stormwater discharges on waterbodies;
 - b. POCs and their sources;
 - c. Steps contributors of the pollutants can take to reduce pollutants in stormwater runoff; and
 - d. Steps contributors of non-stormwater discharges can take to reduce pollutants;
3. Develop, record, periodically assess, and modify as needed, measurable goals; and
4. Select appropriate education and outreach activities and measurable goals to ensure the reduction of all POCs in stormwater discharges to the maximum extent practical (MEP).

2.3 Pollutants of Concern

The MS4 area mainly consists of a dense central business district surrounded by residential areas, resulting in the main pollutants of concern being silt & sediment. Due to the residential density of the village and amount of roads, fertilizer and road salt are also pollutants of concern.

2.4 Existing Water Resources

The Village of Walden is located within the Wallkill River Watershed. A watershed is the area of land where all of the water that is under it or drains off of it migrates to a common location. A watershed generally includes lakes, rivers, estuaries, wetlands, streams, and the surrounding landscape. Groundwater recharge areas are also considered. Watersheds are nature's boundaries, which transcend political, social, and economic boundaries. Because watersheds are defined by natural hydrology, they represent the most logical basis for managing water resources. A Watershed Protection Approach is, therefore, a viable strategy for effectively protecting and restoring aquatic ecosystems and protecting human health. Major features of a Watershed Protection Approach are: targeting priority problems, promoting a high level of stakeholder involvement, integrated solutions that make use of the expertise and authority of multiple agencies, and measuring success through monitoring and other data gathering. A watershed framework

offers many opportunities to simplify and streamline the workload between involved parties, thus generating cost efficiencies. Each watershed presents unique opportunities and challenges. More importantly, they present an opportunity for partnering with watershed advocates, academic institutions, industry, private landowners, neighboring communities, or state agencies to achieve mutual beneficial goals.

Significant water resources in the Village of Walden include:

- Wallkill River
- Tin Brook
- Lake at James Olley Community Park

It should be noted that other significant water resources exist in the MS4 as small, unnamed ponds, watercourses, and wetlands. Some of these are isolated while others are located along stream lengths.

2.5 Geographic Areas of Concern

Land use directly affects the potential for storm water pollution and the types of pollutants found in storm water. Different land uses expose different pollutants to storm water. For example, residential land uses often result in higher nutrient (nitrogen and phosphorous) concentrations in runoff due to the use of fertilizers while metals concentrations are often higher in runoff from commercial areas due to traffic.

High-risk land uses are those that have a higher potential risk or actual presence of pollutants such as sediment, metals, nutrients, and pathogens. The highest risk areas are those that contain a high percentage of impervious area, activities using dangerous chemicals, and high human activity thus creating a higher degree of human impacts (including automotive impacts). These areas would have industrial, commercial, commercial/industrial, transportation, quarries, and waste disposal land use designations. Industrial and commercial land uses can contribute solids, and oils and grease from high volume parking areas. They may also contribute toxics and metals dependent upon the activities conducted at the site from areas associated with manufacturing and waste disposal. Transportation related land uses have the potential to degrade water quality from vehicular spills (oils, grease, antifreeze), salting and sanding, and particulate deposition. Higher concentration of metals can also be found due to tire wear, brake pads, and body wear. High risk areas within the Village of Walden include:

- Industrial and commercial areas mostly centered around the Norfolk Southern Railway
- Wastewater treatment plant and Department of Public Works Complex
- Municipal parking areas

Medium risk areas are those that contain a considerable amount of impervious area and human impacts (including pet waste impacts). These areas consist of high density and medium density land use designations. Residential land uses can be significant sources of nutrients and pathogens. Improper lawn care can contribute excess nutrients to the storm drainage system. Sanitary systems that are not properly designed, constructed, or maintained can be significant sources of nutrients, pathogens, and organic contaminants.

Residential land uses may be a source of toxic contaminants due to improper disposal of household hazardous wastes. Medium risk areas within the Village of Walden include:

- Central business district
- High Density residential areas
- Thruway Market

The active and idle agricultural lands, as well as, cemeteries, and developed recreation areas (parks) are associated with fertilizer and pesticide runoff pollution. Areas of potentially higher concentrations of fertilizer and pesticide runoff pollution include:

- James Olley Community Park, Bradley Park, and Wooster Grove Park
- Most Precious Blood School

2.6 Target Audiences

The target audience for public education and outreach includes residential homeowners, contractors, developers, and schools.

2.7 Available Educational Resources

There are a number of resources and public education currently available or in-place to assist the Village of Walden achieve the requirements of this minimum control measure. Examples of education and outreach materials are provided in Appendix E. The following is a list of the groups or programs that represent opportunities for education and outreach to the public.

USEPA Environmental Education Center (EEC)

The on-line EEC provides teachers with technical background, curriculum and activities information, and workshops on a variety of environmental topics. This resource is useful in providing educators with the tools to teach students in grades K-12. The EEC web page is www.epa.gov/students/teachers.html. More information on educational resources, including having USEPA employees provide talks and presentations at public events or in schools, may be obtained from the USEPA Region 2 office located at 290 Broadway New York, NY 10007-1866, (212) 637-3000.

The Environmental Education Grant Program was developed to provide financial support for projects that “design, demonstrate, or disseminate environmental education practices, methods or techniques.” Organizations eligible to apply for grant funds are:

- A local or tribal government education agency, college, or university; a state education or environmental agency; a 501(c)(3) not-for-profit organization; or a noncommercial educational broadcasting entity is eligible.
- A teacher's school district, an educator's not-for-profit organization, or a faculty member's college or university may apply, but an individual teacher is not eligible.
- The primary applicant must be based in the U.S.; partner organizations and project activities may be located outside the U.S.

USEPA Student Center

USEPA's Student Center web site provides information and activities for students to learn more about surface water ecosystems, environmental laws, and pollution. The site is located at www.epa.gov/students.

President's Environmental Youth Awards

The President's Environmental Youth Awards is a program that recognizes young people across America for projects that demonstrate their commitment to the environment. Winners of regional certificates in the program are evaluated against winners in other USEPA regions. The national winner receives a plaque issued by the President of the United States at an USEPA awards ceremony. Participants of completed projects will receive a certificate signed by the President. Projects can include a variety of topics focused on environmental issues and environmental science. Participation in this awards program can be a mechanism to promote student interest in other education or participation programs.

Green Teacher

This magazine is produced by and for educators to enhance environmental and global education at all grade levels. It is produced four times per year and contains approximately fifty pages of ideas, activities, perspective articles, reports of what successful teachers, parents, and schools are doing, activities for various grade levels, evaluations of new books, kits, games and other resources. Green Teacher may be contacted at P.O. Box 452, Niagara Falls, NY 14304-0452, e-mail: greentea@web.net, (416) 960-1244.

EELinked

EELinked is an on-line environmental education resource guide that can assist educators in locating materials and information for class study guides, activities, and programs (eelinked.naace.net).

Project WET

Project WET (Water Education for Teachers) is a national nonprofit water education program for educators and young people located on the campus of Montana State University. The goal of Project WET is to facilitate and promote the awareness, appreciation, knowledge, and stewardship of water resources through the development and distribution of classroom ready teaching aids and through the establishment of Project WET programs. It is active in all 50 states, the District of Columbia, the U.S. islands and select provinces of Canada. Certified Project WET facilitators conduct free workshops where educators, community leaders, and natural resource managers receive instruction in the use of Project WET materials. A workshop lasts six hours and participants receive the highly acclaimed Project WET Curriculum and Activity Guide. Workshop participants are then encouraged to integrate activities from the Guide into the existing school curriculum or other appropriate forums. This guide is a 500-page publication filled with over 90 innovative, interdisciplinary activities for grades K – 12, most of which are hands-on. Designed to coincide with state and national standards, the Guide addresses the following content areas:

- Water has unique physical and chemical characteristics.

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- Water is essential for all life to exist.
- Water connects all Earth systems.
- Water is a natural resource.
- Water resources are managed.
- Water resources exist within social contexts.
- Water resources exist within cultural contexts.

Please contact the NYSDEC, Regional Environmental Educator, (518) 402-8043, for more information about this program.

2.7.1 Citizen's Groups

Several organizations exist that either currently provide public education resources on stormwater quality issues or could provide a public outreach avenue in developing stormwater awareness and developing partnerships with the public. The organizations that have the best potential to support future stormwater education programs in Village of Walden are the following:

Orange County Soil and Water Conservation District (OCSWCD)

The Orange County Soil and Water Conservation District (OCSWCD) is a non-profit, quasi-public organization that functions as a facilitator for meeting the needs of the local land user in the conservation of soil, water and other related resources. OCSWCD's mission is to foster a community-based, locally led approach for the stewardship of Orange County's natural resources through educational campaigns and outreaches into local communities, as well as providing technical assistance to residents.

OCSWCD has many programs which provide environmental education including the annual Envirothon and Conservation Field Day.

For more information about OCSWCD, OCSWCD's District Office, 225 Dolson Avenue, Suite 103, Middletown, NY 10940, (845) 344-1341. OCSWCD board meetings are the 3rd Monday of each month at 9 AM at the District Office and are open to the public.

2.7.2 Regional, State and National Resources

There are a number of educational resources available for homeowners and businesses such as stormwater guidance documents, programs for children, and educator training workshops. Many of the education and outreach materials developed can, in many cases, eliminate the need for the Village of Walden to develop its own materials. Some of the available resources are listed below.

U.S. Environmental Protection Agency

The Office of Wastewater Management (OWM) provides technical resources to persons responsible for designing and implementing BMPs recommended to achieve the goals of the six minimum control measures. These resources are available electronically at USEPA web sites. While the resources provide some background to the development of the Phase II regulations, they are largely oriented to municipalities and organizations that are developing stormwater management plans as opposed to the general public.

The Office of Water has created Adopt Your Watershed, a campaign to encourage citizens and groups to work at protecting and restoring surface and groundwater quality (water.epa.gov/action/adopt/). The program provides a resource for communities or groups to network with other groups nationwide. This networking and watershed approach can enable a community to share, develop, or use successful strategies from existing programs. The resources available include training courses and publications offered by the Watershed Academy to assist with implementing stormwater programs. These educational materials can be used by educators, private groups that adopt a

watershed, or by municipal employees responsible for implementing the program. The Watershed Academy also offers internet-based learning tools (water.epa.gov/learn/training/wacademy/).

New England Interstate Water Pollution Control Commission (NEIWPCC)

The New England Interstate Water Pollution Control Commission (NEIWPCC) provides educational programs, promotes participation in water quality restoration programs, and supplies outreach materials. Highlights of the NEIWPCC offerings are the NEIWPCC website, an Environmental Training Center, youth programs, newsletters such as L.U.S.T.LINE and Water Connection, informational brochures, workshops, and technical advice.

American Rivers

American Rivers is a national, non-profit, conservation organization dedicated to protecting and restoring healthy natural rivers and the variety of life they sustain for people, fish, and wildlife. They provide innovative solutions to improve river health; raise awareness among decision makers; serve and mobilize the river conservation movement; and are collaborating with their partners to develop a national "river agenda." This will create a unified vision for improving river health across the country. Along with conservation efforts, they promote public awareness about why healthy rivers matter for fish and wildlife, kayakers, canoeists, and anglers, and for our communities as a whole. American Rivers works closely with grassroots river and watershed groups across the country. Staff members also collaborate with other conservation groups, local citizens and businesses, and various federal, state, and tribal agencies to build coalitions and provide technical support. Their website provides educational resources including a Lewis and Clark animation about how the Missouri River has changed, River ABC's for kids and teachers, and a tools and links page. American Rivers has also published a Draft River Threats List and a River Agenda, which is a plan for creating healthy rivers. For more information, please visit www.amrivers.org.

Natural Resources Conservation Service (NRCS)

The Natural Resources Conservation Service (NRCS) is a federal agency that works hand-in-hand with the people to improve and protect their soil, water, and other natural resources. For decades, private landowners have voluntarily worked with NRCS specialists to prevent erosion, improve water quality, and promote sustainable agriculture. This includes helping landowners develop conservation plans, create and restore wetlands, restore and manage other natural ecosystems as well as advise on stormwater remediation, nutrient and animal waste management, and watershed planning. NRCS provides has several educational resources including tip sheets on topics like nutrient management and multi-media information on topics like backyard conservation.

Conservation Programs offered and assisted by NRCS include:

- Environmental Quality Incentives Program (EQIP) – Provides technical, educational, and financial assistance to farmers to help them comply with environmental laws while encouraging environmental enhancement.

- Farmland Protection Program (FFP) – Provides funds to purchase the development rights to farmland, thus preserving quality farmland for agricultural use.
- Wildlife Habitat Incentives Program (WHIP) – Provides both technical assistance and cost-share assistance for farmers who want to voluntarily improve fish and wildlife habitat and restore and managing natural ecosystems on their property.
- Watershed and River Basin Planning and Installation (PL566) – Provides technical and financial assistance in cooperation with local sponsoring organizations, state agencies, and others for watershed-based projects. NRCS cooperates on projects for watershed protection; flood prevention; water quality improvements; soil erosion reduction; rural, municipal, and industrial water supply; irrigation water management; sedimentation control; fish and wildlife habitat enhancement and wetland restorations.
- Resource Conservation and Development (RC&D) – Provides local people with the means to solve natural resource problems and promote sustainable use of natural resources in rural areas. The program aims to improve the quality of life by providing practical solutions for community development, land conservation, environmental enhancement, and water management.
- National Resources Inventory (NRI) – This is a compilation of natural resource information on non-federal land throughout the United States. It captures data on land cover and use, soil erosion, prime farmland, wetlands, habitat diversity, selected conservation practices and related resource attributes at more than 800,000 scientifically selected sample sites.
- Emergency Watershed Protection Program (EWP) – It is a disaster recovery program made available in emergency situations when neither the state nor the local community is able to repair a damaged watershed.
- Earth Team Volunteer Program – Provides volunteers with opportunities to use their talents on behalf of conservation. Earth Team volunteers do not receive a salary from NRCS but they perform services that are essential to the conservation mission of the agency. Anyone 14 years of age and older can join the Earth Team by calling a local NRCS office.

More information about NRCS can be found at www.nrcs.usda.gov, while New York programs can be researched at www.ny.nrcs.usda.gov. In Orange County, Kathleen Capella, District Conservationist, can be contacted for more information at (845) 883-7162 or kathleen.capella@ny.usda.gov.

Cornell Cooperative Extension – Orange County

There are several outreach programs offered by the Cornell Cooperative Extension – Orange County (CCEOC) that may be beneficial to the municipality for its stormwater education and outreach program. In fact, the mission of CCEOC’s Environment Program is “through education, research and partnerships, the Environment Program empowers individuals and municipal groups to expand their knowledge and actions to protect, restore and enhance the environment of Orange County for future generations. The Environment Program will be a leader in research-based education to increase awareness, knowledge and action on local, regional and global environmental issues.”

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CCEOC also has an active 4H Youth Development Program including groups for No Child Left Inside (develop teen environmental leaders) and The Outdoor Adventure Club.

The Cornell Cooperative Extension – Orange County offices are located at 18 Seward Avenue, Suite 300, Middletown, NY 10940, (845) 344-1234, <http://counties.cce.cornell.edu/orange>.

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2.8 Best Management Practices (BMPs)

The goal of a public education/outreach program in the Village of Walden should include several elements as follows:

- Provide a general education to the public about stormwater quality issues that will both improve their awareness, change habits that could impact water quality, and build support for funding of stormwater quality programs.
- Develop school programs that will build long-term awareness and support for stormwater programs.
- Target specific areas and issues where enhanced public education could provide significant benefits.

The Public Education and Outreach BMPs, found in Table 2.2, have been chosen by the Village of Walden to meet the requirements of this permit. Each BMP has an associate responsible party(ies) and/or Department(s), measurable goals, and timeline to assist in evaluate the success of the Village's public education/outreach program. Any additional reference material pertaining to the public education/outreach minimum measure can be found in Appendix E.

**TABLE 2.2
MCM 1 - PUBLIC EDUCATION/OUTREACH BEST MANAGEMENT PRACTICES
VILLAGE OF WALDEN**

| Best Management Practice (BMP) | Responsible Party(ies)/Department | Measurable Goals | Timeline |
|---|--|---|------------------|
| Regional stormwater education program. | SMO, Village Manager, OCSWD | Brochures developed and available at Village Hall and various public events | On-going |
| Village staff trained on pollution prevention/good housekeeping | SMO, Village Manager | Staff trained | Trained annually |
| Village staff trained on erosion and sediment control | SMO, Village Engineer | Staff trained | Trained annually |

2.9 Required Implementation Reporting

The Village of Walden shall report on the following items annually:

- List education / outreach activities performed for the general public and target audiences and provide any results (for example, number of people attended, amount of materials distributed, etc.).
- Education and outreach activities performed as required by other MCMs including but not limited to:
 - IDDE education activities planned or completed for public employees, businesses, and the general public
 - construction site stormwater control training planned or completed
 - employee pollution prevention / good housekeeping training planned or completed
- Report on effectiveness of program, BMP and measurable goal assessment.
- Report on effectiveness of program, BMP and measurable goal assessment.
- Maintain records of all training activities.

3.0 MCM 2 - PUBLIC INVOLVEMENT / PARTICIPATION

3.1 Responsible Party(ies) and/or Department(s)

| | |
|------------------------|---------------------------|
| <u>Village Manager</u> | <u>Building Inspector</u> |
| John Revella | Dean Stickle |
| 1 Municipal Square | 1 Municipal Square |
| Walden, NY 12586 | Walden, NY 12586 |
| (845) 788-2177 | (845) 788-2177 |

3.2 State and Federal Regulatory Requirements

The objective of this minimum control measure is to encourage public participation in the MS4s stormwater program. The anticipated benefits of public involvement and the success of the program are: free intellectual and labor resources; greater support for programs operated by citizen volunteers; faster implementation of minimum control measures (such as illicit discharge detection); fewer legal challenges; and a potential measure of program success. Involvement can include participating in public meetings, providing legislative activism, developing and implementing BMPs, or becoming an educator. To satisfy the requirements of this minimum control measure, the MS4 must:

1. Comply with the State Open Meeting Law and local public notice requirements, such as Open Meetings Law, when implementing a public involvement/participation program;
2. Develop and implement a public involvement/participation program that:
 - a. identifies key individuals and groups, public and private, who are interested in or affected by the SWMP Plan;

- b. identifies types of input the permittee will seek from the key individuals and groups, public and private, to support development and implementation of the SWMP and how the input will be used; and
 - c. describes the public involvement / participation activities the permittee will undertake to provide program access to those who want it and to gather the needed input. The activities included, but are not limited to a water quality hotline (report spills, dumping, construction sites of concern, etc.), stewardship activities like stream cleanups, storm drain marking, and volunteer water quality
 - d. provide the opportunity for the public to participate in the development, implementation, review, and revision of the SWMP Plan.
3. Identify a local stormwater public contact
 4. Complete an annual report presentation
 5. Develop, record, periodically assess and modify as needed measurable goals; and
 6. Select appropriate public involvement / participation activities and measurable goals to ensure the reduction of POCs in stormwater discharges to the MEP.

3.3 Public Notification

According to the State Open Meeting Law and local public notice requirements all events will be announced on the municipal website.

3.4 Local Stormwater Public Contact

The Stormwater Management Officer (SMO) is designated as the Stormwater Public Contact in the Village of Walden.

Building Inspector
Dean Stickles
1 Municipal Square
Walden, New York 12586
(845) 788-2177

3.5 Presentation of Annual Report

As per GP-0-015-003, prior to submitting the final annual report to the NYSDEC, a draft annual report will be presented to the public where the public can ask questions about and make comments on the annual report. The Village of Walden chooses to present our annual report on the internet as a link on our municipal webpage. The public will have the opportunity to provide comments on the report by submitting them to Village Clerk or building department. The Village of Walden holds a public meeting following each reporting period. The latest Annual Report is provided in Appendix J.

3.6 Available Resources

The following section describes some of the organizations and programs that may help the Village implement the public participation component of its stormwater program.

Encouraging public participation in existing volunteer programs that are offered by local and regional groups can minimize the need for creating new programs and allow the Village to focus its financial and human resources on outreach and sponsorship for these programs.

3.6.1 School Programs

The school department currently operates a school wide recycling program and students from several of the schools are actively involved with its implementation. There are no programs in place for students to participate in stormwater pollution prevention or cleanup projects, however the students are responsible for the sorting of recyclables in preparation for transportation to the local recovery center.

3.6.2 Boy and Girl Scouts of America

Boys and girls may be involved in Scout programs from ages 5 through 17 and are supervised by adult volunteers. Scouts are involved in various community service projects and can be beneficial to implementing outfall identification, storm drain marking, and river cleanup projects or environmental awareness outreach programs. Coordination with local Scout leaders is necessary to implement any activity with their group. The Boy Scouts have eight District Executives that meet monthly to discuss possible projects. Material about potential stormwater related projects can be distributed at this meeting and then passed on to troop leaders. The Girl Scouts have Field Coordinators and Service Managers in every town. Information about potential projects can be shared with the Field Coordinators, who will in turn pass the information to the Service Managers and then the troops. Distributing information about the impacts of polluted stormwater on our environment, the Village's Phase II program, and the capacity in which Boy and Girl scouts can help their community are the first steps to promote participation.

The Boy Scouts provides its youth with a conservation program designed to be incorporated throughout the Scouting program and teaches awareness and understanding of conservation as a wise and intelligent management of natural resources. The conservation "Good Turn" program is an opportunity for scouts to join with conservation and environmental organizations (federal, state, local, and private) to carry out a conservation "Good Turn" in their home communities.

The Boy Scouts also provide an outdoor adventures program of which their "Leave No Trace" policy plays a key role. This principles of this policy include planning ahead (not bringing materials that create waste and knowing the area to be explored), traveling and camping on durable surfaces (not trampling vegetated areas which can lead to erosion), dispose of waste properly (pack out what you pack in, dispose of wastewater far enough from surface water), leave what you find, minimize campfire impacts, respect wildlife, and be considerate of other visitors. A "Leave No Trace Awareness Award" is available to scouts who successfully follow these principles. In Orange County, scouts have participated in many activities in their communities including Earth Day cleanups.

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The Girl Scouts are offering a partnership initiative called Linking Girls to the Land. This partnership is between the Girl Scouts of the USA and nine natural resource conservation agencies including USDI Bureau of Land Management, USDA Forest Service, and USDA Natural Resource Conservation Service. This initiative encourages girls to become involved in conservation and natural resource issues and careers on a national and local level. Most program activities fall into four areas: environmental education; volunteer service; outdoor skills development; and career awareness.

The Water Drop Patch, a facet of Linking Girls to the Land, is a project jointly developed by the United States Environmental Protection Agency and the Girl Scout Council of the Nation's Capital (GSCNC). The participants gain hands-on skills in water management and resource conservation by encouraging the girls to:

- Make a difference in their communities by becoming watershed and wetlands stewards;
- Use their skills and their knowledge to educate others in their community about the need to protect the nation's valuable water resources;
- Explore the natural world to gain an interest in science and math; and
- Use the Internet as a source of information.

For additional information about the Water Drop patch view the project booklet at www.epa.gov/adopt/patch or by calling the National Service Center for Environmental Publications at (800) 490-9198.

Funding for these can be acquired through the EarthPACT (Plant and Animal Conservation Team), which will award implementation grants to each council for up to \$2,500. The EarthPACT encourages the formation of partnerships with local environmental education, nature, or science-related organizations, business or county government agencies.

The Girl Scouts are also offering a new program called GirlFACTS (Girls, Families, and Communities Together in Science). This program offers two related activities entitled "geology rocks" and "weather wise" which discuss the topics of the water cycle and acid rain. The topics of stormwater runoff pollution and prevention could easily be added as a topic to these established programs.

The Girls Scouts have also been involved in Earth Day community clean-ups. The Girl Scouts Heart of The Hudson is located in Pleasantville, NY 10570, (914) 747-3080 and may be found at www.girlscoutshh.org.

The Boy Scouts of America Hudson Valley Council office is located at 6 Jeanne Drive, Newburgh, NY 12550 and may be found at www.hudsonvalleyscouting.org.

3.6.3 Citizen's Groups

The groups outlined in the Public Education/Outreach minimum control measure may also provide opportunities for public involvement in a variety of watershed based or specific water body protection and cleanup projects. Some existing projects may help achieve the Village's goals in their program with or without modification and, in some cases, new programs may need to be established. The following is a listing of groups and a summary of some of their current activities available to residents

3.6.4 Regional, State and National Resources

Adopt Your Watershed

As described in the public education and outreach section of this report, the USEPA has created this campaign to encourage citizens and groups to work at protecting and restoring surface and groundwater quality in their watershed. The networking and training resources available from this program can help educators, communities, or private citizens improve water quality and implement their local stormwater program through education and participation.

Give Water a Hand

This is a national watershed education program of the University of Wisconsin Environmental Resources Center. Support for Give Water a Hand is provided by National Fish and Wildlife Foundation, the U.S. Department of Agriculture, CSREES and NRCS designed to involve young people in local environmental service projects (www.uwex.edu/erc/gwah). The program provides guidance to students on how to complete an environmental service project and the basic information necessary to understand their watershed. Free guides are available on the Internet, but printed copies require printing and shipping fees. The publications are the youth Action Guide (also in Spanish) and the teacher's Leader Guidebook.

3.6.5 Local Media Resources

The local media can be a valuable asset to the Village as part of their public education and outreach. The Village provides information on the local cable channel and on periodic municipal newsletters.

Village of Walden Municipal Web Page – www.villageofwalden.org

The web page for the Village of Walden contains information about stormwater management, both general educational information and specific information about the MS4 area. The purpose of the web page is to educate the public on stormwater runoff and stormwater pollution. The following list shows some the information available on the web page.

- MS4 Annual Reports
- Definition of stormwater runoff
- Tips for preventing stormwater runoff pollution
- Public outreach brochures available on-line

3.7 Best Management Practices (BMPs)

The Public Involvement/Participation BMPs, found in Table 3, have been chosen by the Village of Walden to meet the requirements of this permit. Each BMP has an associate responsible party(ies) and/or Department(s), measurable goals, and timeline to assist in evaluate the success of the Village's public involvement/participation program.

TABLE 3
MCM 2 - PUBLIC INVOLVEMENT/PARTICIPATION BEST MANAGEMENT PRACTICES
VILLAGE OF WALDEN

| Best Management Practice (BMP) | Responsible Party(ies)/Department | Measurable Goals | Timeline |
|--|-----------------------------------|------------------|-----------------|
| <p>Inform local Girl Scout troops about the Water Drop Patch. Provide them with the information found herein and encourage them to participate as a means to foster environmental stewardship. This program would not only benefit the scouts but also would provide an avenue for a broader public education, as the scouts become watershed and wetland stewards. The Boy Scouts could also be encouraged to use their conservation "Good Turn" program in the area.</p> | <p>SMO, Mayor</p> | | <p>On-going</p> |
| <p>Coordinate with local Boy and Girl Scout organizations to discuss potential resources that they could contribute to the program (i.e., flyer distribution, storm drain stenciling).</p> | <p>SMO, Village Manager</p> | | <p>On-going</p> |

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| | | | |
|---|-----------------------------|---|-----------------|
| <p>Use volunteers from the community and local organizations for simple tasks that would improve water quality as well as raise the public's awareness. Public participation will enhance the public education component of the stormwater program with the following tasks:</p> <ul style="list-style-type: none"> Expand the Village's current municipal website to include information pertaining to volunteering opportunities either through the Village itself or contact information for other non-profit organizations serving the area. The website should also include notices of upcoming stenciling and cleanup events (including those sponsored by groups other than the Village). | <p>SMO, Village Manager</p> | | <p>On-going</p> |
| <p>Allow the public access to the MS4's Annual Report for review and comment.</p> | <p>SMO, Village Manager</p> | <p>Present the MS4's draft annual report on the Village's municipal webpage annually. Allow for public comment and questions.</p> | <p>On-going</p> |
| <p>Solicit public involvement and comments in the planning and reviewing stages of development plan applications.</p> | <p>SMO, Planning Board</p> | <p>Public hearings are conducted for all development plan applications to the Planning Board.</p> | <p>On-going</p> |

3.8 Required Implementation Reporting

The Village shall report on the following items annually:

- Annual report presentation information (date, time, attendees) or information about how the annual report was made available for comment.
- Comments received and intended responses.
- Public involvement / participation activities (for example stream cleanups including the number of people participating, the number of calls to a water quality hotline, the number and extent of storm drain stenciling).
- Report on effectiveness of program.

4.0 MCM 3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION

4.1 Responsible Party(ies) and/or Department(s)

| | |
|------------------------|---------------------------|
| <u>Village Manager</u> | <u>Building Inspector</u> |
| John Revella | Dean Stickle |
| 1 Municipal Square | 1 Municipal Square |
| Walden, NY 12586 | Walden, NY 12586 |
| (845) 788-2177 | (845) 788-2177 |

4.2 State and Federal Regulatory Requirements

Under this Minimum Control Measure, the Village is required to develop and implement a plan to detect and eliminate illicit discharges to its MS4, including development of a storm sewer outfall map showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls. This also requires an education and outreach component that is addressed under the Public Education Minimum Control Measure (or Section 2.0). The potential for illicit discharges remains with illegal connections that are often the result of failing septic systems. The following sections detail the regulatory requirements for this effort, the Village's existing programs and controls to meet these requirements, and recommended measures for the Village to become fully compliant with these regulatory requirements.

Commonly, municipal separate storm sewer system (MS4) discharges include wastes and other wastewaters from non-stormwater sources that can significantly impact water quality. Sanitary sewage, process wastewater, floor drains, and other wastewaters have been documented in MS4 systems. A common impact is elevated levels of bacteria and pathogens as a result of improper sanitary connections. Because of these water quality impacts, these discharges must either be permitted or removed and connected to the municipal sanitary sewer system for treatment at a wastewater treatment plant. These non-stormwater discharges are often more common in older storm sewer systems due to less awareness and enforcement in the past when these connections were made.

National Pollution Discharge Elimination System (NPDES) Phase II Stormwater Regulations define these discharges as "illicit discharges," which are further defined in

New York State Pollutant Discharge Elimination System (SPDES) regulations. Rule 31(b) Definitions as:

“Illicit discharge means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges from fire fighting activities.”

Specific requirements of this program consist of the following:

1. Develop, implement, and enforce a program to detect and eliminate illicit discharges into the small MS4.
2. Develop and maintain a map, at a minimum within the permittee's jurisdiction in the urbanized area and additionally designated area, showing:
 - a. the location of all outfalls and the names and location of all surface waters of the State that receive discharges from those outfalls
 - b. by March 9, 2010, the preliminary boundaries of the permittee's storm sewersheds determined using GIS or other tools, even if they extend outside of the urbanized area (to facilitate trackdown), and additionally designated area within the permittee's jurisdiction
 - c. the permittee's storm sewer system (when grant funds are made available or for sewer lines surveyed during an illicit discharge trackdown) in accordance with available State and EPA guidance
3. Field verify outfall locations.
4. Conduct an outfall reconnaissance inventory, as described in the EPA publication entitled “Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment,” addressing every outfall within the urbanized area and additionally designated area within the permittee's jurisdiction at least once every five years.
5. Map new outfalls as they are constructed or newly discovered within the urbanized area and additionally designated area.
6. Prohibit, through a law, ordinance, or other regulatory mechanism, illicit discharges into the small MS4 and implement appropriate enforcement procedures and actions. This mechanism must be equivalent to the State's model IDDE local law “NYSDEC Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems.” The mechanism must be certified by the attorney representing the small MS4 as being equivalent to the State's model illicit discharge local law. Laws adopted during the GP-02-02 permit cycle must also be attorney certified as effectively assuring implementation of the State's model IDDE law.
7. Develop and implement a program to detect and address non-stormwater discharges, including illegal dumping, to the small MS4. The program must include: procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for IDDE program; description of priority areas of concern, available equipment, staff, funding, etc.; procedures for identifying and locating illicit discharges (trackdown); procedures for eliminating illicit discharges; and procedures for documenting actions.

8. Inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste.
9. Address the categories of non-stormwater discharges or flows as necessary.
10. Develop, record, periodically assess, and modify as needed, measurable goals.
11. Select appropriate IDDE BMPs and measurable goals to ensure the reduction of all POCs in stormwater discharges to the MEP.

Table 4.1 provides examples of sources of common illicit discharges.

**TABLE 4.1
 EXAMPLES OF SOURCES OF ILLICIT DISCHARGES**

| |
|---|
| Sanitary Wastes |
| Improper Oil Disposal |
| Radiator Flushing |
| Laundry Wastewaters |
| Automobile and Household Hazardous Wastes |

The New York SPDES regulations allow several categories of non-stormwater discharges to an MS4 if they are not identified as significant contributors of pollutants in the system. Table 4.2 lists allowable non-stormwater discharges, provided they do not adversely impact water quality.

**TABLE 4.2
 ALLOWABLE NON-STORMWATER DISCHARGES**

| |
|---|
| Water Line Flushing |
| Landscape Irrigation |
| Diverted Stream Flows |
| Rising Ground Waters |
| Uncontaminated Ground Water Infiltration |
| Uncontaminated Groundwater |
| Discharges from Potable Water Sources |
| Foundation Drains |
| Air Conditioning Condensate |
| Irrigation Water |
| Springs |
| Water from Crawl Space and Basement Sump Pumps |
| Footing Drains |
| Lawn and Landscaping Watering Runoff (provided that all pesticides and fertilizers have been applied in accordance with the manufacturer's product label) |
| Water from Individual Residential Car Washing |
| Flows from Riparian Habitats and Wetlands |
| Dechlorinated Swimming Pool Discharges |

| |
|---|
| Residual Street Wash Water |
| Discharges or Flows from Fire Fighting Activities |
| Any SPDES Permitted Discharge |

With the exception of discharges listed above, current NYS SPDES regulations prohibit non-stormwater discharges to a storm sewer system without specific authorization from NYSDEC in the form of a SPDES permit.

4.3 Illicit Discharge Detection and Elimination

The development of the storm sewer map completed the initial step to detect non-stormwater discharges by locating outfalls where there was a dry weather flow component. See [Section 4.4](#) for more information on the storm sewer map. While dry weather flow could be groundwater infiltrating into the storm sewer, it is also potentially indicative of an illicit discharge. Moving forward, the following steps will be taken to determine whether the observed flow is from an illicit discharge and, if so, to identify the source of the discharge. To the extent possible, at least 72 hours of dry weather should precede any fieldwork associated with this program. These inspections should occur during dry weather such that stream height will be lower to expose submerged outfalls as well as to better observe dry weather flows from outfalls that may be indicative of an illicit discharge.

Each outfall has a unique ID number such that its data is correlated with a location on the storm sewer base mapping.

- Where dry weather flow is observed, collect samples to be analyzed for pH, temperature, specific conductivity, ammonia, surfactants, and fecal coliform. If the results of these analyses indicate that a potential illicit discharge exists, the upgradient drainage system will be examined to identify the extent of the system where that dry weather flow exists. During these investigations, the following information will be collected on upstream structures:
 - Condition of the structure (including a digital photograph),
 - Pipe sizes, and
 - Specific conductivity of the flow as measured in the field.

An outfall inspection report will be prepared to document the results of the investigations. This report will include the following:

- a cost estimate and work plan to further identify the source(s) of the dry weather flow observed, and
- an opinion of construction cost to correct the anticipated problems.

In those outfalls identified as having a potential illicit discharge, the Village must identify sources of that discharge(s). The recommended approach to accomplish this task follows.

1. Delineate the drainage area of each outfall with a dry weather flow component to determine the extent of potential sources. This could be done by two methods.
 - Utilize TV inspection to identify sources of the dry weather flows. This inspection could identify the extent of the system where there is a dry

- weather flow component and identify connections to the storm sewer that are contributing dry weather flow.
- Inspect the drainage system, structure by structure, to determine the extent of the system where there is a dry weather flow component. At this time, the system and its connections where a dry weather flow component was observed, will be mapped, or sketched a minimum. This will be the first task completed as it will limit the extent of the investigation.
2. Inventory the drainage area of each outfall of concern to evaluate the locations of potential pollutant sources. This will consist of reviewing land use and street maps to identify potential pollutant sources in the drainage area. In addition, when available, water quality data from the outfall of concern should be reviewed to determine what the potential sources may be.
 3. Conduct additional “targeted” wet or dry weather sampling at selected locations downgradient of suspected pollutant sources to “bracket” sources of pollutants in the system.
 4. Conduct detailed field inventory. Field inventories should be performed on foot and via windshield surveys, beginning at the point discharge, and following the bracketed drainage system up-gradient. The purpose of the field inventories is to further define what the potential source(s) may be.
 5. Conduct a site investigation for each suspected source. This may be completed by one of several methods to specifically identify a source. This may include the following methods:
 - a. TV inspection to find a specific connection that is contributing dry weather flow. In high groundwater conditions, this method will be less useful. Also, it may be difficult to pin point a specific source in densely developed areas.
 - b. Smoke testing could also be used to identify illicit connections. Neighborhoods would need to be warned prior to use of smoke testing in their area. Also, this method may not be effective if the illicit discharges are flowing full or are equipped with traps.
 - c. Dye testing would pinpoint a specific discharge. This would require access into buildings and inserting dye at all potential illicit discharges which will require the field staff to be thorough. Permission would be required to enter properties.
 6. Eliminate the illicit discharge once found.
 7. Confirm elimination of illicit discharges. This could either be done at the outfall or just downstream of the eliminated discharge.

At least initially, the goal of this program will not necessarily be to detect all illicit discharges to the MS4, but instead to focus on identifying the discharges that may actually impact water quality of receiving waters. For example, this program is focused on eliminating illicit discharges that are actually observed to be discharged to waters of the State as opposed to all discharges that may evaporate or infiltrate prior to being discharged from the MS4.

Throughout the implementation of the above program, efforts will be made to maximize public participation. Depending on the success of the public participation program,

interested citizens could provide a significant amount of labor to complete the fieldwork necessary to implement these program components. Public participation in this program will require organization and training of the volunteers to ensure the quality of work is adequate and defensible for any future corrective actions.

Outfalls where access could be hazardous or would require access onto private property will be investigated by Village or other contract employees and not members of the public. Assigned staff will receive appropriate training that includes Occupational Safety and Health Administration (OSHA) health and safety training as well as confined space entry training as needed to implement this program.

Any actions and documents generated in the detection and elimination of illicit discharges are filed at the Village DPW Complex and with the Building Department.

4.4 Outfall Mapping

An outfall map was created by the Village of Walden which maps 100% of the Village's stormsewer system. A map can be found in Appendix F. As of this revision of the SWMP Plan, there are 63 outfalls in the Village of Walden. All outfall locations have been verified as part of this program and new and newly discovered outfalls will be added to the MS4's mapping as needed.

4.5 Outfall Sewersheds

Outfall sewersheds will be delineated using the following method:

- Existing outfalls will be overlaid over the associated USGS topographic map.
- Sewersheds will be delineated following the topography surrounding each point. Sewersheds may extend outside of the urbanized area and municipal boundaries.
- Where information is available, connections within the stormsewer system which divert stormwater in a direction other than that dictated by topography will be taken into account and the storm sewershed will be adjusted as necessary.

Sewershed mapping of the currently identified outfalls has been completed and is included in Appendix F.

4.6 Outfall Reconnaissance Inventory

All outfalls within the Village of Walden's jurisdiction will be inspected at least once every five (5) years. The Outfall Observation Form found in Appendix G will be filled out during this task. All field sheets generated will be filed at the Village DPW Complex.

4.7 Municipal Regulations

Chapter 252 of the municipal code prohibits illicit discharges into the small MS4 including enforcement procedures was adopted by the Village of Walden on November 13, 2007. A copy of this law is included in Appendix D.

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The municipal law adopted was certified as being equivalent to the State's model illicit discharge local law by the Village attorney, Kevin Dowd, Esq.

4.8 Non-Stormwater Discharges

The Village of Walden prohibits polluting non-stormwater discharges such as illegal dumping and those listed in Table 4.1, as necessary, through implementation and enforcement of the IDDE municipal regulations. Inspection forms to be used during this task can be found in Appendix G. All field sheets generated will be filed at the Village DPW Complex.

The MS4 has the following priority areas of concern as it relates to polluting non-stormwater discharges:

- Tin Brook

4.9 Public Education

Public employees, businesses, and the general public will be informed of the hazards associated with illegal discharges and improper disposal of wastes as part of Minimum Measure 1 – Public Education and Outreach.

4.10 Best Management Practices (BMPs)

The Illicit Discharge Detection and Elimination BMPs, found in Table 4.3, have been chosen by the Village of Walden to meet the requirements of this permit. Each BMP has an associate responsible party(ies) and/or Department(s), measurable goals, and timeline to assist in evaluate the success of the Village’s public education/outreach program.

**TABLE 4.3
MCM 3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION BEST MANAGEMENT PRACTICES
VILLAGE OF WALDEN**

| Best Management Practice (BMP) | Responsible Party(ies)/Department | Measurable Goals | Timeline |
|--|-----------------------------------|--|--|
| Include illicit discharge education as part of the overall education associated with this program. | Village Manager, SMO | Watershed protection education is included in school programs. | On-going |
| Inspect stormwater outfalls within MS4’s jurisdiction | SMO, DPW | Inspect all stormwater outfalls once every five (5) years. | On-going |
| Delineate preliminary boundaries of the storm sewersheds to each stormwater outfall. | SMO, Village Engineer | | All preliminary boundaries delineated by March 9, 2010 |
| Verify all outfall locations | SMO, DPW | | All verified by summer of 2007 |
| Certification of the local law adopted which prohibits illicit discharges into the small MS4. | Village Attorney | Local law (Chapter 252) was adopted November 13, 2007 by the Village | Completed |

4.11 Required Implementation Reporting

The Village shall report on the following items annually:

- Number and percent of outfalls mapped
- Number of illicit discharges detected and eliminated
- Percent of outfalls for which an outfall reconnaissance inventory has been performed
- Status of system mapping
- Activities in and results from informing public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.
- Regulatory mechanism status - certification that law is equivalent to the State's model IDDE law (if not already completed and submitted with an earlier annual report)
- Report on effectiveness of program

5.0 MCM 4 - CONSTRUCTION SITE RUNOFF CONTROL

5.1 Responsible Party(ies) and/or Department(s)

| | |
|------------------------|---------------------------|
| <u>Village Manager</u> | <u>Building Inspector</u> |
| John Revella | Dean Stickle |
| 1 Municipal Square | 1 Municipal Square |
| Walden, NY 12586 | Walden, NY 12586 |
| (845) 788-2177 | (845) 788-2177 |

5.2 State and Federal Regulatory Requirements

Typical construction activities have significant potential to impact surface water quality in the State by creating the potential for sediment, construction materials, waste, and other pollutants to be transported to surface waters by wind or stormwater runoff. As a result, the USEPA promulgated construction site runoff control regulations as part of its Phase I stormwater permitting program. This program focused on projects that disturb more than five acres of land (total project). As part of this program, these projects were required to secure a New York State Pollutant Discharge Elimination System (SPDES) permit and prepare a detailed Stormwater Pollution Control Plan that specifies soil erosion and sediment control as well as waste and product management practices to control potential impacts.

The New York State Department of Environmental Conservation (NYSDEC) currently regulates activities that disturb more than one acre of land through the use of a general permit for the SPDES program. This general permit requires submittal of a Notice of Intent to NYSDEC and the preparation of a Stormwater Pollution Prevention Plan (SWPPP) that must be certified by a professional such as a professional engineer.

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The Phase II program that has been promulgated by the USEPA requires regulated municipalities to develop, implement, and enforce a program to reduce pollutants in stormwater runoff to small municipal storm sewer system (MS4) from construction projects that result in a land disturbance of greater than or equal to one acre (greater than or equal to 5,000 square feet in the New York City Watershed East of the Hudson River Watershed). Sites smaller than this would still require a permit if the land is part of a plan, such as a subdivision, that alters a total area greater than one acre.

The specific state and federal requirements of the construction site runoff control minimum measures, which the Village must develop and implement, are as follows:

1. Develop, implement, and enforce a program that:
 - a. Provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-15-002), unless more stringent requirements are contained within general SPDES permit (GP-0-15-003)
 - b. Addresses stormwater runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Control of stormwater discharges from construction activity disturbing less than one acre must be included in the program if:
 - i. that construction activity is part of a larger common plan of development or sale that would disturb one acre or more
 - ii. if controlling such activities in a particular watershed is required by the Department
 - c. Includes a law, ordinance or other regulatory mechanism to require a SWPPP for each applicable land disturbing activity that includes erosion and sediment controls that meet the State's most up-to-date technical standards:
 - i. this mechanism must be equivalent to one of the versions of the "NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control"
 - ii. equivalence must be documented using the NYSDEC Gap Analysis Workbook or be certified by the attorney representing the small MS4 as being equivalent to one of the versions of the sample laws if one of the sample laws is not adopted or if a modified version of the sample law is adopted
 - d. Contains requirements for construction site operators to implement erosion and sediment control management practices
 - e. Allows for sanctions to ensure compliance to the extent allowable by State or local law
 - f. Contains requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality
 - g. Describes procedures for SWPPP review that incorporate consideration of potential water quality impacts and review of individual pre-construction SWPPPs to ensure consistency with State and local sediment and erosion control requirements

- i. ensure that the individuals performing the reviews are adequately trained and understand the State and local sediment and erosion control requirements
 - ii. all SWPPPs must be reviewed for sites where the disturbance is one acre or greater
 - iii. after review of SWPPPs, the permittee must utilize the “SWPPP Acceptance Form” created by the Department and required by the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002) when notifying construction site owner / operators that their plans have been accepted and approved by the permittee
- h. Describes procedures for receipt and follow up on complaints or other information submitted by the public regarding construction site storm water runoff
- i. Describes procedures for site inspections and enforcement of erosion and sediment control measures including steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water
 - i. the permittee must ensure that the individual(s) performing the inspections are adequately trained and understand the State and local sediment and erosion control requirements. Adequately trained means receiving inspector training by a Department sponsored or approved training
 - ii. all sites must be inspected where the disturbance is one acre or greater
 - iii. covered entities must determine that it is acceptable for the owner or operator of a construction project to submit the Notice of Termination (NOT) to the Department by performing a final site inspection themselves or by accepting the Qualified Inspector's final inspection certification(s) required by the SPDES General Permit for Stormwater Discharges from Construction Activity. The principal executive officer, ranking elected official, or duly authorized representative (see Part VI.J.) shall document their determination by signing the “MS4 Acceptance” statement on the NOT.
- j. Educates construction site owner / operators, design engineers, municipal staff and other individuals to whom these regulations apply about the municipality's construction stormwater requirements, when construction stormwater requirements apply, to whom they apply, the procedures for submission of SWPPPs, construction site inspections, and other procedures associated with control of construction stormwater
- k. By two years from the date this permit is issued, ensures that construction site operators have received erosion and sediment control training before they do work within the permittee's jurisdiction. Small home site construction (construction where the Erosion and Sediment Control Plan is developed in accordance with Appendix E of the “New York Standards

and Specifications for Erosion and Sediment Control”) is exempt from the requirements below:

- i. training may be provided by the Department or other qualified entities (such as Soil and Water Conservation Districts)
 - ii. the permittee is not expected to perform such training, but they may cosponsor training for construction site operators in their area
 - iii. the permittee may ask for a certificate of completion or other such proof of training
 - iv. the permittee may provide notice of upcoming sediment and erosion control training by posting in the building department or distribute with building permit application
- l. Establishes and maintains an inventory of active construction sites, including the location of the site, owner / operator contact information
 - m. Develop, record, periodically assess and modify as needed measurable goals
 - n. Select appropriate construction stormwater BMPs and measurable goals to ensure the reduction of all POCs in stormwater discharges to the MEP.

5.3 Municipal Regulations

Chapter 252 (originally adopted as Chapter 104) of the municipal code provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities, addresses stormwater runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, and requires a SWPPP for each applicable land disturbing activity was adopted by the Village of Walden on November 27, 2007. A copy of this law is included in Appendix D.

The municipal law adopted was certified as being equivalent to the “NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control” by the Village attorney, Kevin Dowd, Esq.

5.4 SWPPP Review Procedures

The Village of Walden uses the following procedures in the review of submitted SWPPPs.

- Planning Board passes SWPPPs to the planning board engineer for review.
- Planning board engineer works with SWPPP preparer and applicant through an iterative comment and response process.
- The SWPPP and stormwater design are found to be complete when all local and state regulations are met.
- The planning board engineer completes the “MS4 SWPPP Acceptance Form” and returns to the applicant.

The Village uses a standard form when reviewing each SWPPP to ensure their adequacy. A copy of this form is located in Appendix H. All SWPPP review forms and MS4

SWPPP Acceptance Forms are filed at the Village DPW Complex and with the Planning Board.

5.5 Public Submittals

All public complaints and submitted documents regarding construction site stormwater runoff will be responded to by the SMO. To date, the Village has received no public complaints. If any complaints or submitted documents are received, they will be filed with the Building Department.

5.6 Site Inspections and Enforcement Procedures

The Village of Walden uses the following procedures in the inspection and enforcement of construction sites. All construction sites disturbing one or more acres of land will be inspected by the Village.

- Based on the location of the construction, size of disturbance, and receiving water body, the SMO may require inspection before, during, and after completion of the construction activity.
- In order to receive inspections, the applicant shall notify the SMO at least 48 hours prior to the start of construction, installation of sediment and erosion control measures, site clearing, rough grading, final grading, end of construction season, final landscaping, and establishment of landscaping in public areas.
- If violations are found, the applicant will be notified and no further work shall be conducted except for site stabilization. Work may continue after the violations are corrected and the all work has been approved by the SMO.

There are currently no active construction sites within the Village of Walden. As construction begins in the Village, an inventory will be added to Appendix L. Copies of all past construction site inspection reports are filed with the Village Building Department.

5.7 Erosion and Sediment Control Education

In Orange County, the Orange County Soil and Water Conservation District (OCSWCD) is the lead agency in the hosting of NYSDEC approved erosion and sediment control trainings for contractor and site inspectors (4-hour training). The OCSWCD maintains a database of local contractors. All those noted in the database are notified of upcoming trainings. In addition to OCSWCD advertisement, the NYSDEC lists all upcoming trainings throughout the State on their “Calendar of Stormwater Training” (www.dec.ny.gov/chemical/8699.html). If possible, the training will also noticed on the MS4s municipal webpage.

The SMO, the primary Village site inspector, is adequately trained for this responsibility. Certificates of Attendance for erosion and sediment control training are included in Appendix I as well as in the employee’s personnel file.

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Construction site owner / operators, design engineers, municipal staff and other individuals to whom these regulations apply are notified of the MS4s regulations, SWPPP submittal, and construction site inspections by SMO.

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5.8 Best Management Practices (BMPs)

The Construction Site Stormwater Runoff Control BMPs, found in Table 5, have been chosen by the Village of Walden to meet the requirements of this permit. Each BMP has an associate responsible party(ies) and/or Department(s), measurable goals, and timeline to assist in evaluate the success of the Village's public education/outreach program.

**TABLE 5
MCM 4 - CONSTRUCTION SITE STORMWATER RUNOFF CONTROL BEST MANAGEMENT PRACTICES
VILLAGE OF WALDEN**

| Best Management Practice (BMP) | Responsible Party(ies)/Department | Measurable Goals | Timeline |
|--|--|---|--|
| Cosponsor a NYSDEC approved Erosion and Sediment Control Training | Orange County Soil and Water Conservation District | | By May 1, 2010, ensure that construction site operators have received erosion and sediment control training before they do work within the Village |
| Develop a checklist for designers and reviewers to confirm the minimum application requirements are met, potential water quality impacts are considered, and BMPs are used appropriately. The checklist can be compiled from the Village regulations and the New York Standards and Specifications for Erosion and Sediment Control (Blue Book). | SMO, Village Engineer | | |
| Develop a common construction site inspection form. | SMO, Village Engineer | | |
| Inspect construction sites. | SMO, Village Engineer | Inspect all construction sites disturbing one acre or greater | On-going |

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| | | | |
|--|------------------|---|-----------|
| Create and maintain MS4 inventory of active construction sites. | SMO, DPW | Update MS4 inventory of active construction sites as needed | On-going |
| Certification of the local law adopted which describes construction site stormwater runoff control into the small MS4. | Village Attorney | Local law (Current Chapter 252 but originally adopted as Chapter 126A) adopted November 27, 2007 by the Village | Completed |

5.9 Required Implementation Reporting

The Village shall report on the following items annually:

- Number of SWPPPs reviewed
- Number and type of enforcement actions
- Percent of active construction sites inspected once
- Percent of active construction sites inspected more than once
- Number of construction sites authorized for disturbances of one acre or more
- Report on effectiveness of program

6.0 MCM 5 - POST-CONSTRUCTION RUNOFF CONTROL

6.1 Responsible Party(ies) and/or Department(s)

| | |
|------------------------|---------------------------|
| <u>Village Manager</u> | <u>Building Inspector</u> |
| John Revella | Dean Stickles |
| 1 Municipal Square | 1 Municipal Square |
| Walden, NY 12586 | Walden, NY 12586 |
| (845) 788-2177 | (845) 788-2177 |

6.2 State and Federal Regulatory Requirements

New development and redevelopment projects have significant potential to increase pollutant loadings to receiving surface waters. These pollutants include solids, nutrients, organics, metals, as well as physical impacts such as increases in temperature. The USEPA Phase I stormwater permitting program did not specifically address the post-development impacts from land development that were not classified as “industrial activities,” but the NY SPDES General Permit for stormwater discharges associated with construction activities does include requirements for “post-construction stormwater management” (Part III.B.2).

NYSDEC’s Phase II stormwater management regulations require regulated municipalities to:

1. Develop, implement, and enforce a program that:
 - a. provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-15-002), unless more stringent requirements are contained within latest SPDES general permit (GP-0-15-003)
 - b. addresses stormwater runoff from new development and redevelopment projects to the small MS4 from projects that result in a land disturbance of greater than or equal to one acre. Control of stormwater discharges from projects of less than one acre must be included in the program if:
 - i. that project is part of a larger common plan of development or sale
 - ii. if controlling such activities in a particular watershed is required by the Department;

- c. includes a law, ordinance or other regulatory mechanism to require post-construction runoff controls from new development and re-development projects to the extent allowable under State or local law that meet the State's most up-to-date technical standards:
 - i. the mechanism must be equivalent to one of the versions of the "NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control;" and
 - ii. equivalence must be documented; by adoption of one of the sample local laws without changes; by using the NYSDEC Gap Analysis Workbook; or by adoption of a modified version of the sample law, or an alternative law, and, in either scenario and certification by the attorney representing the small MS4 that the adopted law is equivalent to one of the sample local laws.
- d. includes a combination of structural or non-structural management practices (according to standards defined in the most current version of the NYS Stormwater management Design Manual) that will reduce the discharge of pollutants to the MEP. In the development of the watershed plans, municipal comprehensive plans, open space preservation programs, local law, ordinances and land use regulations, covered entities must consider principles of Low Impact Development (LID), Better Site Design (BSD), and other Green Infrastructure practices to the MEP. In the development of the watershed plans, municipal comprehensive plans, open space preservation programs, local law, ordinances and land use regulations, covered entities must consider smart growth principles, natural resource protection, impervious area reduction, maintaining natural hydrologic conditions in developments, riparian buffers or set back distances for protection of environmentally sensitive areas such as streams, wetlands, and erodible soils.
 - i. covered entities are required to review according to the Green Infrastructure practices defined in the Design Manual at a site level, and are encouraged to review, and revise where appropriate, local codes and laws that include provisions that preclude green infrastructure or construction techniques that minimize or reduce pollutant loadings.
 - ii. if a stormwater management practice is designed and installed in accordance with the New York State Stormwater Management Design Manual or has been demonstrated to be equivalent and is properly operated and maintained, then MEP will be assumed to be met for post-construction stormwater discharged by the practice.
- e. describes procedures for SWPPP review that incorporate consideration of potential water quality impacts and review of individual pre-construction SWPPPs to ensure consistency with local post-construction stormwater requirements
 - i. ensure that the individuals performing the reviews are adequately trained and understand the State and local post construction stormwater requirements

- ii. ensure that the individuals performing the reviews for SWPPPs that include post-construction stormwater management practices are qualified professionals or under the supervision of a qualified professional
 - iii. all SWPPPs must be reviewed for sites where the disturbance is one acre or greater
 - iv. after review of SWPPPs, the permittee must utilize the "SWPPP Acceptance Form" created by the Department and required by the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002) when notifying construction site owner / operators that their plans have been accepted and approved by the Village
 - v. utilize available training from sources such as Soil and Water Conservation Districts, Planning Councils, The New York State Department of State, USEPA, and/or the Department to educate municipal boards and Planning and Zoning Boards on low impact development principles, better site design approach, and green infrastructure applications.
- f. By May 1, 2009 establish and maintain an inventory of post-construction stormwater management practices within the MS4's jurisdiction. At a minimum, include practices discharging to the small MS4 that have been installed since March 10, 2003, all practices owned by the small MS4, and those practices found to cause or contribute to water quality standard violations.
- i. the inventory shall include at a minimum: location of practice (street address or coordinates); type of practice; maintenance needed per the NYS Stormwater Management Design Manual, SWPPP, or other provided documentation dates and type of maintenance performed
- g. Ensures adequate long-term operation and maintenance of management practices by trained staff, including inspection to ensure that practices are performing properly.
- i. The inspection shall include inspection items identified in the maintenance requirements (NYS Stormwater Management Design Manual, SWPPP, or other maintenance information) for the practice. Permittees are not required to collect stormwater samples and perform specific chemical analysis
- h. Covered entities may include in the SWMP Plan provisions for development of a banking and credit system. MS4s must have an existing watershed plan based on which offsite alternative stormwater management in lieu of or in addition to on-site stormwater management practices are evaluated. Redevelopment projects must be evaluated for pollutant reduction greater than required treatment by the state standards. The individual project must be reviewed and approved by the Department. Use of a banking and credit system for new development is only acceptable in the impaired watersheds to achieve the no net increase requirement and watershed improvement strategy areas to achieve

pollutant reductions in accordance with watershed plan load reduction goals. A banking and credit system must at minimum include:

- i. Ensure that offset exceeds a standard reduction by factor of at least 2
 - ii. Offset is implemented within the same watershed
 - iii. Proposed offset addresses the POC of the watershed
 - iv. Tracking system is established for the watershed
 - v. Mitigation is applied for retrofit or redevelopment
 - vi. Offset project is completed prior to beginning of the proposed construction
 - vii. A legal mechanism is established to implement the banking and credit system
2. Develop, implement, and provide adequate resources for a program to inspect development and re-development sites by trained staff and to enforce and penalize violators;
 3. Develop, record, periodically assess and modify as needed measurable goals
 4. Select appropriate post-construction stormwater BMPs and measurable goals to ensure the reduction of all POCs in stormwater discharges to the MEP.

6.3 Municipal Regulations

Chapter 252 of the municipal code requires post-construction runoff controls from new development and re-development projects was adopted by the Village of Walden on November 27, 2007. A copy of this law is included in [Appendix D](#).

The municipal law adopted was certified as being equivalent to the “NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control” by attorney, Kevin Dowd, Esq.

6.4 Approved Practices

6.4.1 Structural

The Village of Walden approves the use of all structural practices found in the latest NYS Stormwater Management Design Manual.

6.4.2 Non-Structural

The Village of Walden approves the use of all non-structural practices found in the NYS Stormwater Management Design Manual.

- All practices found in the NYS Stormwater Design Manual.

6.5 SWPPP Review Procedures

For the Village’s SWPPP review procedures, refer to Section 5.4.

6.6 Inventory of Post-Construction Stormwater Practices

An inventory of post-construction stormwater practices located within Village of Walden can be found in Appendix K. This inventory includes practices discharging to the Village that have been installed since March 10, 2003, all practices owned by the Village, and those practices found to cause or contribute to water quality standard violations. The inventory lists the location of each practice (street address or coordinates), type of practice, maintenance needed as per the NYS Stormwater Management Design Manual, SWPPP, or other provided documentation and a history of maintenance performed including dates and activity.

6.7 Long-Term Operation and Maintenance of Management Practices

In order to ensure long-term operation and maintenance of stormwater management practices within the Village of Walden, the Department of Public Works will inspect structures regularly. The inspection shall include inspection items identified in the maintenance requirements (NYS Stormwater Management Design Manual, SWPPP, or other maintenance information) for the practice. The practice will be maintained by the responsible party or the Village in accordance with the maintenance requirement. Typical maintenance procedures for most stormwater practices are included in Appendix K.

6.8 Best Management Practices (BMPs)

The Post-Construction Stormwater Management BMPs, found in Table 6, have been chosen by the Village of Walden to meet the requirements of this permit. Each BMP has an associate responsible party(ies) and/or Department(s), measurable goals, and timeline to assist in evaluate the success of the Village's post-construction stormwater management program.

TABLE 6
MCM 5 - POST-CONSTRUCTION STORMWATER MANAGEMENT PROGRAM BEST MANAGEMENT PRACTICES
VILLAGE OF WALDEN

| Best Management Practice (BMP) | Responsible Party(ies)/Department | Measurable Goals | Timeline |
|--|-----------------------------------|--|--------------------------|
| Develop a common post-construction stormwater practices inspection form for use throughout the County. | SMO, DPW, Village Engineer | | |
| Review SWPPPs | Planning Board Engineer | Review all SWPPPs for sites where the disturbance is one acre or greater. | On-going |
| Establish and maintain an inventory of post-construction stormwater management practices within the MS4's jurisdiction. | SMO, DPW | | Completed by May 1, 2009 |
| The Village requires developers to post an escrow account to fund Village inspections of stormwater practices during construction. | Building Department | | On-going |
| Certification of the local law adopted which describes post-construction site stormwater runoff control into the small MS4. | Village Attorney | Local law (Chapter 252, originally adopted as Chapter 126A) adopted November 27, 2007 by the Village | Completed |

6.9 Required Implementation Reporting

The Village shall report on the following items annually:

- Number of SWPPPs reviewed
- Number and type of enforcement actions
- Number and type of post-construction stormwater management practices inventoried
- Number and type of post-construction stormwater management practices inspected
- Number and type of post-construction stormwater management practices maintained
- Regulatory mechanism status - certification that regulation is equivalent to one of the "NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control"
- Report on effectiveness of program

7.0 MCM 6 - POLLUTION PREVENTION / GOOD HOUSEKEEPING

7.1 Responsible Party(ies) and/or Department(s)

| | |
|------------------------|---------------------------|
| <u>Village Manager</u> | <u>Building Inspector</u> |
| John Revella | Dean Stickles |
| 1 Municipal Square | 1 Municipal Square |
| Walden, NY 12586 | Walden, NY 12586 |
| (845) 788-2177 | (845) 788-2177 |

7.2 State and Federal Regulatory Requirements

The goal of this element of the stormwater pollution prevention plan is twofold. The first is to minimize the pollutants that enter the Municipal Separate Storm Sewer System (MS4) prior to being discharged to surface waters of the state. This would consist of pollutants from land uses that drain to Walden's MS4 as well as those pollutants that are swept from municipally owned streets, parking lots, and facilities. The second goal is to minimize pollution caused by activities at municipal owned facilities such as storage of materials and wastes where they are exposed to precipitation.

The Phase II program that has been promulgated by NYSDEC requires regulated municipalities to develop a pollution prevention/good housekeeping element that achieves the above referenced goals. This element largely consists of properly maintaining existing infrastructure such as roads and drainage structures as well as implementing appropriate pollution control practices at municipal facilities. Specific regulatory requirements for this element of the stormwater pollution prevention plan are:

1. Develop and implement a pollution prevention / good housekeeping program for municipal operations and facilities that:
 - a. Addresses municipal operations and facilities that contribute or potentially contribute POCs to the small MS4 system. The operations and facilities may include, but are not limited to: street and bridge maintenance; winter

- road maintenance; stormwater system maintenance; vehicle and fleet maintenance; park and open space maintenance; municipal building maintenance; solid waste management; new construction and land disturbances; right-of-way maintenance; marine operations; hydrologic habitat modification; or other
- b. At a minimum frequency of once every three years, perform a self assessment of all municipal operations addressed by the SWMP Plan to:
 - i. Determine the sources of pollutants potentially generated by the permittee's operations and facilities
 - ii. Identify the municipal operations and facilities that will be addressed by the pollution prevention and good housekeeping program, if it is not done already
 - c. Determines management practices, policies, procedures, etc. that will be developed and implemented to reduce or prevent the discharge of (potential) pollutants. Refer to management practices identified in the "NYS Pollution Prevention and Good Housekeeping Assistance Document" and other guidance materials available from the EPA, State, or other organizations
 - d. Prioritizes pollution prevention and good housekeeping efforts based on geographic area, potential to improve water quality, facilities or operations most in need of modification or improvement, and permittee's capabilities
 - e. Addresses pollution prevention and good housekeeping priorities
 - f. Includes an employee pollution prevention and good housekeeping training program and ensures that staff receive and utilize training
 - g. Requires third party entities performing contracted services, including but not limited to street sweeping, snow removal, lawn / grounds care, etc., to meet permit requirements as the requirements apply to the activity performed
 - h. Requires municipal operations and facilities that would otherwise be subject to the NYS Multi-sector General Permit (MSGP, GP-0-12-001) for industrial stormwater discharges to prepare and implement provisions in the SWMP Plan that comply with Parts III. A, C, D, E, and F of the MSGP. The permittee must also perform monitoring and record keeping in accordance with Part IV. of the MSGP. Discharge monitoring reports must be attached to MS4 annual report. Those operations or facilities are not required to gain coverage under the MSGP. Implementation of the above noted provisions of the SWMP Plan will ensure that MEP is met for discharges from those facilities
2. Consider and incorporate cost effective runoff reduction techniques and green infrastructure in the routine upgrade of the existing stormwater conveyance systems and municipal properties to the MEP. Some examples include replacement of closed drainage with grass swales, replacement of existing islands in parking lots with rain gardens, or curb cuts to route the flow through below grade infiltration areas or other low cost improvements that provide runoff treatment or reduction.
 3. Develop, record, periodically assess and modify as needed measurable goals

4. Select appropriate pollution prevention and good housekeeping BMPs and measurable goals to ensure the reduction of all POCs in stormwater discharges to the MEP.
5. Adopt techniques to reduce the use of fertilizers, pesticides, and herbicides, as well as potential impact to surface water.

7.3 Department of Public Works

Village DPW Complex

12 Bradley Lane
Walden, New York 12586
(845) 831-0932

7.3.1 Street and Bridge Maintenance

Approximately 24 miles of roads are maintained by the Village Department of Public Works. The Village performs street sweeping of roads a minimum of twice annually in the spring and fall. Currently 2 Village employees are trained for operation of the street sweeper owned by the Village of Walden. Areas in need of maintenance are cleaned more frequently. Materials removed from the roads during street sweeping are brought to the DPW Complex and disposed as solid waste by a third party waste hauler.

7.3.2 Winter Road Maintenance

The Village Department of Public Works is responsible for winter road maintenance of Village roads and Village owned parking areas. The Village currently uses a 2:1 sand/salt mix. During a typical winter, approximately 1,000 tons of salt are used. Sand and salt are stored, covered, at the DPW Complex. During snow removal operations, excess snow can be stockpiled at the DPW Complex.

7.3.3 Stormwater System Maintenance

The Village Department of Public Works is responsible for maintenance of the catch basins, stormsewer inlets, stormsewer pipe, and 63 outfalls within the Village of Walden. Locations of catch basins, stormsewer inlet, and stormsewer pipe shall be located and mapped. Outfall locations are shown on the Outfall and Sewershed Mapping provided in Appendix G. Catch basins are inspected and cleaned at least once every two years, maintenance records are retained by the Village. The catch basins are cleaned using the vacuum from the street sweeper. Materials removed from catch basins during maintenance are disposed at DPW Complex as solid waste. Drainage ditches are maintained a minimum of once every year using a grading bucket. Stormwater outfalls are inspected a minimum of once every year, records of the outfall inspections are retained by the Department of Public Works. Post-construction stormwater practices maintained by the Department of Public Works are list in Appendix L.

7.3.4 Vehicle and Fleet Maintenance

Village vehicles are maintained at the Village DPW Complex. Maintenance is performed both indoors and outdoors. Floor drains in the DPW Complex have been sealed. The Village currently maintains 25 vehicles, records of maintenance are retained by the Department of Public Works. Village vehicles are washed at the Village Garage using biodegradable soaps.

7.3.5 Solid Waste Management

The Village contracts with a third party, County Waste, for garbage collection. The Village has regulations prohibiting littering, problem areas are posted and monitored by the police and Village personnel. Violators are fined in accordance with the Village regulations. The Department of Public Works collects brush and Christmas trees, brings them to the DPW complex, and disposed by mulching and composting. The Village DPW is also responsible for collecting trash along the Village roadways.

7.3.6 Hazardous Materials Management

Hazardous materials will be handled in accordance with NYSDEC regulations. Hazardous materials created from maintenance of Village Vehicles are stored at Village Garage. 3rd party contractors are used for disposal of the stored hazardous materials. Waste oil and batteries produced by the Village during maintenance of Village owned vehicles and equipment are collected and recycled by a third party hauler. Village residents are educated about recycling hazardous waste through public education materials.

7.3.7 Tree Management

Village code states that permits are required to plant, cut, remove, disturb, spray, or place fixtures upon trees in any highway, sidewalk, or public place. Wastes produced during tree maintenance are transported to DPW Complex, chipped, and stockpiled for use by Village residents.

7.3.8 Spill Response

Spill response will be handled in accordance with NYSDEC regulations. Spill kits are kept at the DPW Complex for handling of small spills. Larger spills will be handled by the Village fire department and 3rd party licensed contractors. MSDSs for all materials used by the Village DPW are kept in the garage at the DPW Complex.

7.3.9 Personnel Training Program

Village of Walden Department of Public Works personnel are provided stormwater pollution prevention and erosion and sediment control training, as needed depending on the personnel roles. Currently all the Department Heads of Public Works have received stormwater pollution prevention and erosion and sediment control training.

7.4 Parks Department and Recreation Department

Parks Department Location

Wooster Grove Park

East Main Street

The Village of Department of Parks maintains the following parks: James Olley Community Park (located on Sherman Avenue), Bradley Park (located on Bradley Lane), Wooster Grove Park (located on East Main Street), Martin Besdesky Park (located on Pond Road), and Alfred Place Park (located on Alfred Place). The parks contain softball/baseball fields, football fields, soccer fields, tennis courts, basketball courts, playgrounds, picnic pavilions, picnic areas, walking paths, and a beach. The parks maintained by the Village DPW total approximately 150 acres. Vehicles, equipment, and chemicals used by the Parks Department are stored at Wooster Grove Park.

7.4.1 Park and Open Space Maintenance

The Village Department of Parks is responsible for maintenance of all the Village parks, including mowing and drainage structure cleaning. The DPW owns mowers and various other pieces of equipment used for park maintenance, which are stored at Wooster Grove Park. Maintenance of equipment is handled by the Department of Parks. Lawn clippings are mulched during mowing.

7.4.2 Fertilizer and Pesticide Application

The Village contracts to a third party for application of fertilizer and pesticides at all Village parks.

7.4.3 Solid Waste Management

The Department of Parks is responsible for collection of trash from receptacles at all Village parks. All trash is deposited at a dumpster located at Wooster Park, to be collected by the Village trash hauler.

7.4.4 Pet and Bird Waste

Village code requires pet owners to clean up waste from their pets. The Village has posted the pet-waste regulations at the Village parks. The police and Village personnel monitor the parks. Violators are fined in accordance with the Village regulations.

7.4.5 Spill Response

Spill response will be handled in accordance with NYSDEC regulations.

7.5 Best Management Practices (BMPs)

The Pollution Prevention/Good Housekeeping for Municipal Operations BMPs, found in Table 7, have been chosen by the Village of Walden to meet the requirements of this permit. Each BMP has an associate responsible party(ies) and/or Department(s), measurable goals, and timeline to assist in evaluate the success of the Village's pollution prevention/good housekeeping for municipal operations program.

**TABLE 7
 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS
 BEST MANAGEMENT PRACTICES
 VILLAGE OF WALDEN**

| Best Management Practice (BMP) | Responsible Party(ies)/Department | Measurable Goals | Timeline |
|--|-----------------------------------|------------------|----------|
| Perform a self assessment of all municipal operations addressed by this SWMP Plan. | SMO, Village Manager | | Annually |

7.6 Required Implementation Reporting

The Village shall report on the following items annually:

- Indicate the municipal operations and facilities that the pollution prevention and good housekeeping program assessed
- Describe, if not done so already, the management practices, polices and procedures that have been developed, modified, and / or implemented and report, at a minimum, on the items below that the permittee's pollution prevention and good housekeeping program addressed during the reporting year:
 - Acres of parking lot swept
 - Miles of street swept
 - Number of catch basins inspected and, where necessary, cleaned
 - Post-construction control stormwater management practices inspected and, where necessary, cleaned
 - Pounds of phosphorus applied in chemical fertilizer
 - Pounds of nitrogen applied in chemical fertilizer
 - Pounds of pesticides / herbicides applied as pure product.
- Staff training events and number of staff trained
- Report on effectiveness of program. Note: If the pollution prevention and good housekeeping program addresses other operations than what is listed above, the Village shall report on items that will demonstrate program effectiveness.

8.0 ANNUAL REPORTING

8.1 Responsible Party(ies) and/or Department(s)

| | | |
|------------------------|---------------------------|-----------------------|
| <u>Village Manager</u> | <u>Building Inspector</u> | <u>DPW Supervisor</u> |
| John Revella | Dean Stickles | Fred Perna |
| 1 Municipal Square | 1 Municipal Square | 12 Bradley Lane |
| Walden, NY 12586 | Walden, NY 12586 | Walden, NY 12586 |
| (845) 788-2177 | (845) 788-2177 | (845) 778-1724 |

8.2 Reporting

By the aforementioned general permit, the Village of Walden is required to collect and report information regarding the development and implementation of their SWMP Plan and evaluate the MS4s compliance annually. The annual reporting period ends March 9th of each year. The Village's annual report will be submitted to the NYSDEC for review prior to June 1 of each year. The most current annual report can be found in Appendix J.

8.3 Recordkeeping

As per the recordkeeping requirements of this permit, the Village will keep records required by this permit including, but not limited to, records that document SWMP Plan, records included in the SWMP Plan, NOI, past annual reports, and comments from the public and the NYSDEC for at least five (5) years after they are generated. Records,

including the NOI and the SWMP Plan, will be available to the public at reasonable times during regular business hours.

9.0 APPENDICES

- Appendix A NYSDEC SPDES General Permit for Stormwater Discharges (GP-0-15-003)
- Appendix B Notice of Intent for MS4
- Appendix C Village Organizational Charts
- Appendix D Illicit Discharge Detection and Elimination Municipal Code
Construction and Post-Construction Runoff Control Municipal Code
- Appendix E Examples of Education and Outreach Materials
- Appendix F Outfall Sewershed Map and MS4 Area Map
- Appendix G Illicit Discharge Detection and Elimination Forms
- Appendix H Miscellaneous Village Forms
- Appendix I Certificates of Attendance for Training of Village Employees
- Appendix J Latest MS4 Annual Report
- Appendix K Inventory of Post-Construction Stormwater Practices
Stormwater Practice Maintenance Procedures
- Appendix L Inventory of Active Construction Sites
- Appendix M Completed MS4 SWPPP Review Forms
MS4 SWPPP Acceptance Forms

Appendix A

NYSDEC SPDES General Permit for Stormwater Discharges (GP-0-15-003)





Department of
Environmental
Conservation

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

From

MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

Permit No. GP-0-15-003

Issued Pursuant to Article 17, Titles 7, 8 and Article 70
of the Environmental Conservation Law

Effective Date: May 1, 2015

Expiration Date: April 30, 2017

Modification Dates

July 15, 2015 - Correction of Table IX.C and Appendix 2 to reflect GP-0-10-002 October
2011 Modification

January 13, 2016 - Additional reporting for covered entities in the watersheds listed in
Part IX

Stu Fox
Deputy Chief Permit Administrator


Authorized Signature

1 / 12 / 16
Date

Address: NYS DEC
Division of Environmental Permits
625 Broadway, 4th Floor
Albany, N.Y. 12233-17

PREFACE

Pursuant to Section 402 of the Clean Water Act ("CWA"), operators of *small municipal separate storm sewer systems* ("small MS4s"), located in *urbanized areas* ("UA") and those *additionally designated* by New York State are unlawful unless they are authorized by a *National Pollutant Discharge Elimination System* ("NPDES") permit or by a state permit program. New York's *State Pollutant Discharge Elimination System* ("SPDES") is an NPDES-approved program with permits issued in accordance with the *Environmental Conservation Law* ("ECL").

Only those *small MS4 operators* who *develop and implement a stormwater management program* (SWMP) and obtain permit coverage in accordance with Part II of this *SPDES general permit* are authorized to *discharge stormwater* from their *small MS4* under this *SPDES general permit*.

A *covered entity* authorized under GP-0-10-002 as of the effective date of GP-0-15-003, shall be permitted to discharge in accordance with the renewed permit, GP-0-15-003, upon the submission of their Annual Report, unless otherwise notified by the *Department*.

An *operator* not authorized under GP-0-15-003 may¹ obtain coverage under this *SPDES general permit* by submitting a Notice of Intent (NOI) to the address provided on the NOI form. For newly regulated MS4s, authorization under this *SPDES general permit* is effective upon written notification from the *Department* of the receipt of a complete NOI. Copies of this *SPDES general permit* and the NOI for New York are available by calling (518) 402 - 8109 or at any *Department of Environmental Conservation (Department)* regional office (Appendix A). They are also available on the *Department's* website:

<http://www.dec.ny.gov/permits/6045.html>

Submitting an NOI is an affirmation that an initial *SWMP* has been *developed* and will be *implemented* in accordance with the terms of this *SPDES general permit*.

*** Note: all italicized words within this *SPDES general permit* are defined in Part X. Acronyms and Definitions.**

¹ The term "may" is used to recognize that there are circumstances under which the *operator* is ineligible for coverage under this *SPDES general permit* because of exclusionary provisions of this permit. *Operators* that are excluded from coverage under this *SPDES general permit* as provided for in Part I, for example, are not authorized to *discharge* under this permit. This clarification also applies to situations in which an NOI has been submitted; submission of an NOI by an entity excluded from *SPDES general permit* coverage does not authorize the *small MS4* to *discharge stormwater* runoff under the authority of this *SPDES general permit*.

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 SPDES GENERAL PERMIT FOR DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)**

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Part I. PERMIT COVERAGE AND LIMITATIONS

A. Permit Application

1. This *SPDES general permit* authorizes *discharges of stormwater* from *small municipal separate storm sewer systems* ("MS4"s) as defined in 40 CFR 122.26(b)(16), provided all of the eligibility provisions of this *SPDES general permit* are met.

2. Exempt Non-Stormwater Discharges. The following non-stormwater *discharges* are exempt from the need for *SPDES general permit* coverage unless the *Department* has determined them to be substantial contributors of pollutants to a particular *small MS4* applying for coverage under this *SPDES general permit*. If the *Department* determines that one or more of the *discharges* listed below is a substantial contributor of pollutants to a *small MS4*, the identified *discharges* will be considered *illicit*. In that event, the *covered entity* must eliminate such discharges by following the *illicit discharge* minimum control measure ("MCM") requirements (See Part VII.A.3 or VIII.A.3, and Part IX.A.3, B.3, C.3, and D.3 where applicable).
 - a. water line flushing
 - b. landscape irrigation
 - c. diverted stream flows
 - d. rising ground waters
 - e. uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20))
 - f. uncontaminated ground water
 - g. discharges from potable water sources
 - h. foundation drains
 - i. air conditioning condensate
 - j. irrigation water
 - k. springs
 - l. water from crawl space and basement sump pumps
 - m. footing drains
 - n. lawn and landscape watering runoff provided that all pesticides and fertilizers have been applied in accordance with the manufacturer's product label;
 - o. water from individual residential car washing
 - p. flows from riparian habitats and wetlands
 - q. dechlorinated swimming pool discharges
 - r. residual street wash water
 - s. discharges or flows from firefighting activities

(Part I.A.2.)

- t. dechlorinated water reservoir discharges
- u. any SPDES permitted discharge.

Even if the non-stormwater discharges are determined not to be substantial contributors of pollutants, the *Department* recommends that the *covered entity's stormwater management program* ("SWMP") include public education and outreach activities directed at reducing pollution from these discharges.

B. Limitations on Coverage

The following are not authorized by this *SPDES general permit*:

1. *Stormwater discharges* whose unmitigated, direct, indirect, interrelated, interconnected, or interdependent impacts would jeopardize a listed endangered or threatened species or adversely modify designated critical habitat;
2. *Stormwater discharges* or *implementation of a covered entity's SWMP*, which adversely affect properties listed or eligible for listing in the National Register of Historic Places, unless the covered entity is in compliance with requirements of the National Historic Preservation Act and has coordinated with the appropriate State Historic Preservation Office any activities necessary to avoid or minimize impacts;
3. *Stormwater discharges* to territorial seas not of the State of New York, the contiguous zone, and the oceans unless such *discharges* are in compliance with the ocean *discharge* criteria of 40 CFR 125 subpart M;
4. *Stormwater discharges*, the permitting of which is prohibited under 40 CFR 122.4 and/ or the *ECL*;

C. Exemption Criteria

For *stormwater discharges* from a designated *small MS4* that are mixed with non-*stormwater* or *stormwater* associated with *industrial activity*, the *Department* may determine them to be exempt from the requirements of this *SPDES general permit* if the *discharges* are:

1. Effectively addressed by and in compliance with a different *SPDES general permit* or an *individual SPDES permit*; or
2. Identified by and in compliance with Part I.A.2 of this *SPDES general permit*.

Part II. OBTAINING PERMIT COVERAGE

A. Permit coverage is obtained by submission of a complete and accurate Notice of Intent.

B. Permit coverage is public noticed by the Department.

NOIs will be public noticed and an opportunity for public comment provided on the contents of submitted NOIs.

a. NOIs and the location of the SWMPs and Annual Reports for existing MS4s will be posted in the Environmental Notice Bulletin (ENB).

b. A deadline of 28 calendar days from the posting in the ENB will be provided for receiving comments.

c. After the public comment period has expired, the *Department* may extend the public comment period, require submission of an application for an individual SPDES permit or alternative *SPDES general permit*, or accept the NOI or SWMP as complete.

C. Continuance of Permit Coverage for Covered Entities Authorized by GP-0-10-002 (Continuing Covered Entities)

As of May 1, 2015, entities with coverage under GP-0-10-002 will continue to have authorization to discharge on an interim basis for up to 180 days from the effective date of this *SPDES general permit*. Covered entities may gain coverage under this *SPDES general permit* by submission of their 2014 Annual Report due in June 2015. For public participation purposes, the updated Annual Report will be considered equivalent to submission of an NOI.

When the operator changes, a new operator is added, or the individual responsible for the SWMP changes, these changes must be indicated on the MCC form submitted in accordance with Part V.D. It is not necessary to submit a revised Notice of Intent (NOI).

D. Permit Coverage for Covered Entities Newly Designated Under GP-0-15-003 (Small MS4s not Previously Authorized by GP-0-10-002)

Certain *small MS4s* designated by 40CFR Section 122.32(a)(1) were not authorized by GP-0-10-002, but are now required to gain coverage under this *SPDES general permit*. The *small MS4s* were not previously authorized because they were either:

- required to gain coverage under GP-0-10-002, but were granted a waiver from that requirement;
- were not required to gain coverage under GP-0-10-002 based on the designation criteria, but they are now within an *Additionally Designated Area*; or

(Part II.D.)

- were otherwise not permitted under GP-0-10-002.
- 1. In order for *stormwater discharges* from *small MS4s* to be newly authorized under this *SPDES general permit*, an operator must:
 - a. within 180 days of receiving written notification from the *Department* that a permit for discharges from MS4s is required, prepare an NOI using the form provided by the *Department* (or a photocopy thereof); and
 - b. submit the NOI, signed in accordance with Part VI.J of this *SPDES general permit*, to:

NOTICE OF INTENT
NYS DEC, Bureau of Water Permits
625 Broadway, 4th Floor
Albany, NY 12233-3505
- 2. *Operators* who submit a complete NOI in accordance with the requirements of this *SPDES general permit* are authorized to *discharge stormwater* from *small MS4s*, under the terms and conditions of this *SPDES general permit*, upon written notification from the Department that a complete NOI has been received.

E Small MS4s Not Required to Gain Coverage

Operators of unregulated *small MS4s* may apply for coverage under this *SPDES general permit* at any time, per Part II.B.

F. Extension of Permit Coverage to Covered Entity's Full Jurisdiction

Operators of traditional land use control MS4s must extend the implementation of minimum control measures (MCMs) 4 and 5 in accordance with *Criterion 3* of the Designation Criteria or apply for a waiver, if eligible.

Operators of all regulated *small MS4s* may also extend the implementation of any of the six MCMs to areas under their control, but outside of the existing area covered by this *SPDES general permit*. This may be done by describing the program components (MCMs) being extended and the geographic extent to which they are being extended in the annual report (Part V.C.) and indicating in the Municipal Compliance Certification (MCC) form (Part V.D.) that the program was extended to the *covered entity's* full jurisdiction.

(Part II.)

G. Single Entity to Cover the MS4

A single entity may gain coverage for, and on behalf of, one or more regulated MS4s to implement a part of an MCM, one, or all the MCMs. A single entity shall be defined by watershed, municipal boundaries, special district boundaries, or other specifically defined boundaries. The single entity must demonstrate to the *Department* that it was formed in accordance with applicable state and/or local legislation, and that it has the legal authority and capacity (financial, resources, etc.) to meet the requirements of this *SPDES general permit*. Depending on the MCM(s) implemented, the single entity shall demonstrate that it has the following capacities, as applicable for each MCM that the single entity is seeking coverage under this *SPDES general permit*:

1. Initiate and administer appropriate enforcement procedures,
2. Collect, finance, bond or otherwise borrow money for capital projects,
3. Control the management and operation of the storm sewer system,
4. Implement best management practices at all municipal facilities discharging to the MS4, and
5. Obtain access to property that may be necessary for siting stormwater management facilities and/or practices.

The single entity must submit a complete NOI form to the *Department*, detailing which of the regulated MS4s it will gain coverage for and which of the MCMs, or parts of MCMs, it will implement for each particular regulated MS4. A copy of the document forming the single entity, and detailing the legal authority and capacity of the single entity, must be attached to the NOI. Prior to the single entity gaining coverage under this *SPDES general permit*, each regulated MS4, for which the single entity will implement one or more MCM must submit a complete notice of termination (NOT). This notice shall specify which of the minimum control measures the single entity will implement for the MS4 and which of the minimum control measures the MS4 will implement.

Part III. SPECIAL CONDITIONS

A. Discharge Compliance with Water Quality Standards

Where a *discharge* is already authorized under this *SPDES general permit* and is later determined to directly or indirectly cause or have the reasonable potential to cause or contribute to the violation of an applicable *water quality standard*, the *Department* will notify the *covered entity* of such violation(s) and may take enforcement actions for such violations. The *covered entity* must take all necessary actions to ensure future *discharges* do not directly or indirectly cause or contribute to the violation of a *water quality standard*, and the *covered entity* must document these actions in the *SWMP*.

(Part III.A.)

Compliance with this requirement does not preclude, limit, or eliminate any enforcement activity as provided by the Federal and / or State law for the underlying violation. Additionally, if violations of applicable water quality standards occur, then coverage under this *SPDES general permit* may be terminated by the *Department* in accordance with 750-1.21(e), and the *Department* may require an application for an alternative *SPDES general permit* or *individual SPDES permit* may be issued.

B. Impaired Waters

1. Impaired Waters Without Watershed Improvement Strategies or Future TMDLs

If a *small MS4 discharges* a stormwater pollutant of concern (POC) to an *impaired* water listed in Appendix 2, the covered entity must ensure no net increase in its *discharge* of the listed POC to that water.

By January 8, 2013, *covered entities* must assess potential sources of discharge of stormwater POC(s), identify potential stormwater pollutant reduction measures, and evaluate their progress in addressing the POC(S). Newly authorized covered entities must perform the above tasks within 5 years after gaining coverage under this SPDES general permit. Covered entities must evaluate their SWMP with respect to the MS4's effectiveness in ensuring there is no net increase discharge of stormwater POC(s) to the impaired waters for *storm sewersheds* that have undergone non-negligible changes such as changes to land use and impervious cover greater than one acre, or stormwater management practices during the time the MS4 has been covered by this *SPDES general permit*. This assessment shall be conducted for the portions of the *small MS4 storm sewershed* that *discharge* to the listed waters (see Appendix 2). The assessment shall be done using *Department* supported modeling of pollutant loading.

If the modeling shows increases in loading of the POC, the SWMP must be modified to reduce the loading to meet the no net increase requirement. The subsequent annual reports must contain an assessment of priority stormwater problems, potential management practices that are effective for reduction of stormwater POC(s), and document a gross estimate of the extent and cost of the potential improvements.

2. Watershed Improvement Strategies

The SWMPs for *covered entities* in the watersheds listed below must be modified to comply with the following requirements and the watershed improvement strategies. *Covered entities* implementing the pollutant-specific BMPs in addition to the BMPs required of all *covered entities* will be taking satisfactory steps towards achieving compliance with TMDL requirements. *Covered entities* under the MS4 *SPDES general*

(Part III.B.2.)

permit are required to make best efforts to participate in locally based watershed planning efforts that involve the NYSDEC, other covered entities, stakeholders and other interested parties for implementation of load reduction BMPs. Covered entities may form a Regional Stormwater Entity (RSE) to implement stormwater retrofits collectively. The *covered entities* must ensure that discharges of the *POC* to the *TMDL* waterbody are reduced through these or additional changes to the *SWMP* so that the waste load allocation is met.

MS4s are required to meet the reduction of the POC defined by the TMDL program defined in Part IX of this *SPDES general permit*. By the deadlines defined in Part IX of the general permit, *covered entities* must assess their progress and evaluate their *SWMP* to determine the *MS4's* effectiveness in reducing their discharges of *TMDL POC(s)* to *TMDL* water bodies. Newly designated watershed improvement strategy areas must perform the assessment within 5 years from authorization under this *SPDES general permit*. This assessment shall be conducted for the portions of the *small MS4 storm sewershed* that are within the *TMDL watershed*. The assessment shall be done using *Department* supported modeling of pollutant loading from the *storm sewershed*. The *covered entities* or an RSE must prepare and implement, participate in or utilize the results of existing or ongoing ambient water quality monitoring programs to validate the accuracy of models and evaluate the effectiveness of the additional BMPs for watershed improvement strategies.

If the modeling shows that loading of the POC is not being reduced to meet the waste load allocation, the *SWMP* must be modified to reduce the pollutant loading to meet the waste load allocation.

Each regulated MS4 is responsible for an individual load reduction, which is a fraction of the total required load reduction in the TMDL. If MS4s form an RSE and stormwater retrofits are approached collectively, the *Department* would allow compliance with this condition of the *SPDES general permit* to be achieved on a regional basis.

In this case the load reduction requirement for each participating MS4 will be aggregated, to create an RSE load reduction, to allow design and installation of retrofits where they are most feasible, without restricting MS4s to site retrofit projects within their municipal boundaries.

Each member of an RSE is in compliance if the aggregate reduction number associated with the retrofit plans is met. If the aggregate number is not met, each of the participating MS4s would be deemed non-compliant until such time as they had met their individual load reduction requirements.

(Part III.B.2.)

a. New York City Watershed East of the Hudson River

Covered entities shall modify their *SWMP* to meet the additional requirements as set forth in Part IX.A to address phosphorus as the *POC* for the portion of their *storm sewershed* in the watershed. A map of the watershed is shown in Appendix 3.

b. Other Phosphorus Watersheds

Covered entities shall modify their *SWMP* to meet the additional requirements as set forth in Part IX.B to address phosphorus as the *POC* for the portion of their *storm sewershed* in the watershed. Maps of the watersheds are shown in Appendices 4, 5, and 10.

c. Pathogen Watersheds

Covered entities shall modify their *SWMP* to meet the additional requirements as set forth in Part IX.C to address pathogens as the *POC* for the portion of their *storm sewershed* in any of the watersheds. Maps of the watersheds are shown in Appendices 6, 7, and 9.

d. Nitrogen Watersheds

Covered entities shall modify their *SWMP* to meet the additional requirements as set forth in Part IX.D to address nitrogen as the *POC* for the portion of their *storm sewershed* in the watershed. Maps of the watersheds are shown in Appendix 8.

3. Future TMDL Areas

If a *TMDL* is approved in the future by EPA for any waterbody or watershed into which a *small MS4 discharges*, the *covered entity* must review the applicable *TMDL* to see if it includes requirements for control of *stormwater discharges*. If a *covered entity* is not meeting the *TMDL* wasteload allocations, it must, within 180 days of written notification from the *Department*, modify its *SWMP* to ensure that the reduction of the *POC* specified in the *TMDL* is achieved. It will be the *MS4's* obligation to meet the waste load allocations specified in the *TMDL* through modification of its *SWMP plan* according to the schedule of Part IX of this *SPDES general permit*.

Modifications must be considered for each of the six *MCMs*. Refer to assistance documents or enhanced requirements for specific pollutants in documents on the *Department's* website for modifications specific to the *TMDL*. Revised *SWMPs* must include updated schedules for implementation.

(Part III.B.3.)

Within three years of having modified its SWMP to ensure that reduction of the POC specified in the TMDL is achieved, covered entities in future TMDL areas must assess their progress and evaluate their *SWMP* to determine the *MS4's* effectiveness in reducing their discharges of *TMDL POC(s)* to *TMDL* water bodies. This assessment shall be conducted for the portions of the *small MS4 storm sewershed* that are within the *TMDL* watershed. The assessment shall be done using *Department* supported modeling of pollutant loading from the *storm sewershed*.

Part IV. Stormwater Management Program (SWMP) Requirements

A. SWMP Background

Covered entities must develop (for newly authorized *MS4s*, implement), and enforce a *SWMP* designed to reduce the discharge of pollutants from *small MS4s* to the maximum extent practicable ("MEP") in order to protect water quality and to satisfy the appropriate water quality requirements of the *ECL* and the *CWA*. The objective of the permit is for *MS4s* to assure achievement of the applicable water quality standards. *Covered entities* under GP-0-10-002 must have prepared a *SWMP plan* documenting modifications to their *SWMP*. See Part X.B. (Definitions) for more information about the *SWMP* and *SWMP plan*.

The *SWMP* and *SWMP plan* may be created by an individual *covered entity*, by a shared effort through a group or coalition of individual *covered entities*, or by a third party entity. The *SWMP plan* shall be made readily available to covered entity's staff, to the public and to *Department* and EPA staff.

B. Cooperation Between Covered Entities Encouraged

The *Department* encourages *covered entities* to cooperate when developing and implementing their *SWMP*². However, each *covered entity* is responsible for obtaining its own permit coverage and for filing its own NOI. Irrespective of any agreements between *covered entities*, each individual *covered entity* remains legally responsible for satisfying all GP-0-15-003 requirements and for its own discharges. If one *covered entity* is relying on another *covered entity* to satisfy one or more of its permit obligations, that fact must be noted on the *covered entity's* MCC form. The other entity must, in fact,

² For example, villages are encouraged to cooperate with towns, towns with counties, and adjacent counties with each other. In addition, municipal governments are encouraged to coordinate and cooperate with non-traditional *MS4s* such as DOT, school and fire districts, Federal and State facilities located within and adjacent to their jurisdictions. Sewer boards, water boards, or other non-traditional entities are encouraged to partner with the municipality (municipalities) that they serve.

(Part IV.B.)

implement the MCM(s) and must agree to *implement* the MCM(s) on the first *covered entity's* behalf. This agreement between the two or more parties must be documented in writing and signed by both (all) parties. Part IV.G. below may apply if such an agreement is not already in place. The agreement must be included in the *SWMP plan*, and be retained by the *covered entity* for the duration of this *SPDES general permit*, including any administrative extensions of the permit term.

Covered entities that are working together to *develop (for newly authorized MS4s) or implement* their *SWMPs* are encouraged to complete shared annual reports. *Covered entities* may also hold a group meeting to present their annual reports to the public and to receive comments on their annual reports. These options are discussed in more detail in Part V.C.2.

C. SWMP Coverage Area

At a minimum, *covered entities* are required to *develop (for newly authorized MS4s) and implement SWMPs* in the automatically designated *urbanized areas ("UA")* and *additionally designated areas* (40CFR Section 122.32(a)(1) or 122.32(a)(2)) under their jurisdiction³.

SWMP coverage shall include all UA or additionally designated areas within the *covered entity's* jurisdiction that drain into their *small MS4* and subsequently *discharge to surface waters of the State* directly or through other *small MS4s*.

Operators of *small MS4s* whose jurisdiction includes regulated and unregulated areas are encouraged to include their entire jurisdiction in their *SWMP* (refer to Part II.D).

D. SWMP Development and Implementation for Covered entities Authorized by GP-0-10-002(Continuing Covered entities)

Covered entities authorized under GP-0-10-002 shall continue to fully *implement* their *SWMP*, unless otherwise stated in this *SPDES general permit*. A *covered entity* may modify its *SWMP* if it determines changes are needed to improve *implementation* of its *SWMP*. Any changes to a *SWMP* shall be reported to the *Department* in the *MS4's*

³ The purpose of this section is to minimize conflicts between adjacent *small MS4s*. For the purposes of this *SPDES general permit*, areas under the *covered entity's* jurisdiction shall mean areas where the legal authority exists for the subject *covered entity* to *develop and implement* an *SWMP* including the six MCMs. It is not a permit requirement for *covered entities* to *implement* and enforce any portion of their *SWMP* in any area that is under the jurisdiction of another *covered entity*. For example, if a portion of a town drains directly into a stormwater system owned and operated by the State DOT, and this area of the town is regulated, the DOT will not be required to implement and enforce any portion of a *SWMP* in the area lying outside of its right of way. In this case, the town would be required to implement the program in the subject area in accordance with this *SPDES general permit*, this despite the fact that the subject drainage does not directly enter the town's system.

(Part IV.D)

annual report and Municipal Compliance Certification (MCC) form (See Part V.C and V.D).

E. SWMP Development and Implementation for Newly Regulated Covered entities (Small MS4s not Previously Authorized by GP-0-10-002)

Certain *small MS4s* designated by 40CFR Section 122.32(a)(1) were not authorized by GP-0-10-002, but are now required to gain coverage under this *SPDES general permit*. The *small MS4s* were not previously authorized because they were either:

- required to gain coverage under GP-0-10-002, but were granted a waiver from that requirement;
- were not required to gain coverage under GP-0-10-002 based on the designation criteria, but they now meet the additional designation criteria in NYS DEC "Designation Criteria for Identifying Regulated Municipal Separate Storm Sewer Systems" ; or
- were otherwise not permitted under GP-0-10-002.

Operators of small MS4s newly regulated under this *SPDES general permit* must develop an initial *SWMP* and provide adequate resources to fully *implement* the *SWMP* no later than three years from the date of the individual MS4's authorization.

A newly regulated *covered entity* may modify its *SWMP* to comply with the terms and conditions of this *SPDES general permit* if it determines changes are needed to improve *implementation* of its *SWMP*. Any changes to a *SWMP* shall be documented in the *SWMP plan* and reported to the *Department* in the annual report (See Part V.C).

Covered entities are required to make steady progress toward full *implementation* in the first three years after the date of authorization. Full *implementation* of *SWMPs* for newly regulated *small MS4s* is expected no later than three years from the date of coverage under this *SPDES general permit*.

F. Minimum Control Measures

Each *covered entity* is required to develop (*for newly authorized MS4s*) and implement a *SWMP* that satisfies the requirements for each of six required program components, known as minimum control measures (MCMs).

The MCMs for *traditional land use control MS4s* are listed in Part VII. The MCMs for *traditional non-land use control MS4s* and *non-traditional MS4s* are listed in Part VIII. Additional MCMs that *covered entities* in watersheds with improvement strategies must address, referred to in Part III.B.2, are described in Part IX.

(Part IV.)

G. Reliance Upon Third Parties

This section applies when a *covered entity* relies upon any third party entity to *develop* or *implement* any portion of its *SWMP*. Examples of such entities include, but are not

limited to a non-government, commercial entity that receives payment from the *covered entity* for services provided (for example businesses that create policies or procedures for *covered entities*, perform illicit discharge identification and track down, maintain roads, remove snow, clean storm sewer system, sweep streets, etc. as contracted by the covered entity).

The covered entity must, through a signed certification statement, contract or agreement provide adequate assurance that the third parties will comply with permit requirements applicable to the work performed by the third party. The certification statement, contract or other agreement must:

- provide adequate assurance that the third party will comply with permit requirements;
- identify the activities that the third party entity will be responsible for and include the name and title of the person providing the signature;
- the name, address and telephone number of the third party entity;
- an identifying description of the location of the work performed; and
- the date the certification statement, contract or other agreement is signed.

Example certification language is provided below:

Contracted Entity Certification Statement:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the (covered entity's name) stormwater management program and agree to implement any corrective actions identified by the (covered entity's name) or a representative. I also understand that the (covered entity's name) must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from the Municipal Separate Storm Sewer Systems ("MS4s") and that it is unlawful for any person to directly or indirectly cause or contribute to a violation of water quality standards. Further, I understand that any non-compliance by (covered entity's name) will not diminish, eliminate, or lessen my own liability."

Part V. PROGRAM ASSESSMENT, RECORD KEEPING, REPORTING AND CERTIFICATION REQUIREMENTS

A. Assessment

Covered entities are required to collect and report information about the *development* and *implementation* of their SWMPs. Specific information the *small MS4s* are required to collect is identified in Parts VII or VIII, depending on the type of *small MS4*. The *small MS4s* are encouraged to collect additional information that will help them evaluate their SWMP. Collection of information over time will facilitate the evaluation of the *covered entity's SWMP* by allowing the examination of trends in the information collected.

The *covered entity* must conduct an annual evaluation of its program compliance, the appropriateness of its identified *BMPs*, meeting new permit requirements, and progress towards achieving its identified *measurable goals*, which must include reducing the *discharge* of pollutants to the *MEP*.

Where the evaluation shows that the SWMP is not reducing discharges to the *MEP*, the SWMP shall be revised to reduce discharges to the *MEP*. Update to the SWMP and the SWMP plan must be completed within a year from the annual evaluation of their SWMP with an implementation schedule no later than 3 years from the annual evaluation.

B. Recordkeeping

The *covered entity* must keep records required by this *SPDES general permit* (records that document *SWMP*, records included in *SWMP plan*, other records that verify reporting required by the permit, NOI, past annual reports, and comments from the public and the *Department*, etc.) for at least five (5) years after they are generated. Records must be submitted to the *Department* within 5 business days of receipt of a *Department* request for such information. The *covered entity* shall keep duplicate records (either hard copy or electronic), to have one copy for public observation and a separate working copy where the *covered entity's* staff, other individuals responsible for the *SWMP* and regulators, such as *Department* and EPA staff can access them. Records, including the NOI and the *SWMP plan*, must be available to the public at reasonable times during regular business hours.

C. Annual Reporting

1. Annual Report Submittal

The annual reporting period ends March 9 of each year. The annual report must be received in the *Department's* Central Office, electronic or hard copy, no later than June 1 of each reporting year. If electronic, submit in accordance with procedures set forth by the *Department*. If mailed, send to the address below:

(Part V.C.1.)

NYS DEC "MS4 Coordinator"
Bureau of Water Permits
625 Broadway, 4th Floor
Albany, NY 12233-3505

Failure to submit a complete annual report and a complete MCC form (Part V.D) shall constitute a permit violation.

a. Annual Report Submittal for Newly Regulated Covered entities (Small MS4s not Previously Authorized by GP-0-10-002)

Newly regulated covered entities *developing* their *SWMP* are to submit their Annual Report in a format provided by the *Department*. They will provide, at a minimum, the information on the annual report form and the information required by Parts VII or VIII.

Newly regulated *covered entities* are required to submit their first annual report the year that authorization is granted if authorization is granted on or before December 31 of that reporting year.

b. Annual Report Submittal for Covered entities Authorized by GP-0-10-002 (Continuing Covered entities)

Beginning with annual reports due in 2010 *covered entities* implementing their *SWMP* shall submit, at a minimum, information specified by the *Department* in Part VII or VIII in a format provided by the *Department*.

2. Shared Annual Reporting and Submittal

Covered entities working together to *develop* (for newly authorized MS4s) and /or *implement* their *SWMPs* may complete a shared annual report. The shared annual report is an annual report that outlines and explains group activities, but also includes the tasks performed by individual *covered entities* (*BMPs, measurable goals, schedules of planned activities, etc.*). To facilitate the submission of one annual report for the entire group of *covered entities*, individual *covered entity's* activities may be incorporated into the report by either:

- providing the details specific to their *small MS4(s)* to a person(s) who incorporates that information into the group report. That one group report is submitted to the *Department* for all participating *small MS4s*; or
- providing the details specific to their *small MS4(s)* on a separate sheet(s) that will be attached with the one group report.

(Part V.C.2.)

Regardless of the method chosen, each *covered entity* must, by June 1 of the annual reporting year:

- a. Provide their individual MCC form (see Part V.D) to be submitted with the shared annual report. Each *covered entity* must sign and submit an MCC form to take responsibility for all of the information in the annual report, which includes specific endorsement or acceptance of the shared annual report on behalf of the individual *covered entity*;
- b. Present their draft annual report at a meeting (see Part VII.A.2.d or Part VIII.A.2.d for more information). For completed shared annual reports, the report may be presented by each participating individual *covered entity* at an existing *municipal* meeting or may be made available for comments on the internet. Additionally, *covered entities* participating in shared annual reporting may combine meetings to have a group or regional meeting. While the group meeting is allowable, each *covered entity* shall ensure that local public officials and members of the public are informed about the program, activities and progress made; and
- c. Submit a summary of any comments received and (intended) responses on the individual *covered entity's* information or the shared annual report information, as applicable. This information should be included with the annual report submission. Changes made to the *SWMP* in response to comments should be described in the annual report.

3. Annual Report Content

The annual report shall summarize the activities performed throughout the reporting period (March 10 to March 9) and must include at a minimum:

- a. The status of compliance with permit conditions, including Watershed Improvement Strategy conditions;
- b. An assessment/evaluation of:
 - i. the appropriateness of the identified *BMPs*;
 - ii. progress towards achieving the statutory goal of reducing the *discharge* of pollutants to the *MEP*; and
 - iii. the identified *measurable goals* for each of the *MCMs*.
- c. Results of information collected and analyzed, monitoring data, and an assessment of the *small MS4's SWMP* progress toward the statutory goal of reducing the *discharge* of pollutants to the *MEP* during the reporting period. This could include results from required *SWMP* reporting, estimates of pollutant loading (from parameters such as identified illicit discharges, physically interconnected *small MS4s* that may contribute substantially to pollutant

loadings from the *small MS4*) and pollutant load reductions (such as illicit discharges removed). This assessment may be submitted as an attachment;

- d. When required to be completed, results of assessments of effectiveness in meeting no net increase requirements or TMDL loadings as required by III. B.1 and 2. These results must be submitted in evaluation forms and as an attachment;
- e. A summary of the stormwater activities planned to be undertaken during the next reporting cycle (including an implementation schedule);
- f. Any change in identified *BMPs* or *measurable goals* and justification for those changes;
- g. Notice that a *small MS4* is relying on another entity to satisfy some or all of its permit obligations (if applicable);
- h. A summary of the public comments received on this annual report at the public presentation required in Part VII.A.2. or VIII.A.2. And, as appropriate, how the *small MS4* will respond to comments and modify the program in response to the comments;
- i. A statement that the final report and, beginning in 2009, the SWMP plan are available for public review and the location where they are available; and
- j. The information specified under the reporting requirements for each MCM (Part VII or VIII).

D. Interim Progress Reporting

In accordance with 6 NYCRR Part 750-1.14, *covered entities* that own or operate MS4s within the watersheds listed in Part IX must submit to the Department interim progress reports no later than December 1 of each year. These interim progress reports will identify the activities that have been performed during the period of March 10 through September 9 of each year, which demonstrates that there is progress being made by the *covered entity* towards completion of the reduction requirements, prescribed in Part IX. Progress made during the period of September 10 through March 9 shall be reported with the annual report that is due no later than June 1 of each year.

E. Annual Report Certification

A signed original hard copy and a photocopy of the MCC form must be submitted to the *Department* no later than June 1 of each reporting year. If the annual report is mailed (Part V.C. above), the MCC form must be submitted with the annual report.

The MCC form, provided by the *Department*, certifies that all applicable conditions of Parts IV, VII, VIII and IX of this *SPDES general permit* are being *developed, implemented* and complied with. It must be signed by an individual as described in Part VI.J.2. The certification provided by the MCC form does not affect, replace or negate the certification required under Part VI.J.2 (d). If compliance with any requirement cannot be certified to on the MCC form, a complete explanation with a description of corrective measures must be included as requested on the MCC form.

Failure to submit a complete annual report (Part V.C.) and a complete MCC form shall constitute a permit violation.

Part VI. STANDARD PERMIT CONDITIONS

A. General Authority to Enforce

Three of the MCMs (illicit discharge detection and elimination, construction site *stormwater* runoff control and post-construction *stormwater* management) require local laws, ordinances or other regulatory mechanisms to ensure successful implementation of the MCMs. Some *covered entities*, however, are not enabled by state law to adopt local laws or ordinances. Those *covered entities* (typically non-traditional MS4s and traditional, non-land use control MS4s) are expected to utilize the authority they do possess to create or modify existing regulatory mechanisms, including but not limited to contracts, bid specifications, requests for proposals, etc. to ensure successful implementation.

B. Duty To Comply

A *covered entity* must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the CWA and the *ECL* and is grounds for enforcement action.

C. Enforcement

Failure of the *covered entity*, its contractors, subcontractors, agents and/or assigns to strictly adhere to any of the *SPDES general permit* requirements contained herein shall constitute a permit violation. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to \$37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

D. Continuation of the Expired SPDES General Permit

This *SPDES general permit* expires five years from the effective date of this permit. However, an administratively extended *SPDES general permit* continues in force and effect until the *Department* issues a new permit, unless a *covered entity* receives written notice from the *Department* to the contrary. *Operators* of the *MS4s* authorized under the administratively extended expiring *SPDES general permit* seeking coverage under the new *SPDES general permit* must refer to the terms within the new *SPDES general permit* to continue coverage.

E. Technology Standards

Covered entities, in accordance with written notification by the *Department*, must comply with all applicable technology-based effluent standards or limitations promulgated by EPA pursuant to Sections 301 and 304 of the CWA. If an effluent standard or limitation more stringent than any effluent limitation in the *SPDES general permit* or controlling a pollutant not limited in the permit is promulgated or approved

(Part VI.E.)

after the permit is issued, the *SWMP plan* shall be promptly modified to include that effluent standard or limitation.

F. Need To Halt or Reduce Activity Not a Defense

It shall not be a defense for a *covered entity* in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this *SPDES general permit*.

G. Duty to Mitigate

The *covered entity* shall take all reasonable steps to minimize or prevent any *discharge* in violation of this *SPDES general permit* which has a reasonable likelihood of adversely affecting human health or the environment.

H. Duty to Provide Information

The *covered entity* shall, within five (5) business days, make available for inspection and copying or furnish to the *Department* or an authorized representative of the *Department* any information that is requested to determine compliance with this *SPDES general permit*. Failure to provide information requested shall be a violation of the terms of this *SPDES general permit* and applicable regulation.

I. Other Information

Covered entities who become aware of a failure to submit any relevant facts or have submitted incorrect information in the NOI or in any other report to the *Department* must promptly submit such facts or information.

J. Signatory Requirements

All NOIs, reports, certifications or information submitted to the *Department*, or that this *SPDES general permit* requires be maintained by the *covered entity*, shall be signed as follows:

1. Notices of Intent

All NOIs shall be signed by either a principal executive officer or ranking elected official. Principal executive officer includes (1) the chief executive officer of the municipal entity agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports Required and Other Information Requested

All reports required by this *SPDES general permit* and other information requested by the *Department*, including MCC forms (part V.D.), shall be signed by a person

(Part VI.J.2.)

described above or by a duly authorized representative of that person⁴. A person is a duly authorized representative only if:

- a. The authorization is made in writing by a person described in VI.J.1 above and submitted to the *Department*; and
- b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, or position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the *covered entity* (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and
- c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the MCC form; and
- d. **Changes to authorization.** If an authorization to discharge is no longer accurate because a different *covered entity* has responsibility for the overall operation of another *covered entity's* program, these changes must be indicated on the MCC form submitted to the *Department* per Part V.D.
- e. **Initial signatory authorization or changes to signatory authorization.** The initial signatory authorization must be submitted to the *Department* with any reports to be signed by a signatory representative. If a signatory authorization under VI.J.2 is no longer accurate because a different individual, or position, has responsibility for the overall operation of the facility, a new signatory authorization satisfying the requirements of VI.J.2 must be submitted to the *Department* with any reports to be signed by an authorized representative.
- f. **Certification.** Any person signing documents under paragraph VI.H shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the

⁴Positions that must be duly authorized include, but are not limited to, Environmental Directors, Deputy Supervisors, Safety and Environmental Managers, Assistant Directors, and Chief Health and Safety Officers.

(Part VI.J.2.f.)

information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information."

Under Part VI.J. (Signatory Requirements), it shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, and/or reports.

K. Penalties for Falsification of Reports

Article 17 of the *ECL* provides a civil penalty of \$37,500 per day per violation of this permit. Articles 175 and 210 of the New York State Penal Law provide for a criminal penalty of a fine and / or imprisonment for falsifying reports required under this permit..

L. Oil and Hazardous Substance Liability

Nothing in this *SPDES general permit* shall be construed to preclude the institution of any legal action or relieve the *covered entity* from any responsibilities, liabilities, or penalties to which it is or may be subject under section 311 of the CWA or section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

M. Property Rights

The issuance of this *SPDES general permit* does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations, nor does it limit, diminish and / or stay compliance with any terms of this permit.

N. Severability

The provisions of this *SPDES general permit* are severable, and if any provision of this *SPDES general permit*, or the application of any provision of this *SPDES general permit* to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

O. Requiring an Individual Permit or an Alternative General Permit

1. In its sole discretion, the *Department* may require any person authorized by this *SPDES general permit* to apply for and/or obtain either an *individual SPDES permit* or an alternative *SPDES general permit*. Where the *Department* requires a *covered entity* to apply for an *individual SPDES permit*, the *Department* will notify such

(Part VI.O.1.)

person in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for filing the application, and a deadline not sooner than 180 days from covered entity's receipt of the notification letter, whereby the authorization to discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Regional Office. The *Department* may grant additional time to submit the application upon request of the applicant.

2. Any *covered entity* authorized by this *SPDES general permit* may request to be excluded from the coverage of this *SPDES general permit* by applying for an *individual SPDES permit* or an *alternative SPDES general permit*. In such cases, a *covered entity* must submit an individual application or an application for an *alternative SPDES general permit* in accordance with the requirements of 40 CFR 122.26(c)(1)(ii), with reasons supporting the request, to the *Department* at the address for the appropriate Regional Office. The request may be granted by issuance of any *individual SPDES permit* or an *alternative SPDES general permit* if the reasons cited by the *covered entity* are adequate to support the request.
3. When an individual *SPDES permit* is issued to a discharger authorized to discharge under a *SPDES general permit* for the same discharge(s), the general permit authorization for outfalls authorized under the individual permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

P. Other State Environmental Laws

1. Nothing in this *SPDES general permit* shall be construed to preclude the institution of any legal action or relieve a *covered entity* from any responsibilities, liabilities, or penalties established pursuant to any applicable *State* law or regulation under authority preserved by section 510 of the CWA.
2. No condition of this *SPDES general permit* releases the *covered entity* from any responsibility or requirements under other environmental statutes or regulations.

Q. Proper Operation and Maintenance

A *covered entity* must 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 *covered entity* to achieve compliance with the conditions of this *SPDES general permit*. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems,

(Part VI.Q.)

installed by a *covered entity* only when necessary to achieve compliance with the conditions of the *SPDES general permit*.

R. Inspection and Entry

The *covered entity* shall allow the Commissioner of NYSDEC, the Regional Administrator of the USEPA, the applicable county health department, or their authorized representatives, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the *covered entity's* premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this *SPDES general permit*;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, including records required to be maintained for purposes of operation and maintenance; and
3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit.

S. Permit Actions

At the *Department's* sole discretion, this *SPDES general permit* may be modified, revoked, suspended, or renewed for cause at any time.

T. Anticipated noncompliance

The covered entity shall give advance notice to the *Department* of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Notification of planned changes or anticipated noncompliance does not limit, diminish and / or stay compliance with any terms of this permit.

U. Permit Transfers.

Coverage under this *SPDES general permit* is not transferable to any person except after notice to the *Department*. The *Department* may require modification or revocation and reissuance of this *SPDES general permit* to change the responsible party and incorporate such other requirements as may be necessary.

Part VII. MINIMUM CONTROL MEASURES - TRADITIONAL LAND USE CONTROL

A. Traditional Land-Use Control MS4 Minimum Control Measures (MCMs)

These MCMs apply to *traditional land use control MS4s* (cities, towns, villages). The SWMP for these *small MS4s* must be comprised of the 6 MCMs below. It is recommended that covered entities refer to assistance and guidance documents available from the *State* and EPA.

Continuing covered entities were required to develop a SWMP with the MCM requirements below by January 8, 2008 (if authorized by GP-02-02) and within three years of gaining coverage (if authorized by GP-0-10-002). Under this *SPDES general permit*, the continuing *covered entities* are required to implement their SWMP, including the MCM requirements below. Notwithstanding any sooner deadlines contained elsewhere within this permit, newly regulated *covered entities* are required to develop their SWMP, containing the MCM requirements below, within the first 3 years of coverage and then commence implementation.

For each of the elements of the SWMP plan, the *covered entity* must identify (i) the agencies and/or offices that would be responsible for implementing the SWMP plan element and (ii) any protocols for coordination among such agencies and/or offices necessary for the implementation of the plan element.

The *covered entity* may *develop* (for newly authorized MS4s) and /or *implement* their SWMP within their jurisdiction on their own. The *covered entity* may also *develop* (for newly authorized MS4s) and / or *implement* part or all of their SWMP through an intermunicipal program with another *covered entity(s)* or through other cooperative or contractual agreements with third parties that provide services to the *covered entities*.

1. Public Education and Outreach - SWMP Development / Implementation

At a minimum, all *covered entities* must:

- a. Identify *POCs*, waterbodies of concern, geographic areas of concern, target audiences;
- b. *Develop* (for newly authorized MS4s) and *implement* an ongoing public education and outreach program designed to describe to the general public and target audiences:
 - i. the impacts of *stormwater discharges* on waterbodies;
 - ii. *POCs* and their sources;
 - iii. steps that contributors of these pollutants can take to reduce pollutants in *stormwater runoff*; and

(Part VII.A.1.b.)

- iv. steps that contributors of non-*stormwater discharges* can take to reduce pollutants (non-*stormwater discharges* are listed in Part I.A.2);
- c. *Develop (for newly authorized MS4s), record, periodically assess, and modify as needed, measurable goals; and*
- d. Select and implement appropriate education and outreach *activities* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

- e. **Program *implementation* reporting for continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
 - i. list education / outreach *activities* performed for the general public and target audiences and provide any results (for example, number of people attended, amount of materials distributed, etc.);
 - ii. *covered entities* performing the education and outreach activities required by other MCMs (listed below), may report on those activities in MCM 1 and provide the following information applicable to their program:
 - IDDE education *activities* planned or completed for public employees, businesses, and the general public, as required by Part VII.A.3;
 - construction site *stormwater* control training planned or completed, as required by Part VII.A.4; and
 - employee pollution prevention / good housekeeping training planned or completed, as required by Part VII.A.6; andTo facilitate shared annual reporting, if the education and outreach activities above are implemented by a third party, and the third party is completing the associated portions of the annual report, that third party may report on the education and outreach activities within MCM 1 of the annual report and not within the MCMs that the education and outreach activities are required by,
 - iii. report on effectiveness of program, *BMP* and *measurable goal* assessment; and
 - iv. maintain records of all training activities.
- f. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
 - i. **program *development* deadlines and reporting:**

(Part VII.A.1.f.i.)

Complete in Year 1 (report changes in Year 2 and 3 as needed):

- list (and describe if necessary) *POCs*;
- *development* of education and outreach program and *activities* for the general public and target or priority audiences that address *POCs*, geographic areas of concern, and / or *discharges to 303(d) / TMDL* waterbodies;
- *covered entities* developing education and outreach programs required by other MCMs (listed below), may report on development (and implementation of those activities, if occurring during the three year development period) in MCM 1 and provide the following information applicable to their program:
 - IDDE education *activities* planned or completed for public employees, businesses, and the general public for IDDE, as required by Part VII.A.3;
 - Construction site stormwater control training planned or completed, as required by Part VII.A.4; and
 - employee pollution prevention / good housekeeping training planned or completed, as required by Part VII.A.6;

To facilitate shared annual reporting, if the education and outreach activities above are developed by a third party, and the third party is completing the associated portions of the annual report, that third party may report on the education and outreach activities within MCM 1 of the annual report and not within the MCMs that the education and outreach activities are required by.

ii. **program *implementation* reporting** as set forth in Part VII.A.1(e) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during *development* period.

2. Public Involvement / Participation - SWMP Development / Implementation

At a minimum, all *covered entities* must:

- a. Comply with the *State Open Meetings Law* and local public notice requirements, such as *Open Meetings Law*, when implementing a public involvement / participation program;
- b. *Develop (for newly authorized MS4s) and implement* a public involvement/participation program that:
 - i. identifies key individuals and groups, public and private, who are interested in or affected by the *SWMP* ;

(Part VII.A.2.b.)

- ii. identifies types of input the *covered entity* will seek from the key individuals and groups, public and private, to support *development* and *implementation* of the SWMP program and how the input will be used; and
 - iii. describes the public involvement / participation activities the *covered entity* will undertake to provide program access to those who want it and to gather the needed input. The activities included, but are not limited to a water quality hotline (report spills, dumping, construction sites of concern, etc.), stewardship activities like stream cleanups, storm drain marking, and volunteer water quality monitoring;
 - iv. provide the opportunity for the public to participate in the *development, implementation, review, and revision* of the *SWMP*.
- c. **Local stormwater public contact.**
Identify a local point of contact for public concerns regarding *stormwater* management and compliance with this *SPDES general permit*. The name or title of this contact and the telephone number must be published in public outreach and public participation materials and kept updated with the *Department* on the MCC form;
- d. **Annual report presentation.**
Below are the requirements for the annual report presentation:
- i. prior to submitting the final annual report to the *Department*, by June 1 of each reporting year (see Part V.C.), present the draft annual report in a format that is open to the public, where the public can ask questions about and make comments on the report. This can be done:
 - at a meeting that is open to the public, where the public attendees are able to ask questions about and make comments on the report. This may be a regular meeting of an existing board, such as planning, zoning or the town board. It may also be a separate meeting, specifically for *stormwater*. If multiple *covered entities* are working together, they may have a group meeting (refer to Part V.C.2); or
 - on the internet by:
 - making the annual report available to the public on a website;
 - providing the public the opportunity to provide comments on the internet or otherwise; and

(Part VII.A.2.d.i.)

- making available the opportunity for the public to request an open meeting to ask questions about and make comments on the report. If a public meeting is requested by 2 or more persons, the covered entity must hold such a meeting. However, the covered entity need only hold a public meeting once to satisfy this requirement.
- ii. provide public notice about the presentation, making public the following information when noticing the presentation in accordance with the local public notice requirements:
- the placement of the annual report on the agenda of this meeting or location on the internet;
 - the opportunity for public comment. This *SPDES general permit* does not require a specified time frame for public comments, although it is recommended that *covered entities* do provide the public an opportunity to comment for a period after the meeting. Comments received after the final annual report is submitted shall be reported with the following year's annual report. *Covered entities* must take into account those comments in the following year;
 - the date and time of the meeting or the date the annual report becomes available on the internet; and
 - the availability of the draft report for prior review prior to the public meeting or duration of availability of annual report on the internet;
- iii. the *Department* recommends that announcements be sent directly to individuals (public and private) known to have a specific interest in the *covered entity's SWMP*;
- iv. include a summary of comments and (intended) responses with the final annual report. Changes made to the *SWMP* in response to comments should be described in the annual report; and
- v. ensure that a copy of the final report and, beginning in 2009, the *SWMP* plan are available for public inspection;
- e. *Develop (for newly authorized MS4s), record, periodically assess and modify as needed measurable goals; and*

(Part VII.A.2.)

- f. Select and implement appropriate public involvement / participation *activities* and *measurable goals* to ensure the reduction of *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

- g. **Program *implementation* reporting for continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
 - i. annual report presentation information (date, time, attendees) or information about how the annual report was made available for comment;
 - ii. comments received and intended responses (as an attachment);
 - iii. public involvement / participation *activities* (for example stream cleanups including the number of people participating, the number of calls to a water quality hotline, the number and extent of storm drain stenciling); and
 - iv. report on effectiveness of program, *BMP* and *measurable goal* assessment.
- h. **Reporting for newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
 - i. **program *development* deadlines and reporting:**
 - Complete for Year 1, 2 and 3:
 - annual report presentation information (date, time, attendees);
 - comments received and intended responses (as an attachment);
 - Complete by end of Year 2 (report changes by end of Year 3 as needed):
 - key stake holders identified;
 - *development* of public involvement / participation plan based on the *covered entity's* needs, *POCs*, target audiences, geographic areas of concern, *discharges* to *303(d)* / *TMDL* waterbodies; and
 - *development* of public involvement / participation *activities* (for example stream cleanups including the number of people participating, the number of calls to a dumping / water quality hotline, the number or percent of storm drains stenciled);
 - ii. **program *implementation* reporting**, as set forth in Part VII.A.2(g) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during development period.

(Part VII.A.)

3. **Illicit Discharge Detection and Elimination (IDDE) - SWMP Development / Implementation**

At a minimum, all *covered entities* must:

- a. *Develop (for newly authorized MS4s), implement and enforce a program to detect and eliminate illicit discharges (as defined at 40CFR 122.26(b)(2)) into the small MS4;*
- b. *Develop (for newly authorized MS4s) and maintain a map, at a minimum within the covered entity's jurisdiction in the urbanized area and additionally designated area, showing:*
 - i. *the location of all outfalls and the names and location of all surface waters of the State that receive discharges from those outfalls;*
 - ii. *by March 9, 2010, the preliminary boundaries of the covered entity's storm sewersheds have been determined using GIS or other tools, even if they extend outside of the urbanized area (to facilitate track down), and additionally designated area within the covered entity's jurisdiction; and*
 - iii. *when grant funds are made available or for sewer lines surveyed during an illicit discharge track down, the covered entity's storm sewer system in accordance with available State and EPA guidance;*
- c. *Field verify outfall locations;*
- d. *Conduct an outfall reconnaissance inventory, as described in the EPA publication entitled Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, addressing every outfall within the urbanized area and additionally designated area within the covered entity's jurisdiction at least once every five years, with reasonable progress each year;*
- e. *Map new outfalls as they are constructed or newly discovered within the urbanized area and additionally designated area;*
- f. *Prohibit, through a law, ordinance, or other regulatory mechanism, illicit discharges into the small MS4 and implement appropriate enforcement procedures and actions. This mechanism must be equivalent to the State's model IDDE local law "NYSDEC Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems". The mechanism must be certified by the attorney representing the small MS4 as being equivalent to the State's model illicit discharge local law. Laws adopted during the GP-02-02 permit cycle must also be attorney-certified as effectively assuring implementation of the State's model IDDE law;*

(Part VII.A.3.)

- g. *Develop (for newly authorized MS4s) and implement* a program to detect and address non-stormwater *discharges*, including illegal dumping, to the *small MS4* in accordance with current assistance and guidance documents from the State and EPA. The program must include: procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for the IDDE program; description of priority areas of concern, available equipment, staff, funding, etc.; procedures for identifying and locating *illicit discharges* (trackdown); procedures for eliminating *illicit discharges*; and procedures for documenting actions;
- h. Inform public employees, businesses, and the general public of the hazards associated with illegal *discharges* and improper disposal of waste, and maintain records of notifications;
- i. Address the categories of non-stormwater *discharges* or flows listed in Part I.A.2 as necessary;
- j. *Develop (for newly authorized MS4s), record, periodically assess, and modify as needed, measurable goals; and*
- k. Select and implement appropriate IDDE *BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

- I. **Program *implementation* reporting for continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
 - i. number and percent of *outfalls* mapped;
 - ii. number of *illicit discharges* detected and eliminated;
 - iii. percent of outfalls for which an outfall reconnaissance inventory has been performed. ;
 - iv. status of system mapping;
 - v. activities in and results from informing public employees, businesses, and the general public of hazards associated with illegal *discharges* and improper disposal of waste;
 - vi. regulatory mechanism status - certification that law is equivalent to the *State's* model IDDE law (if not already completed and submitted with an earlier annual report); and
 - vii. report on effectiveness of program, *BMP* and *measurable goal* assessment.

(Part VII.A.3.)

m. Reporting for **newly regulated covered entities** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. **program development deadlines and reporting:**

Complete in Year 1 (revise in Year 2 and 3 if changes are made):

- describe procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for IDDE program;
- describe priority areas of concern, available equipment, staff, funding, etc.;

Initiate by end of Year 1; complete by end of Year 2 (revise in Year 3 if changes are made):

- describe procedures for identifying and locating *illicit discharges* (trackdown);
- describe procedures for eliminating *illicit discharges*;
- describe procedures for enforcing against illicit dischargers;
- describe procedures for documenting actions;
- describe the program being developed for informing public employees, businesses, and the general public of hazards associated with illegal *discharges* and improper disposal of waste;

Initiate by end of Year 1; complete by end of Year 3:

- regulatory mechanism status development and adoption - by end of Year 3 certify that regulatory mechanism is equivalent to the *State's* model IDDE law (if not already completed and submitted with an earlier report);

Initiate by end of Year 2; complete by end of Year 3:

- number and percent of *outfalls* mapped; and

Complete by Year 3:

- *outfall* map.

ii. **program implementation reporting** as set forth in Part VIII.A.3(l) above.

Commence *implementation* reporting after three year *development* period.

Implementation reporting may begin earlier if *implementation* begins during development period.

4. Construction Site Stormwater Runoff Control - SWMP Development / Implementation

At a minimum, all *covered entities* must:

- a. *Develop* (for newly authorized MS4s), *implement*, and enforce a program that:

(Part VII.A.4.a.)

- i. provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities (either GP-02-01, GP-0-08-001 or GP-0-15-002), unless more stringent requirements are contained within this *SPDES general permit*;
- ii. addresses *stormwater* runoff to the *small MS4* from *construction activities* that result in a land disturbance of greater than or equal to one acre. Control of *stormwater discharges* from *construction activity* disturbing less than one acre must be included in the program if:
 - that *construction activity* is part of a *larger common plan of development or sale* that would disturb one acre or more; or
 - if controlling such activities in a particular watershed is required by the *Department*;
- iii. includes a law, ordinance or other regulatory mechanism to require a *SWPPP* for each applicable land disturbing activity that includes erosion and sediment controls that meet the *State's* most current technical standards:
 - this mechanism must be equivalent to one of the versions of the "NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control"; and
 - equivalence must be documented
 - by adoption of one of the sample local laws without changes;
 - by using the NYSDEC Gap Analysis Workbook; or
 - by adoption of a modified version of the sample law, or an alternative law, and, in either scenario, certification by the attorney representing the small MS4 that the adopted law is equivalent to one of the sample local laws.
- iv. contains requirements for construction site operators to implement erosion and sediment control management practices;
- v. allows for sanctions to ensure compliance to the extent allowable by State law;
- vi. contains requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality, pursuant to the requirement of construction permit;
- vii. describes procedures for *SWPPP* review with consideration of potential water quality impacts and review of individual *SWPPPs* to ensure consistency with *State* and local sediment and erosion control requirements;

(Part VII.A.4.a.vii.)

- ensure that the individuals performing the reviews are adequately trained and understand the *State* and local sediment and erosion control requirements;
 - all *SWPPPs* must be reviewed for sites where the disturbance is one acre or greater; and
 - after review of *SWPPPs*, the *covered entity* must utilize the "MS4 *SWPPP* Acceptance Form" created by the *Department* and required by the SPDES General Permit for Stormwater Discharges from Construction Activity when notifying construction site owner / operators that their plans have been accepted by the *covered entity*;
- viii. describes procedures for receipt and follow up on complaints or other information submitted by the public regarding construction site storm water runoff;
- ix. describes procedures for site inspections and enforcement of erosion and sediment control measures including steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water;
- the *covered entity* must ensure that the individual(s) performing the inspections are adequately trained and understand the *State* and local sediment and erosion control requirements. Adequately trained means receiving inspector training by a *Department* sponsored or approved training;
 - all sites must be inspected where the disturbance is one acre or greater;
 - *covered entities* must determine that it is acceptable for the owner or operator of a construction project to submit the Notice of Termination (NOT) to the *Department* by performing a final site inspection themselves or by accepting the Qualified Inspector's final inspection certification(s) required by the SPDES General Permit for Stormwater Discharges from Construction Activity. The principal executive officer, ranking elected official, or duly authorized representative (see Part VI.J.) shall document their determination by signing the "MS4 Acceptance" statement on the NOT.
- x. educates construction site owner / operators, design engineers, *municipal* staff and other individuals to whom these regulations apply about the *municipality's* construction *stormwater* requirements, when construction *stormwater* requirements apply, to whom they apply, the procedures for submission of *SWPPPs*, construction site inspections, and other procedures associated with control of construction stormwater;

(Part VII.A.4.a.)

- xi. ensures that construction site operators have received erosion and sediment control training before they do work within the *covered entity's* jurisdiction and maintain records of that training. Small home site construction (construction where the Erosion and Sediment Control Plan is developed in accordance with Appendix E of the "New York Standards and Specifications for Erosion and Sediment Control") is exempt from the requirements below:
 - training may be provided by the *Department* or other qualified entities (such as Soil and Water Conservation Districts);
 - the *covered entity* is not expected to perform such training, but they may co-sponsor training for construction site operators in their area;
 - the *covered entity* may ask for a certificate of completion or other such proof of training; and
 - the *covered entity* may provide notice of upcoming sediment and erosion control training by posting in the building department or distribute with building permit application;
- xii. establishes and maintains an inventory of active construction sites, including the location of the site, owner / operator contact information;
- xiii. *develop (for newly authorized MS4s), record, periodically assess and modify as needed measurable goals; and*
- xiv. select and appropriate construction *stormwater BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

- b. **Program *implementation* reporting for continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
 - i. number of *SWPPPs* reviewed;
 - ii. number and type of enforcement actions;
 - iii. percent of active construction sites inspected once;
 - iv. percent of active construction sites inspected more than once;
 - v. number of construction sites authorized for disturbances of one acre or more; and
 - vi. report on effectiveness of program, *BMP* and *measurable goal* assessment.
- c. **Reporting for newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

(Part VII.A.4.c.)

i. **program *development* deadlines and reporting:**

Initiate by end of Year 1:

- procedures, activities and identify personnel to educate and train construction site operators about requirements to develop and implement a SWPPP and any other requirements that must be met within the MS4's jurisdiction;

Complete in Year 1 (revise in Year 2 and 3 if changes are made):

- describe procedures for the receipt and consideration of information submitted by the public. Identify the responsible personnel;

Initiate by end of Year 1; complete by end of Year 3:

- regulatory mechanism development and adoption status - by end of Year 3 certify that regulatory mechanism is equivalent to one of the NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control (if not already completed and submitted with an earlier report);

Initiate by end of Year 2; complete by end of Year 3:

- describe procedures for SWPPP review that incorporate consideration of potential water quality impacts and ensure consistency with local sediment and erosion control requirements;
- describe procedures for construction site inspections; and
- describe procedures for enforcement of control measures and sanctions to ensure compliance.

ii. **program *implementation* reporting** as set forth in Part VII.A.4(b) above.

Commence *implementation* reporting after three year *development* period.

Implementation reporting may begin earlier if *implementation* begins during development period.

5. Post-Construction Stormwater Management - SWMP Development/Implementation

At a minimum, all covered entities must:

a. *Develop* (for newly authorized MS4s), *implement*, and enforce a program that:

- provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities (either GP-02-01, GP-0-08-001, or GP-0-15-002), unless more stringent requirements are contained within this *SPDES general permit*;
- addresses *stormwater* runoff from new development and redevelopment projects to the *small MS4* from projects that result in a land disturbance of greater than or

(Part VII.A.5.a.ii.)

equal to one acre. Control of *stormwater discharges* from projects of less than one acre must be included in the program if:

- that project is part of a *larger common plan of development or sale*; or
- if controlling such activities in a particular watershed is required by the *Department*;

iii. includes a law, ordinance or other regulatory mechanism to require post construction runoff controls from new development and re-development projects to the extent allowable under *State* law that meet the *State's* most current technical standards:

- the mechanism must be equivalent to one of the versions of the "NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control"; and
- equivalence must be documented
 - by adoption of one of the sample local laws without changes;
 - by using the NYSDEC Gap Analysis Workbook; or
 - by adoption of a modified version of the sample law, or an alternative law, and, in either scenario and certification by the attorney representing the small MS4 that the adopted law is equivalent to one of the sample local laws;

iv. includes a combination of structural or non-structural management practices (according to standards defined in the most current version of the NYS Stormwater management Design Manual) that will reduce the *discharge* of pollutants to the MEP. In the development of the watershed plans, municipal comprehensive plans, open space preservation programs, local law, ordinances and land use regulations, covered entities must consider principles of *Low Impact Development (LID)*, *Better Site Design (BSD)*, and other *Green Infrastructure* practices to the MEP. In the development of the watershed plans, municipal comprehensive plans, open space preservation programs, local law, ordinances and land use regulations, covered entities must consider smart growth principles, natural resource protection, impervious area reduction, maintaining natural hydrologic conditions in developments, riparian buffers or set back distances for protection of environmentally sensitive areas such as streams, wetlands, and erodible soils.

- *covered entities* are required to review according to the *Green Infrastructure* practices defined in the Design Manual at a site level, and are encouraged to review, and revise where appropriate, local codes and laws that include provisions that preclude green infrastructure or construction techniques that minimize or reduce pollutant loadings.

(Part VII.A.5.a.iv.)

- if a *stormwater* management practice is designed and installed in accordance with the New York State Stormwater Management Design Manual or has been demonstrated to be equivalent and is properly operated and maintained, then *MEP* will be assumed to be met for post-construction *stormwater* discharged by the practice;
- v. describes procedures for *SWPPP* review with consideration of potential water quality impacts and review of individual *SWPPPs* to ensure consistency with state and local post-construction *stormwater* requirements;
 - ensure that the individuals performing the reviews are adequately trained and understand the *State* and local post construction *stormwater* requirements;
 - ensure that the individuals performing the reviews for *SWPPPs* that include post-construction stormwater management practices are *qualified professionals* or under the supervision of a *qualified professional*;
 - all *SWPPPs* must be reviewed for sites where the disturbance is one acre or greater;
 - after review of *SWPPPs*, the *covered entity* must utilize the "MS4 *SWPPP* Acceptance Form" created by the *Department* and required by the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002) when notifying construction site owner / operators that their plans have been accepted by the *covered entity*;
 - utilize available training from sources such as Soil and Water Conservation Districts, Planning Councils, The New York State Department of State, USEPA, and/or the *Department* to educate municipal boards and Planning and Zoning Boards on low impact development principles, better site design approach, and green infrastructure applications.
- vi. maintain an inventory of post-construction stormwater management practices within the *covered entities* jurisdiction. At a minimum, include practices discharging to the *small MS4* that have been installed since March 10, 2003, all practices owned by the *small MS4*, and those practices found to cause or contribute to water quality standard violations.
 - the inventory shall include at a minimum: location of practice (street address or coordinates); type of practice; maintenance needed per the NYS Stormwater Management Design Manual, *SWPPP*, or other provided documentation; and dates and type of maintenance performed; and

(Part VII.A.5.a.)

- vii. ensures adequate long-term operation and maintenance of management practices identified in Part VII.5.a.vi by trained staff, including inspection to ensure that practices are performing properly.
- The inspection shall include inspection items identified in the maintenance requirements (NYS Stormwater Management Design Manual, *SWPPP*, or other maintenance information) for the practice. *Covered entities* are not required to collect *stormwater* samples and perform specific chemical analysis;
- viii. Covered entities may include in the SWMP Plan provisions for development of a banking and credit system. MS4s must have an existing watershed plan based on which offsite alternative stormwater management in lieu of or in addition to on-site stormwater management practices are evaluated. Redevelopment projects must be evaluated for pollutant reduction greater than required treatment by the state standards. The individual project must be reviewed and approved by the *Department*. Use of a banking and credit system for new development is only acceptable in the impaired watersheds to achieve the no net increase requirement and watershed improvement strategy areas to achieve pollutant reductions in accordance with watershed plan load reduction goals. A banking and credit system must at minimum include:
- Ensure that offset exceeds a standard reduction by factor of at least 2
 - Offset is implemented within the same watershed
 - Proposed offset addresses the POC of the watershed
 - Tracking system is established for the watershed
 - Mitigation is applied for retrofit or redevelopment
 - Offset project is completed prior to beginning of the proposed construction
 - A legal mechanism is established to implement the banking and credit system
- b. *Develop (for newly authorized MS4s), implement, and provide adequate resources for a program to inspect development and re-development sites by trained staff and to enforce and penalize violators;*
- c. *Develop (for newly authorized MS4s), record, annually assess and modify as needed measurable goals; and*
- d. Select and implement appropriate post-construction *stormwater BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

(Part VII.A.5.)

Required SWMP Reporting

- e. **Program *implementation* reporting for continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
 - i. number of *SWPPPs* reviewed;
 - ii. number and type of enforcement actions;
 - iii. number and type of post-construction stormwater management practices inventoried;
 - iv. number and type of post-construction stormwater management practices inspected;
 - v. number and type of post-construction stormwater management practices maintained;
 - vi. regulatory mechanism status - certification that regulatory mechanism is equivalent to one of the "NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control" (if not already done); and
 - vii. report on effectiveness of program, BMP and measurable goal assessment, and implementation of a banking and credit system, if applicable;

- f. **Reporting for newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
 - i. **program *development* deadlines and reporting:**
 - Initiate by end of Year 1; complete by end of Year 3:
 - regulatory mechanism development and adoption status - by end of Year 3 certify that regulatory mechanism is equivalent to one of the NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control (if not already completed and submitted with an earlier report);

 - Initiate by end of Year 2; complete by end of Year 3:
 - procedures for *SWPPP* review to ensure that post-construction stormwater management practices meet the most current version of the state technical standards;
 - procedures for inspection and maintenance of post-construction management practices;
 - procedures for enforcement and penalization of violators; and

 - Complete by the end of year 3:

(Part VII.A.5.f.i.)

- provide resources for the program to inspect new and re-development sites and for the enforcement and penalization of violators.
- ii. **program *implementation* reporting** as set forth in Part VII.A.5(e) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during *development* period.

6. Pollution Prevention/Good Housekeeping For Municipal Operations - SWMP Development / Implementation

At a minimum, all *covered entities* must:

- a. *Develop (for newly authorized MS4s) and implement* a pollution prevention / good housekeeping program for *municipal* operations and facilities that:
 - i. addresses *municipal* operations and facilities that contribute or potentially contribute *POCs* to the *small MS4* system. The operations and facilities may include, but are not limited to: street and bridge maintenance; winter road maintenance; stormwater system maintenance; vehicle and fleet maintenance; park and open space maintenance; municipal building maintenance; solid waste management; new construction and land disturbances; right-of-way maintenance; marine operations; hydrologic habitat modification; or other;
 - ii. at a minimum frequency of once every three years, perform and document a self assessment of all municipal operations addressed by the SWMP to:
 - determine the sources of pollutants potentially generated by the *covered entity's* operations and facilities; and
 - identify the *municipal* operations and facilities that will be addressed by the pollution prevention and good housekeeping program, if it is not done already;
 - iii. determines *management practices*, policies, procedures, etc. that will be *developed* and *implemented* to reduce or prevent the discharge of (potential) pollutants. Refer to management practices identified in the "NYS Pollution Prevention and Good Housekeeping Assistance Document" and other guidance materials available from the EPA, *State*, or other organizations;
 - iv. prioritizes pollution prevention and good housekeeping efforts based on geographic area, potential to improve water quality, facilities or operations most in need of modification or improvement, and *covered entity's* capabilities;

(Part VII.A.6.a.)

- v. addresses pollution prevention and good housekeeping priorities;
 - vi. includes an employee pollution prevention and good housekeeping training program and ensures that staff receive and utilize training;
 - vii. requires third party entities performing contracted services, including but not limited to street sweeping, snow removal, lawn / grounds care, etc., to meet permit requirements as the requirements apply to the activity performed ; and
 - viii. requires *municipal* operations and facilities that would otherwise be subject to the NYS Multi-sector General Permit (MSGP, GP-0-12-001) for industrial stormwater discharges to prepare and *implement* provisions in the SWMP that comply with Parts III. A, C, D, J, K and L of the MSGP. The covered entity must also perform monitoring and record keeping in accordance with Part IV. of the MSGP. Discharge monitoring reports must be attached to the MS4 annual report. Those operations or facilities are not required to gain coverage under the MSGP. *Implementation* of the above noted provisions of the SWMP will ensure that MEP is met for discharges from those facilities;
- b. Consider and incorporate cost effective runoff reduction techniques and green infrastructure in the routine upgrade of the existing stormwater conveyance systems and municipal properties to the MEP. Some examples include replacement of closed drainage with grass swales, replacement of existing islands in parking lots with rain gardens, or curb cuts to route the flow through below grade infiltration areas or other low cost improvements that provide runoff treatment or reduction.
 - c. *Develop (for newly authorized MS4s), record, periodically assess and modify as needed measurable goals; and*
 - d. Select and implement appropriate pollution prevention and good housekeeping *BMPs and measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.
 - e. Adopt techniques to reduce the use of fertilizers, pesticides, and herbicides, as well as potential impact to surface water.

Required SWMP Reporting

- f. **Program *implementation* reporting for continuing *covered entities* (MS4s covered for 3 or more years on the *reporting date*). *Covered entities* are required to report on**

(Part VII.A.6.f.)

all *municipal* operations and facilities within their jurisdiction (*urbanized area* and *additionally designated area*) that their program is addressing. The *covered entity* shall report at a minimum on the items below:

- i. indicate the *municipal* operations and facilities that the pollution prevention and good housekeeping program assessed;
 - ii. describe, if not done so already, the management practices, policies and procedures that have been developed, modified, and / or implemented and report, at a minimum, on the items below that the *covered entity's* pollution prevention and good housekeeping program addressed during the reporting year:
 - acres of parking lot swept;
 - miles of street swept;
 - number of catch basins inspected and, where necessary, cleaned;
 - post-construction control stormwater management practices inspected and, where necessary, cleaned;
 - pounds of phosphorus applied in chemical fertilizer
 - pounds of nitrogen applied in chemical fertilizer; and
 - acres of pesticides / herbicides applied.
 - iii. staff training events and number of staff trained; and
 - iv. report on effectiveness of program, *BMP* and *measurable goal* assessment. If the pollution prevention and good housekeeping program addresses other operations than what is listed above in Part VII.A.6.a(ii), the *covered entity* shall report on items that will demonstrate program effectiveness.
- g. Reporting for **newly regulated covered entities** (MS4s covered for less than 3 years on the *reporting date*). *Covered entities* are required to report on all *municipal* operations and facilities within their jurisdiction (*urbanized area* and *additionally designated area*) that their program is addressing. The *covered entity* shall report at a minimum on the items below:
- i. **program development deadlines and reporting** (first three years after authorization is granted):
Complete by end of Year 1:
 - identify the municipal operations and facilities that will be considered for inclusion in the pollution prevention and good housekeeping program;
 - describe the pollution prevention and good housekeeping program priorities (geographic area, potential to improve water quality; facilities or operations most in need of modification or improvement);

(Part VII.A.6.g.i.)

- describe management practices, policies, procedures, etc. that will be developed or modified;
- identify the staff and equipment available;

Initiate by end of Year 2; complete by end of Year 3:

- describe employee pollution prevention and good housekeeping program training program and begin training, report on number of staff trained; and

Complete by end of Year 3:

- description of developed management practices.

- ii. **program *implementation* reporting** as set forth in Part VII.A.6.(d) above. Commence reporting after three year *development* permit. *Implementation* reporting may begin earlier if *implementation* begins during development period.

PART VIII. MINIMUM CONTROL MEASURES - TRADITIONAL NON-LAND USE CONTROL AND NON-TRADITIONAL MS4s

A. Traditional Non-Land Use Control and Non-traditional MS4 Minimum Control Measures (MCMs)

These MCMs apply to *traditional non-land use control MS4s* and *non-traditional MS4s*. The SWMP for these *small MS4s* must be comprised of the 6 MCMs below. It is recommended that covered entities refer to assistance and guidance documents available from the *State* and EPA.

Under this *SPDES general permit*, the continuing *covered entities* are required to implement their SWMP, including the MCM requirements below. Newly regulated covered entities are required to develop their SWMP, containing the MCM requirements below, within the first 3 years of coverage and then commence implementation.

The *covered entity* may develop (for newly authorized *MS4s*) and / or implement their SWMP within their jurisdiction on their own. The *covered entity* may also develop (for newly authorized *MS4s*) and / or implement part or all of their SWMP through an intermunicipal program with another *covered entity(s)* or through other cooperative or contractual agreements with third parties that provide services to the *covered entity(s)*.

For each of the elements of the SWMP plan, the *covered entity* must identify (i) the agencies and/or offices that would be responsible for implementing the SWMP plan element and (ii) any protocols for coordination among such agencies and/or offices necessary for the implementation of the plan element.

To comply with the requirements of this *SPDES general permit*, the *traditional non-land use control MS4s* and *non-traditional MS4s* should consider their public to be the employee / user population, visitors, or contractors / developers. Examples of the public include, but are not limited to:

- transportation *covered entities* - general public using or living along transportation systems, staff, contractors;
- educational *covered entities* - faculty, other staff, students, visitors;
- other government *covered entities* - staff, contractors, visitors.

1. Public Education and Outreach on Stormwater Impacts SWMP Development / Implementation

At a minimum, all *covered entities* must:

- a. Identify *POCs*, waterbodies of concern, geographic areas of concern, target audiences;

(Part VIII.A.1.)

- b. *Develop (for newly authorized MS4s) and implement* an ongoing public education and outreach program designed to describe:
 - i. the impacts of *stormwater discharges* on waterbodies;
 - ii. *POCs* and their sources;
 - iii. steps that contributors of these pollutants can take to reduce pollutants in *stormwater runoff*; and
 - iv. steps that contributors of non-*stormwater discharges* can take to reduce pollutants (non-*stormwater discharges* are listed in Part I.A.2);
- c. Educational materials may be made available at, locations including, but not limited to:
 - i. at service areas, lobbies, or other locations where information is made available;
 - ii. at staff training;
 - iii. on *covered entity's* website;
 - iv. with pay checks; and
 - v. in employee break rooms;
- d. *Develop (for newly authorized MS4s), record, periodically assess and modify as needed measurable goals*; and
- e. Select and implement appropriate education and outreach *activities* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

- f. At a minimum, the *covered entity* shall report on the items below:
 - i. list education / outreach *activities* performed and provide any results (number of people attended, amount of materials distributed, etc.);
 - ii. education of the public about the hazards associated with illegal *discharges* and improper disposal of waste as required by Part VIII.A.3, may be reported in this section;
 - iii. *covered entity's* performing the education and outreach activities required by other MCMs (listed below), may report on those activities in MCM 1 and provide the following information applicable to their program:
 - IDDE education *activities* planned or completed for the public, as required by Part VIII.A.3;
 - construction site *stormwater* control training planned or completed, as required by Part VIII.A.4; and
 - employee pollution prevention / good housekeeping training planned or completed, as required by Part VIII.A.6;

To facilitate shared annual reporting, if the education and outreach activities

(Part VIII.A.1.f.iii.)

- above are implemented by a third party, and the third party is completing the associated portions of the annual report, that third party may report on the education and outreach activities within MCM 1 of the annual report and not within the MCMs that the education and outreach activities are required by;
- iv. report on effectiveness of program, *BMP* and *measurable goal* assessment; and
 - v. maintain records of all training activities
- g. Reporting for newly regulated **covered entities** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
- i. **program development deadlines and reporting:**
Complete in Year 1 (report changes in Year 2 and 3 as needed):
 - list (and describe if necessary) POCs;
 - *development* of education and outreach program and activities for the public that address *POCs*, geographic areas of concern, and / or *discharges* to 303(d) / *TMDL* waterbodies;
 - *covered entities* developing education and outreach programs required by other MCMs (listed below), may report on development (and implementation of those activities, if occurring during the three year development period) in MCM 1 and provide the following information applicable to their program:
 - IDDE education *activities* planned or completed for the public, as required by Part VIII.A.3;
 - construction site *stormwater* control training planned or completed, as required by Part VIII.A.4; and
 - employee pollution prevention / good housekeeping training planned or completed, as required by Part VIII.A.6.

To facilitate shared annual reporting, if the education and outreach activities above are implemented by a third party, and the third party is completing the associated portions of the annual report, that third party may report on the education and outreach activities within MCM 1 of the annual report and not within the MCMs that the education and outreach activities are required by.
 - ii. **Program implementation reporting** as set forth in Part VIII.A.1(f) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during *development* period.

2. Public Involvement/Participation - SWMP Development / Implementation

At a minimum, all *covered entities* must:

(Part VIII.A.2.)

- a. Comply with *State* and local public notice requirements identified below when implementing a public involvement / participation program:
 - i. *traditional non-land use control MS4s* shall comply with the *State Open Meetings Law* and local public notice requirements, such as *Open Meetings Law*; and
 - ii. *traditional non-land use control MS4s* and *non-traditional MS4s* may comply with this requirement by determining who their public is (staff, visitors, contractors, etc.) and posting notifications (as needed) in areas viewable by the public. Such areas include common areas, bulletin boards, agency/office web pages, etc. For *small MS4s* whose public are in multiple locations, notifications shall be made available to the public in all locations within the urbanized or additionally designated areas;
- b. Provide the opportunity for the public to participate in the *development, implementation, review, and revision* of the *SWMP*;
- c. **Local stormwater public contact.**

Identify a local point of contact for public concerns regarding *stormwater* management and compliance with this *SPDES general permit*. The name or title of this contact and the telephone number must be published in public outreach and public participation materials and kept updated with the *Department* on the MCC form;
- d. **Annual report presentation.**

Below are the requirements for the annual report presentation:

 - i. prior to submitting the final annual report to the *Department*, by June 1 of each reporting year (see Part V.C.), present the draft annual report in a format that is open to the public, where the public can ask questions and make comments on the report. This can be done:
 - at a meeting that is open to the public, where the public attendees are able to ask questions about and make comments on the report. This may be a regular meeting of an existing board. It may also be a separate meeting, specifically for *stormwater*. If multiple *covered entities* are working together, they may have a group meeting (refer to Part V.C.2); or
 - on the internet by:
 - making the annual report available to the public on a website:
 - providing the public the opportunity to provide comments on the internet or otherwise; and

(Part VIII.A.2.d.i.)

- making available the opportunity for the public to request an open public meeting to ask questions about and make comments on the report;
- ii. *traditional non-land use control MS4s* must comply with Part VIII.A.2.(d)(i) above. If they choose to present the draft annual report at a meeting, it may be presented at an existing meeting (e.g. a meeting of the Environmental Management Council , Water Quality Coordinating Committee, other agencies, or a meeting specifically for stormwater), or made available for review on the internet. The *covered entity* must make public the following information when noticing the presentation in accordance with *Open Meetings Law* or other local public notice requirements:
- the placement of the annual report on the agenda of this meeting or location on the internet;
 - the opportunity for public comment. This *SPDES general permit* does not require a specified time frame for public comments, although it is recommended that *covered entities* provide the public an opportunity to comment for a period after the meeting. Comments received after the final annual report is submitted shall be reported with the following year's annual report. *Covered entities* must take into account those comments in the following year;
 - the date and time of the meeting or date annual report becomes available on the internet; and
 - the availability of the draft report for review prior to the public meeting or duration of availability of the annual report on the internet;
- iii. *non-traditional MS4s* typically do not have regular meetings during which a presentation on the annual report can be made. Those *covered entities* may comply with this requirement by either:
- noticing the availability of the report for public comment by posting a sign, posting on web site, or other methods with information about the availability and location where the public can view it and contact information for those that read the report to submit comments; or
 - following the internet presentation as explained in Part VIII.A.2(d)(i) above;
- iv. the *Department* recommends that announcements be sent directly to individuals (public and private interested parties) known to have a specific interest in the covered entity's *SWMP*;

(Part VIII.A.2.d.)

- v. include a summary of comments and intended responses with the final annual report. Changes made to the *SWMP* in response to comments should be described in the annual report; and
 - vi. ensure that a copy of the final report and, beginning in 2009, the *SWMP* plan are available for public inspection;
- e. *Develop (for newly authorized MS4s), record, periodically assess and modify as needed measurable goals; and*
- f. Select and implement appropriate public involvement / participation *activities* and *measurable goals* to ensure the reduction of all of the *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

- g. **Program *implementation* reporting for continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
- i. annual report presentation information (date, time, attendees) or information about how the annual report was made available for comment;
 - ii. comments received and intended responses (as an attachment); and
 - iii. report on effectiveness of program, *BMP* and *measurable goal* assessment;
- h. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
- i. **program *development* deadlines and reporting:**
Complete for Year 1, 2, and 3:
 - annual report presentation information (date, time, attendees) or information about how the annual report was made available for comment; and
 - comments received and intended responses (as an attachment).
 - ii. **program *implementation* reporting** as set forth in Part VIII.A.2.g above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during development period.

3. Illicit Discharge Detection and Elimination (IDDE) - SWMP Development / Implementation

At a minimum, all *covered entities* must:

(Part VIII.A.3.)

- a. *Develop (for newly authorized MS4s), implement and enforce a program to detect and eliminate illicit discharges (as defined at 40CFR 122.26(b)(2)) into the small MS4;*
- b. *Develop (for newly authorized MS4s) and maintain a map, at a minimum within the covered entity's jurisdiction in the urbanized area and additionally designated area, showing:*
 - i. *the location of all outfalls and the names and location of all surface waters of the State that receive discharges from those outfalls;*
 - ii. *by March 9, 2010, the preliminary boundaries of the covered entity's storm sewersheds determined using GIS or other tools, even if they extend outside of the urbanized area (to facilitate trackdown), and additionally designated area within the covered entity's jurisdiction; and*
 - iii. *when grant funds are made available or for sewer lines surveyed during an illicit discharge trackdown, the covered entity's storm sewer system in accordance with available State and EPA guidance;*
- c. *Field verify outfall locations;*
- d. *Conduct an outfall reconnaissance inventory, as described in the EPA publication entitled Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, addressing every outfall within the urbanized area and additionally designated area within the covered entity's jurisdiction at least once every five years, with reasonable progress each year;*
- e. *Map new outfalls as they are constructed or discovered within the urbanized area or additionally designated area;*
- f. *Prohibit illicit discharges into the small MS4 and implement appropriate enforcement procedures and actions below, as applicable:*
 - i. *for traditional non-land use control MS4s:*
 - *effectively prohibit, through a law, ordinance, or other regulatory mechanism, illicit discharges into the small MS4 and implement appropriate enforcement procedures and actions; and*
 - *the law, ordinance, or other regulatory mechanism must be equivalent to the State's model IDDE local law "NYSDEC Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems" developed by the State, as determined and certified to be equivalent by the attorney representing the small MS4 ; and*

(Part VIII.A.3.f.)

- ii. for *non-traditional MS4s*:
 - prohibit and enforce against *illicit discharges* through available mechanisms (i.e. tenant lease agreements, bid specifications, requests for proposals, standard contract provisions, connection permits, maintenance directives / BMPS, access permits, consultant agreements, internal policies);
 - procedures or policies must be developed for implementation and enforcement of the mechanisms;
 - a written directive from the person authorized to sign the NOI stating that updated mechanisms must be used and who (position(s)) is responsible for ensuring compliance with and enforcing the mechanisms for the *covered entity's IDDE program*; and
 - the mechanisms and directive must be equivalent to the *State's model illicit discharge local law*;
- g. *Develop (for newly authorized MS4s) and implement a program to detect and address non-stormwater discharges, including illegal dumping, to the small MS4 . The program must include: procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for IDDE program; description of priority areas of concern, available equipment, staff, funding, etc.; procedures for identifying and locating illicit discharges (trackdown); procedures for eliminating illicit discharges; and procedures for documenting actions;*
- h. Inform the public of the hazards associated with illegal *discharges* and the improper disposal of waste;
- i. Address the categories of non-stormwater *discharges* or flows listed in Part I.A.2 as necessary and maintain records of notification;
- j. *Develop (for newly authorized MS4s), record, periodically assess, and modify as needed, measurable goals; and*
- k. Select and implement appropriate IDDE *BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*

Required SWMP Reporting

- l. **Program *implementation* reporting for continuing *covered entities* (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:**
 - i. number and percent of *outfalls* mapped;

(Part VIII.A.3.I.)

- ii. number of *illicit discharges* detected and eliminated;
 - iii. percent of outfalls for which an outfall reconnaissance inventory has been performed. ;
 - iv. status of system mapping;
 - v. activities to and results from informing the public of hazards associated with illegal *discharges* and improper disposal of waste;
 - vi. for traditional non-land use control MS4s, regulatory mechanism status - certification that law is equivalent to the *State's* model *IDDE* local law (if not already completed and submitted with a prior annual report); and
 - vii. report on effectiveness of program, *BMP* and *measurable goal* assessment.
- m. Required reporting for **newly authorized covered entities** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
- i. **program development deadlines and reporting:**
 - Initiate by end of Year 1; complete by end of Year 3:
 - regulatory mechanism development and adoption - by end of Year 3 certify that regulatory mechanism is equivalent to the *State's* model *IDDE* local law (traditional non-land use control MS4s) or certification of equivalence may be accomplished as set forth in Part VIII.A.3(f)(ii).
 - Complete in Year 1 (revise in Year 2 and 3 if changes are made):
 - describe procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for *IDDE* program;
 - describe priority areas of concern, available equipment, staff, funding, etc.;
 - Initiate by end of Year 1; complete by end of Year 2 (revise in Year 3 if changes are made):
 - describe procedures for identifying and locating *illicit discharges* (trackdown);
 - describe procedures for eliminating *illicit discharges*;
 - describe procedures for enforcing against illicit dischargers;
 - describe procedures for documenting actions;
 - describe the program being developed for informing the public of hazards associated with illegal *discharges* and improper disposal of waste;
 - Initiate by end of Year 2; complete by end of Year 3:
 - number and percent of *outfalls* mapped;

(Part VIII.A.3.m.i.)

Complete by Year 3:

- *outfall* map; and

- ii. **program *implementation* reporting** as set forth in Part VIII.A.3(l) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during development period.

4. Construction Site Stormwater Runoff Control - SWMP Development / Implementation

At a minimum, all *covered entities* must:

- a. *Develop (for newly authorized MS4s), implement, and enforce* a program that:
 - i. provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities, unless more stringent requirements are contained within this *SPDES general permit*;
 - ii. addresses *stormwater* runoff to the *small MS4* from *construction activities* that result in a land disturbance of greater than or equal to one acre. Control of *stormwater discharges* from *construction activity* disturbing less than one acre must be included in the program if:
 - that *construction activity* is part of a *larger common plan of development or sale* that would disturb one acre or more; or
 - if controlling such activities in a particular watershed is required by the *Department*;
 - iii. incorporates mechanisms for construction runoff requirements from new development and redevelopment projects to the extent allowable under *State* and local law that meet the *State's* most current technical standards:
 - through available mechanisms (i.e. tenant lease agreements, bid specifications, requests for proposals, standard contract provisions, connection permits, maintenance directives / BMPS, access permits, consultant agreements, internal policies);
 - procedures or policies must be developed for implementation and enforcement of the mechanisms;
 - a written directive from the person authorized to sign the NOI stating that updated mechanisms must be used and who (position(s)) is responsible for ensuring compliance with and enforcing the mechanisms for construction projects that occur on property owned, under easement to, within the

(Part VIII.A.4.a.iii.)

right-of-way of, or under the maintenance jurisdiction by the *covered entity* or within the maintenance jurisdiction of the MS4; and

- the mechanisms and directive must be equivalent to the requirements of the NYS SPDES General Permit for Stormwater Discharges from Construction Activities.
- iv. allows for sanctions to ensure compliance to the extent allowable by *State* law;
- v. describes procedures for receipt and follow up on complaints or other information submitted by the public regarding construction site stormwater runoff;
- vi. educates construction site operators, design engineers, *municipal* staff and other individuals to whom these regulations apply about the construction requirements in the *covered entity's* jurisdiction, including the procedures for submission of SWPPPs, construction site inspections, and other procedures associated with control of construction stormwater;
- vii. Ensures that construction site contractors have received erosion and sediment control training, including the *trained contractors* as defined in the SPDES general permit for construction, before they do work within the *covered entity's* jurisdiction:
- training may be provided by the *Department* or other qualified entities (such as Soil and Water Conservation Districts);
 - the *covered entity* is not expected to perform such training, but they may co-sponsor training for construction site operators in their area;
 - the *covered entity* may ask for a certificate of completion or other such proof of training; and
 - the *covered entity* may provide notice of upcoming sediment and erosion control training by posting in the building department or distribute with building permit application.
- viii. establishes and maintains an inventory of active construction sites, including the location of the site, owner / operator contact information;
- ix. develop (*for newly authorized MS4s*), record, periodically assess and modify as needed *measurable goals*; and

(Part VIII.A.4.a.)

- x. select and implement appropriate construction stormwater *BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

- b. **Program *implementation* reporting for continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
 - i. number and type of sanctions employed;
 - ii. status of regulatory mechanism - certify that mechanisms will assure compliance with the NYS SPDES General Permit for Stormwater Discharges from Construction Activities;
 - iii. number of construction sites authorized for disturbances of one acre or more; and
 - iv. report on effectiveness of program, *BMP* and *measurable goal* assessment.

- c. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
 - i. **Program *development* deadlines and reporting:**
 - Initiate by end of Year 1:
 - procedures, activities and identify personnel to educate and train construction site operators about requirements to develop and implement a SWPPP and any other requirements that must be met within the MS4's jurisdiction;

 - Initiate by the end of Year 1; complete by the end of Year 3:
 - status of mechanism for construction runoff requirements - by end of Year 3 certify that mechanisms will assure compliance with the NYS SPDES General Permit for Stormwater Discharges from Construction Activities; and

 - Complete in Year 1 (revise in Year 2 and 3 if changes are made):
 - describe procedures for the receipt and consideration of information submitted by the public. Identify the responsible personnel.

 - ii. Program implementation reporting as set forth in Part VIII.A.4(b) above. Commence *implementation* reporting after three year development period. *Implementation* reporting may begin earlier if *implementation* begins during development period.

(Part VIII.A.)

5. Post-Construction Stormwater Management SWMP Development / Implementation

At a minimum, all *covered entities* must:

- a. *Develop (for newly authorized MS4s), implement, and enforce* a program that:
 - i. provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities, unless more stringent requirements are contained within this *SPDES general permit*;
 - ii. addresses *stormwater* runoff from new development and redevelopment projects to the *small MS4* from projects that result in a land disturbance of greater than or equal to one acre. Control of *stormwater discharges* from projects of less than one acre must be included in the program if:
 - that project is part of a *larger common plan of development or sale*;
 - if controlling such activities in a particular watershed is required by the *Department*;
 - iii. incorporates enforceable mechanisms for post-construction runoff control from new development and re-development projects to the extent allowable under *State* or local law that meet the *State's* most current technical standards:
 - through available mechanisms (i.e. tenant lease agreements, bid specifications, requests for proposals, standard contract provisions, connection permits, maintenance directives / BMPS, access permits, consultant agreements, internal policies);
 - procedures or policies must be developed for implementation and enforcement of the mechanisms;
 - a written directive from the person authorized to sign the NOI stating that updated mechanisms must be used and who (position(s)) is responsible for ensuring compliance with and enforcing the mechanisms for construction projects that occur on property owned by the *covered entity* or within the maintenance jurisdiction of the MS4; and
 - the mechanisms and directive must assure compliance with the requirements of the NYS SPDES General Permit for Stormwater Discharges from Construction Activities;
 - iv. includes a combination of structural or non-structural management practices (according to standards defined in the most current version of the NYS Stormwater management Design Manual) that will reduce the *discharge* of pollutants to the MEP. In the development of environmental plans such as watershed plans, open space preservation programs, local laws, and ordinances covered entities must incorporate principles of *Low Impact Development (LID)*, *Better Site Design (BSD)* and other *Green Infrastructure* practices to the MEP.

(Part VIII.A.5.a.iv.)

Covered entities must consider natural resource protection, impervious area reduction, maintaining natural hydrologic condition in developments, buffers or set back distances for protection of environmentally sensitive areas such as streams, wetlands, and erodible soils in the development of environmental plans.

- if a *stormwater* management practice is designed and installed in accordance with the New York State Stormwater Management Design Manual or has been demonstrated to be equivalent and is properly operated and maintained, then *MEP* will be assumed to be met for the post construction *stormwater* discharged by the practice;
- v. establish and maintain an inventory of post-construction stormwater management practices to include at a minimum practices discharging to the *small MS4* that have been installed since March 10, 2003, those owned by the small MS4, and those found to cause water quality standard violations.
 - the inventory shall include, at a minimum: location of practice (street address or coordinates); type of practice; maintenance needed per the NYS Stormwater Management Design Manual, *SWPPP*, or other provided documentation; and dates and type of maintenance performed; and
- vi. ensures adequate long-term operation and maintenance of management practices by trained staff, including assessment to ensure that the practices are performing properly.
 - The assessment shall include the inspection items identified in the maintenance requirements (NYS Stormwater Management Design Manual, *SWPPP*, or other maintenance information) for the practice. *Covered entities* are not required to collect *stormwater* samples and perform specific chemical analysis;
- vii. Covered entities may include in the SWMP Plan provisions for development of a banking and credit system. MS4s must have an existing watershed plan based on which offsite alternative stormwater management in lieu of or in addition to on-site stormwater management practices are evaluated. Redevelopment projects must be evaluated for pollutant reduction greater than required treatment by the state standards. The individual project must be reviewed and approved by the *Department*. Use of a banking and credit system for new development is only acceptable in the impaired watersheds to achieve the no net increase requirement and watershed improvement strategy areas to achieve pollutant reductions in accordance with watershed plan load reduction goals. A banking and credit system must at minimum include:

(Part VIII.A.5.a.vii.)

- Ensures offset exceeds standard reduction by factor of at least 2
 - Offset is implemented within the same watershed
 - Proposed offset addresses the POC of the watershed
 - Tracking system is established for the watershed
 - Mitigation is applied for retrofit or redevelopment
 - Offset project is completed prior to beginning the proposed construction
 - A legal mechanism is established to implement the banking and credit system
- b. *Develop (for newly authorized MS4s), implement, and provide adequate resources for a program to inspect development and re-development sites by trained staff and to enforce and employ sanctions;*
- c. *Develop (for newly authorized MS4s), record, annually assess and modify as needed measurable goals; and*
- d. *Select and implement appropriate post-construction stormwater BMPs and measurable goals to ensure the reduction of all POCs in stormwater discharges to the MEP.*

Required SWMP Reporting

- e. Program *implementation* reporting for continuing *covered entities* (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
- i. number and type of sanctions;
 - ii. number and type of post-construction stormwater management practices;
 - iii. number and type of post-construction stormwater management practices inspected;
 - iv. number and type of post-construction stormwater management practices maintained;
 - v. status of regulatory mechanism, equivalent mechanism, that regulatory mechanism is equivalent; and
 - vi. report on effectiveness of program, *BMP* and *measurable goal* assessment, and implementation of a banking and credit system, if applicable.
- f. Program reporting for **newly regulated covered entities** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

(Part VIII.A.5.f.)

i. **program development deadlines and reporting:**

Initiate by end of Year 1; complete by end of Year 3:

- mechanism of post-construction stormwater management - by end of Year 3 certify that mechanisms will assure compliance with the NYS Construction General Permit (GP-0-15-002);

Initiate by end of Year 2; complete by end of Year 3:

- procedures for inspection and maintenance of post-construction management practices; and
- procedures for enforcement and penalization of violators;

ii. **program implementation reporting** as set forth in Part VIII.A.5(e). Commence *implementation* reporting after three year development period. *Implementation* reporting may begin earlier if *implementation* begins during *development* period.

**6. Pollution Prevention/Good Housekeeping For Municipal Operations
SWMP Development / Implementation**

At a minimum, all *covered entities* must:

- a. *Develop (for newly authorized MS4s) and implement* a pollution prevention / good housekeeping program for *municipal* operations and facilities that:
 - i. addresses *municipal* operations and facilities that contribute or potentially contribute *POCs* to the *small MS4* system. The operations and facilities may include, but are not limited to: street and bridge maintenance; winter road maintenance; stormwater system maintenance; vehicle and fleet maintenance; park and open space maintenance; municipal building maintenance; solid waste management; new construction and land disturbances; right-of-way maintenance; marine operations; hydrologic habitat modification, or other;
 - ii. includes the performance and documentation of a self assessment of all *municipal* operations to:
 - determine the sources of pollutants potentially generated by the *covered entity's* operations and facilities; and
 - identify the *municipal* operations and facilities that will be addressed by the pollution prevention and good housekeeping program, if it is not done already;
 - iii. determines *management practices*, policies, procedures, etc. that will be *developed* and *implemented* to reduce or prevent the discharge of (potential)

(Part VIII.A.6.a.iii.)

- pollutants. Refer to *management practices* identified in the “NYS Pollution Prevention and Good Housekeeping Assistance Document” or other guidance materials available from the EPA, the *State*, or other organizations;
- iv. prioritizes pollution prevention and good housekeeping efforts based on geographic area, potential to improve water quality, facilities or operations most in need of modification or improvement, and *covered entity's* capabilities;
 - v. addresses pollution prevention and good housekeeping priorities;
 - vi. includes an employee pollution prevention and good housekeeping training program and ensure that staff receive and utilize training;
 - vii. requires third party entities performing contracted services, including but not limited to, street sweeping, snow removal, lawn / grounds care, etc., to make the necessary certification in Part IV.G; and
 - viii. requires *municipal* operations and facilities that would otherwise be subject to the NYS Multisector General Permit (MSGP, GP-0-12-001) for industrial stormwater discharges to prepare and *implement* provisions in the SWMP that comply with Parts III. A, C, D, J, K and L of the MSGP. The covered entity must also perform monitoring and record keeping in accordance with Part IV. of the MSGP. Discharge monitoring reports must be attached to MS4 annual report. Those operations or facilities are not required to gain coverage under the MSGP. *Implementation* the above noted provisions of the SWMP will ensure that MEP is met for discharges from those facilities;
- b. Consider and incorporate cost effective runoff reduction techniques and green infrastructure in the routine upgrade of the existing stormwater conveyance systems and municipal properties to the MEP. Some examples include replacement of closed drainage with grass swales, replacement of the existing islands in parking lots with rain garden, or curb cuts to route the flow through below grade infiltration areas or other low cost improvements that provide runoff treatment or reduction.
 - c. *Develop (for newly authorized MS4s)*, record, periodically assess and modify as needed *measurable goals*; and

(Part VIII.A.6.)

- d. Select and implement appropriate pollution prevention and good housekeeping *BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.
- e. Adopt techniques to reduce the use of fertilizers, pesticides, and herbicides, as well as potential impact to surface water.

Required SWMP Reporting

- f. **Program *implementation* reporting for continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). *Covered entities* are required to report on all *municipal* operations and facilities within their jurisdiction (*urbanized area* and *additionally designated area*) that their program is addressing. The *covered entity* shall report at a minimum on the items below:
 - i. indicate the *municipal* operations and facilities that the pollution prevention and good housekeeping program assessed;
 - ii. describe, if not done so already, the management practices, policies and procedures that have been developed, modified, and / or implemented and report, at a minimum, on the items below that the *covered entity's* pollution prevention and good housekeeping program addresses during the reporting year:
 - acres of parking lot swept;
 - miles of street swept;
 - number of catch basins inspected and, where necessary, cleaned;
 - post-construction control stormwater management practices inspected and, where necessary, cleaned;
 - pounds of phosphorus applied in chemical fertilizer
 - pounds of nitrogen applied in chemical fertilizer; and
 - acres of pesticides / herbicides applied.
 - iii. staff training events and number of staff trained; and
 - iv. report on effectiveness of program, *BMP* and *measurable goal* assessment. If the pollution prevention and good housekeeping program addresses other operations than what is listed above in Part VIII.A.6.a(ii), the *covered entity* shall report on items that will demonstrate program effectiveness.
- g. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). *Covered entities* are required to report on all *municipal* operations and facilities within their jurisdiction (*urbanized area* and *additionally*

(Part VIII.A.6.g.)

designated area) that their program is addressing. The *covered entity* shall report at a minimum on the items below:

i. program *development* deadlines and reporting:

Complete by end of Year 1:

- identify the municipal operations and facilities that will be considered for inclusion in the pollution prevention and good housekeeping program;
- describe the pollution prevention and good housekeeping program priorities (geographic area, potential to improve water quality; facilities or operations most in need of modification or improvement);
- describe management practices, policies, procedures, etc. that will be developed or modified;
- identify the staff and equipment available;

Initiate by Year 2; complete Year 3:

- describe employee pollution prevention and good housekeeping program training program and begin training, report on number of staff trained;

Complete by end of Year 3:

- description of developed management practices.

ii. program *implementation* reporting as set forth in Part VIII.A.6(d) above. Commence *implementation* reporting after three year *development* permit. *Implementation* reporting may begin earlier if *implementation* begins during *development* period.

Part IX. WATERSHED IMPROVEMENT STRATEGY REQUIREMENTS

The covered entities in the watershed improvement strategy areas must develop or modify their SWMP to address the additional watershed specific requirements to achieve the pollutant load reduction by the deadlines specified in Tables IX.A through D. The requirements contained in this Part are in addition to the applicable requirements in Part VII or VIII, depending on the type of MS4. The Pollutant Load Reductions are the reductions necessary from the discharge loads associated with MS4s that, when combined with reductions in the discharge loads from non-MS4s to the waterbody, will meet water quality standards. The calculated reductions are based on TMDL models and may be recalculated according to 40CFR Part 130.

The MS4 portion of the pollutant load reduction shall be achieved by implementation of BMPs required of all MS4s, reductions from implementation of additional BMPs for watershed improvement strategy areas including any retrofits required by this permit. These reductions are intended to be targeted and credited using models, loading factors and load reductions predicted based on the best scientific information available. In accordance with NYCRR Part 750-1.14, all covered entities that own or operate MS4s in the watershed improvement strategy areas shall submit to the Department progress reports, described in Part V.D, identifying the activities that have been performed during the period of March 10 through September 9 of each year, and demonstrating that progress is being made towards completion of the reduction requirements, as required by this Part.

The Pollutant Load Reduction Deadlines are deadlines by which the MS4 portion of the pollutant load reduction must be met. Watershed Improvement Strategy Deadlines are the deadlines by which the watershed improvement strategy requirements for addressing the POC are to be completed and implemented. Retrofit Plan Submission Deadlines are the deadlines by which the retrofit plan component of the watershed improvement strategies are submitted to the *Department* for review and approval.

Ultimately, the effectiveness of the load reductions in meeting water quality standards will be verified by ambient monitoring of the affected waterbody. Where ambient monitoring demonstrates consistent compliance with water quality standards, the covered entity may request that the *Department* suspend the additional BMP requirements to install stormwater retrofits.

(Part IX.)

A. New York City East of Hudson Watershed MS4s - (Mapped in Appendix 3)

Table IX.A - Pollutant Load Reduction and Timetable for New York City East of Hudson Phosphorus Watershed Improvement Strategy Area

| Watershed | Watershed Improvement Strategy Deadline | Retrofit Plan Submission Deadline | Pollutant Load Reduction (Load Allocation) | Pollutant Load Reduction Deadline |
|--|---|--|---|--------------------------------------|
| New York City East of Hudson Watershed | 05/01/2011 | 03/09/ 2009 (single) and 12/ 31/2009 (RSE) | In accordance with the TMDL Implementation Plan | 03/09/2019 (single) 12/31/2019 (RSE) |

By the deadlines specified in Table IX.A, covered entities that own or operate MS4s within the listed watershed shall develop and implement the following pollutant specific BMPs. Covered entities that own or operate MS4s in these watersheds shall also submit to the Department, progress reports as specified in Part V.D.

1. Public Education and Outreach on Stormwater Impacts- applicable to *traditional land use control, traditional non-land use control and non-traditional MS4s.*

- a. Plan and conduct an ongoing public education and outreach program designed to describe the impacts of phosphorus (the *POC*) on waterbodies. The program must identify potential sources of phosphorus in *stormwater* runoff and describe steps that contributors can take to reduce the concentration of this *POC* in *stormwater* runoff. The program must also describe steps that contributors of non-*stormwater* discharges (Part I.A.2) can take to reduce phosphorus.
- b. Develop, or acquire if currently available, specific educational material dealing with sources of phosphorus in *stormwater* and pollutant reduction practices. At a minimum, the educational material should address the following topics:
 - i. understanding the phosphorus issue;
 - ii. septic systems as a source of phosphorus;
 - iii. phosphorus concerns with fertilizer use;
 - iv. phosphorus concerns with grass clippings and leaves entering streets and storm sewers;
 - v. construction sites as a source of phosphorus; and

- vi. phosphorus concerns with detergent use.

2. Public Involvement/ Participation

No additional requirements proposed for this permit term.

3. Illicit Discharge Detection and Elimination

a. Mapping - applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*.

Develop and maintain a map showing the entire *small MS4* conveyance system. The *covered entity* shall complete the mapping of approximately 20% of the system every year, with the entire system being mapped by January 8, 2013.

At a minimum, the map and/or supportive documentation for the conveyance system should include the following information:

- i. type of conveyance system - closed pipe or open drainage;
- ii. for closed pipe systems - pipe material, shape, and size;
- iii. for open drainage systems - channel/ditch lining material, shape, and dimensions; location and dimensions of any culvert crossings;
- iv. drop inlet, catch basin, and manhole locations; and
- v. number and size of connections (inlets/outlets) to catch basins and manholes, direction of flow.

All information shall be prepared in digital format suitable for use in GIS software and in accordance with the *Department's* guidance on Illicit Discharge Detection and Elimination. The scale shall be 1:24,000 or better.

b. On-site wastewater systems - applicable to *traditional land use control* and *traditional non-land use control MS4s*.

- *Develop, implement* and enforce a program that ensures that on-site sanitary systems designed for less than 1000 gallons per day (septic systems, cesspools, including any installed absorption fields) are inspected at a minimum frequency of once every five years and, where necessary, maintained or rehabilitated. Regular field investigations/inspections should be done in accordance with the most current

version of the EPA publication entitled Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, to detect the presence of ongoing and/or intermittent on-site sanitary discharges to the storm sewer system. An advanced system inspection requiring completion by a certified professional is not required by this permit, but may be used where site specific conditions warrant. Program development shall include the establishment of the necessary legal authority to implement the program.

4. Construction Site Stormwater Runoff Control- applicable to *traditional land use control MS4s*.

- a. *Develop, implement and enforce a program to reduce pollutants in stormwater runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to five thousand (5000) square feet. At a minimum, the program must provide equivalent protection to the NYS DEC SPDES General Permit for Stormwater Discharges from Construction Activity and must include the development and implementation of:*
 - i. by December 31, 2009, an ordinance or other regulatory mechanism that requires erosion and sediment controls designed in accordance with the most current version of the technical standard New York State Standards and Specifications for Erosion and Sediment Control for all construction activities that disturb between five thousand (5000) square feet and one acre of land. For construction activities that disturb between five thousand (5000) square feet and one (1) acre of land, one of the standard erosion and sediment control plans included in Appendix E (Erosion & Sediment Control Plan For Small Homesite Construction) of the New York Standards and Specifications for Erosion and Sediment Control may be used as the Stormwater Pollution Prevention Plan (SWPPP);
 - ii. policy and procedures for the *covered entity* to perform, or cause to be performed, compliance inspections at all sites with a disturbance of one (1) or more acres. By December 31, 2009, the *covered entity* shall have started performing, or cause to be performed, compliance inspections at all sites with a disturbance between five thousand (5000) square feet and one (1) acre of land;

5. Post-Construction Stormwater Management

- a. Construction stormwater program - applicable to *traditional land use control, traditional non-land use control and non-traditional MS4s*.

(Part IX.A.5.a.)

Develop, *implement* and enforce a program to address post-construction *stormwater* runoff from new development and redevelopment projects that disturb greater than or equal to one (1) acre. This includes projects of less than one acre that are part of a larger common plan of development or sale. At a minimum, the program must provide equivalent protection to the NYS DEC SPDES General Permit for Stormwater Discharges from Construction Activity and must include the *development* and *implementation* of:

- i. a law or other mechanism that requires post-construction stormwater management controls designed in accordance with the most current version of the technical standards the New York State Stormwater Management Design Manual including the Enhanced Phosphorus Removal Design Standards. An MS4 must ensure that their ordinance or other mechanism requires post-construction stormwater management controls to be designed in accordance with the final version of the Enhanced Phosphorus Removal Design Standards by September 30, 2008.
- b. Retrofit program - applicable to *traditional land use control, traditional non-land use control* and *non-traditional MS4s*.

Develop and commence implementation of a Retrofit Program that addresses runoff from sites to correct or reduce existing erosion and/or pollutant loading problems, with a particular emphasis placed on the pollutant phosphorus. At a minimum, the MS4 shall:

- i. establish procedures to identify sites with erosion and/or pollutant loading problems;
- ii. establish policy and procedures for project selection. Project selection should be based on the phosphorus reduction potential of the specific retrofit being constructed/installed; the ability to use standard, proven technologies; and the economic feasibility of constructing/installing the retrofit. As part of the project selection process, the *covered entity* should participate in locally based watershed planning efforts which involve the *Department, other covered entities, stakeholders* and other interested parties;
- iii. establish policy and procedures for project permitting, design, funding, construction and maintenance.

(Part IX.A.5.b.)

- iv. for covered entities that develop their own retrofit program, by March 9, 2009 develop and submit approvable plans with schedules for completing retrofit projects, including identification of funding sources. Upon DEC approval of those schedules, the plans and schedules shall become enforceable requirements of this permit.
- v. pursuant to Part IV. B (Cooperation Between Covered entities Encouraged), retrofit projects can be completed in cooperation with other covered entities in the East of Hudson Watershed through the formation of a cooperative entity with other MS4s. Participating MS4s shall work with the Department and other members of the cooperative entity in implementing the requirements of i, ii and iii above. In addition, each covered entity that becomes a member of the cooperative entity shall work closely with the Department and other members of the cooperative entity to, by December 31, 2009, develop and submit approvable plans and schedules for completing retrofit projects, including identification of funding sources. Upon DEC approval of those plans and schedules, the plans and schedules shall become enforceable requirements of this permit.

6. Pollution Prevention/Good Housekeeping For Municipal Operations- applicable to *traditional land use control, traditional non-land use control and non-traditional MS4s.*

- a. By December 31, 2009, develop and implement a Stormwater Conveyance System inspection and maintenance program. At a minimum, the program shall include the following:
 - i. policy and procedures for the inspection and maintenance of catch basin and manhole sumps. Catch basin and manhole sumps should be inspected in the early spring and late fall for sediment and debris build-up. If sediment and debris fills greater than 50% of the sump volume, the sump should be cleaned. All sediment and debris removed from the catch basins and manholes shall be properly disposed of;
 - ii. policy and procedures for the inspection, maintenance and repair of conveyance system *outfalls*. Beginning June 30, 2008, the MS4 must inspect 20% of their *outfalls* each year and make repairs as necessary. All outfall protection and/or bank stability problems identified during the inspection shall be corrected in accordance with the New York Standards and Specifications for Erosion and Sediment Control;

(Part IX.A.6.a.)

- iii. policy and procedures for the inspection, maintenance and repair of a *covered entity's* stormwater management practices. The inspection and maintenance schedule for all stormwater management practices shall assure continued operation of stormwater management practices; and
 - iv. develop a Corrective Action Plan for each Stormwater Conveyance System component that has been identified as needing repair. A file of all corrective actions implemented and *illicit discharges* detected and repaired should be maintained for a period of not less than five years.
- b. By December 31, 2010, develop and implement a turf management practices and procedures policy. The policy shall address the following:
- i. procedures for proper fertilizer application on municipally-owned lands. The application of any phosphorus-containing fertilizer (as labeled) shall only be allowed following a proper soil test and analysis documenting that soil phosphorus concentrations are inadequate;
 - ii. procedures for the proper disposal of grass clippings from municipally-owned lawns where grass clipping collection equipment is used. Grass clippings shall be disposed of in a compost pile or a proper containment device so that they cannot enter the *small MS4* or surface waters;
 - iii. procedures for the proper disposal of leaves from municipally-owned lands where leaves are collected. Leaves shall be disposed of in a compost pile or a proper containment device so that they cannot enter *small MS4s* or surface waters;
 - iv. for municipalities with lawn waste collection programs, the development of a curbside lawn waste management policy which ensures that lawn waste does not decay and release phosphorus to the storm sewer system; and
 - v. the planting of wildflowers and other native plant material to lessen the frequency of mowing and the use of chemicals to control vegetation.

(Part IX.)

B. Other Phosphorus Watershed MS4s (Mapped in Appendices 4, 5, and 10)

Table IX.B - Pollutant Load Reduction and Timetable for Other Phosphorus Watershed Improvement Strategy Areas

| Watershed | Watershed Improvement Strategy Deadline | Retrofit Plan Submission Deadline | Pollutant Load Reduction (Waste Load Allocation %*) | Pollutant Load Reduction Deadline |
|----------------|---|-----------------------------------|---|-----------------------------------|
| Greenwood Lake | 05/01/2011 | 03/09/2011 | 43* (load allocation) | 03/09/2011 |
| Onondaga Lake | TMDL approval + 3 years | TMDL approval + 3 years | TBD | TMDL approval + 13 years |
| Oscawana Lake | 05/01/2013 | Not Applicable | 18 | 2020 |

By the deadlines specified in Table IX.B, covered entities that own or operate MS4s within the listed watersheds shall develop and implement the following pollutant specific BMPs for MS4 sewersheds discharging to the listed waterbody. Covered entities that own or operate MS4s in these watersheds shall also submit to the Department, progress reports as specified in Part V.D.

1. Public Education and Outreach on Stormwater Impacts- applicable to *traditional land use control, traditional non-land use control and non-traditional MS4s.*

- a. Plan and conduct an ongoing public education and outreach program designed to describe the impacts of phosphorus (the POC) on waterbodies. The program must identify potential sources of Phosphorus in stormwater runoff and describe steps that contributors can take to reduce Phosphorus in stormwater runoff.
- b. develop, or acquire if currently available, specific educational material dealing with sources of Phosphorus in stormwater and pollutant reduction practices. At a minimum, the educational material should address the following topics:
 - i. understanding the phosphorus issue;
 - ii. septic systems as a source of phosphorus; and
 - iii. phosphorus concerns with fertilizer use.

2. Public Involvement/ Participation

No additional requirements proposed for at this time.

3. Illicit Discharge Detection and Elimination applicable to *traditional land use control and traditional non-land use control MS4s*, except within the Onondaga Lake Watershed.

- a. *Develop, implement and enforce* a program that ensures that on-site sanitary systems designed for less than 1000 gallons per day (septic systems, cesspools, including any installed absorption fields) are inspected at a minimum frequency of once every five

years and, where necessary, maintained or rehabilitated. Conduct of regular field investigations/inspections should be done in accordance with the most current version of the EPA publication entitled Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, to detect the presence of ongoing and/or intermittent on-site sanitary discharges to the storm sewer system. An advanced system inspection requiring completion by a certified professional is not required by this permit, but may be used where site specific conditions warrant. Program development shall include the establishment of the necessary legal authority to implement the program.

4. Construction Site Stormwater Runoff Control

No additional requirements at this time.

5. Post-Construction Stormwater Management, - applicable to *traditional land use, traditional non-land use control and non-traditional MS4s*.

- a. The *covered entity* must require the use of the “Enhanced Phosphorus Removal Design Standards” in accordance with NYS Stormwater Design Manual;
- b. *Develop* and commence implementation of a Retrofit Program that addresses runoff from sites to correct or reduce existing erosion and/or pollutant loading problems, with a particular emphasis placed on the pollutant Phosphorus. At a minimum, the MS4 shall:
 - i. establish procedures to identify sites with erosion and/or pollutant loading problems;
 - ii. establish policy and procedures for project selection. Project selection should be based on the Phosphorus reduction potential of the specific retrofit being constructed/installed; the ability to use standard, proven technologies; and the economic feasibility of constructing/installing the retrofit. As part of the project selection process, the *covered entity* should participate in locally based watershed planning efforts which involve the *Department*, other *covered entities*, stakeholders and other interested parties;
 - iii. establish policy and procedures for project permitting, design, funding, construction and maintenance
 - iv. by the date specified for each watershed in the appropriate Watershed Improvement Strategy Requirement Table develop and submit approvable plans and schedules for completing retrofit projects, including identification of funding

sources. Upon DEC approval of those plans and schedules, the plans and schedules shall become enforceable requirements of this permit.

6. Pollution Prevention/Good Housekeeping For Municipal Operations applicable to *traditional land use control, traditional non-land use control and non-traditional MS4s.*

- a. Develop a turf management practices and procedures policy. The policy should address the following:
 - i. procedures for proper fertilizer application on municipally-owned lands. The application of any phosphorus-containing fertilizer (as labeled) shall only be allowed following a proper soil test and analysis documenting that soil phosphorus concentrations are inadequate; and
 - ii. the planting of native plant material to lessen the frequency of mowing and the use of chemicals to control vegetation.

(Part IX.)

C. Pathogen Impaired Watershed MS4s (Mapped in Appendix 6, 7 and 9)

Table IX.C - Pollutant Load Reduction and Timetable for Pathogen Impaired Watershed Improvement Strategy Areas

| Watershed | Watershed Improvement Strategy Deadline | Retrofit Plan Submission Deadline | Pollutant Load Reduction (Waste Load Allocation %) | Pollutant Load Reduction Deadline |
|------------------------------|---|-----------------------------------|--|-----------------------------------|
| Budds Pond* | 05/01/2013 | 09/30/2012 | 61 | 09/30/2022 |
| Stirling Creek* | 05/01/2013 | 09/30/2012 | 28 | 09/30/2022 |
| Town & Jockey Creeks* | 05/01/2013 | 09/30/2012 | 76 | 09/30/2022 |
| Goose Creek* | 05/01/2013 | 09/30/2012 | 70 | 09/30/2022 |
| Hashamomuck Pond, Zone HP-1* | 05/01/2013 | 09/30/2012 | 77 | 09/30/2022 |
| Hashamomuck Pond, Zone HP-2* | 05/01/2013 | 09/30/2012 | 43 | 09/30/2022 |
| Richmond Creek* | 05/01/2013 | 09/30/2012 | 71 | 09/30/2022 |
| Deep Hole Creek* | 05/01/2013 | 09/30/2012 | 29 | 09/30/2022 |
| James Creek* | 05/01/2013 | 09/30/2012 | 51 | 09/30/2022 |
| Flanders Bay | 05/01/2012 | 03/09/2012 | 98 | 03/09/2021 |
| Reeves Bay | 05/01/2012 | 03/09/2012 | 97 | 03/09/2021 |
| Sebonac Creek | 05/01/2012 | 03/09/2012 | 58 | 03/09/2021 |
| North Sea Harbor, Zone NSH-1 | 05/01/2012 | 03/09/2012 | 97 | 03/09/2021 |
| North Sea Harbor, Zone NSH-2 | 05/01/2012 | 03/09/2012 | 62 | 03/09/2021 |
| North Sea Harbor, Zone NSH-3 | 05/01/2012 | 03/09/2012 | 99 | 03/09/2021 |
| North Sea Harbor, Zone NSH-5 | 05/01/2012 | 03/09/2012 | 74 | 03/09/2021 |
| Wooley Pond | 05/01/2012 | 03/09/2012 | 97 | 03/09/2021 |
| Noyac Creek, Zone NC-1 | 05/01/2012 | 03/09/2012 | 64 | 03/09/2021 |
| Sag Harbor, Zone SH-2* | 05/01/2013 | 09/30/2012 | 50 | 09/30/2022 |
| Northwest Creek* | 05/01/2013 | 09/30/2012 | 76 | 09/30/2022 |
| Acabonac Harbor, Zone AH-2* | 05/01/2013 | 09/30/2012 | 42 | 09/30/2022 |
| Acabonac Harbor, Zone AH-3* | 05/01/2013 | 09/30/2012 | 85 | 09/30/2022 |
| Acabonac Harbor, Zone AH-4* | 05/01/2013 | 09/30/2012 | 81 | 09/30/2022 |
| Acabonac Harbor, Zone AH-5* | 05/01/2013 | 09/30/2012 | 87 | 09/30/2022 |
| Montauk Lake, Zone LM-1* | 05/01/2013 | 09/30/2012 | 52 | 09/30/2022 |
| Montauk Lake, Zone LM-2* | 05/01/2013 | 09/30/2012 | 52 | 09/30/2022 |
| Montauk Lake, Zone LM-3* | 05/01/2013 | 09/30/2012 | 48 | 09/30/2022 |
| Little Sebonac Creek | 05/01/2012 | 03/09/2012 | 70 | 03/09/2021 |
| Oyster Bay (Harbor 2) | 05/01/2012 | 03/09/2012 | 20 | 03/09/2021 |
| Oyster Bay (Harbor 3) | 05/01/2012 | 03/09/2012 | 90 | 03/09/2021 |

*Additionally Designated Area

| Watershed | Watershed Improvement Strategy Deadline | First Retrofit Plan Submission Deadline | Pollutant Reduction (Waste Load Allocation %) | Pollutant Load Reduction Deadline |
|---|---|---|---|-----------------------------------|
| Hempstead Harbor, north, and tidal tributaries | 05/01/2013 | 09/30/2012 | 95 | 09/30/2022 |
| Cold Spring Harbor, and tidal tributaries, Inner | 05/01/2013 | 09/30/2012 | 95 | 09/30/2022 |
| Cold Spring Harbor, Eel Creek | 05/01/2013 | 09/30/2012 | 90 | 09/30/2022 |
| Huntington Harbor | 05/01/2013 | 09/30/2012 | 89 | 09/30/2022 |
| Centerport Harbor | 05/01/2013 | 09/30/2012 | 91 | 09/30/2022 |
| Northport Harbor | 05/01/2013 | 09/30/2012 | 92 | 09/30/2022 |
| Stony Brook Harbor and West Meadow Creek | 05/01/2013 | 09/30/2012 | 99 | 09/30/2022 |
| Stony Brook Creek | 05/01/2013 | 09/30/2012 | 99 | 09/30/2022 |
| Stony Brook Yacht Club | 05/01/2013 | 09/30/2012 | 48 | 09/30/2022 |
| Port Jefferson Harbor, North and tribs | 05/01/2013 | 09/30/2012 | 94 | 09/30/2022 |
| Conscience Bay and tidal tribs | 05/01/2013 | 09/30/2012 | 99 | 09/30/2022 |
| Setauket Harbor, Little Bay | 05/01/2013 | 09/30/2012 | 84 | 09/30/2022 |
| Setauket Harbor, East Setauket | 05/01/2013 | 09/30/2012 | 79 | 09/30/2022 |
| Setauket Harbor, Poquot | 05/01/2013 | 09/30/2012 | 100 | 09/30/2022 |
| Mt. Sinai Harbor, Crystal Brook | 05/01/2013 | 09/30/2012 | 88 | 09/30/2022 |
| Mt. Sinai Harbor, Inner Harbor | 05/01/2013 | 09/30/2012 | 96 | 09/30/2022 |
| Mt. Sinai Harbor, Pipe Stave Hollow | 05/01/2013 | 09/30/2012 | 93 | 09/30/2022 |
| Mattituck Inlet/Creek, Low, and tidal tributaries | 05/01/2013 | 09/30/2012 | 64 | 09/30/2022 |
| Goldsmith Inlet | 05/01/2013 | 09/30/2012 | 91 | 09/30/2022 |
| West Harbor - Darby Cove | 05/01/2013 | 09/30/2012 | 41 | 09/30/2022 |
| Georgica Pond, Upper | 05/01/2013 | 09/30/2012 | 93 | 09/30/2022 |

| | | | | |
|--------------------------------------|------------|------------|----|------------|
| Georgica Pond, Lower | 05/01/2013 | 09/30/2012 | 93 | 09/30/2022 |
| Georgica Pond Cove | 05/01/2013 | 09/30/2012 | 92 | 09/30/2022 |
| Sagaponack Pond | 05/01/2013 | 09/30/2012 | 88 | 09/30/2022 |
| Mecox Bay and tributaries | 05/01/2013 | 09/30/2012 | 89 | 09/30/2022 |
| Heady Creek and tributaries | 05/01/2013 | 09/30/2012 | 88 | 09/30/2022 |
| Taylor Creek and tributaries | 05/01/2013 | 09/30/2012 | 52 | 09/30/2022 |
| Penny Pond | 05/01/2013 | 09/30/2012 | 31 | 09/30/2022 |
| Weesuck Creek and tidal tributaries | 05/01/2013 | 09/30/2012 | 37 | 09/30/2022 |
| Penniman Creek and tidal tributaries | 05/01/2013 | 09/30/2012 | 32 | 09/30/2022 |
| Ogden Pond | 05/01/2013 | 09/30/2012 | 28 | 09/30/2022 |
| Quantuck Bay-Quantuck Creek | 05/01/2013 | 09/30/2012 | 91 | 09/30/2022 |
| Quantuck Canal/Moneybogue Bay | 05/01/2013 | 09/30/2012 | 62 | 09/30/2022 |
| Seatuck Cove | 05/01/2013 | 09/30/2012 | 94 | 09/30/2022 |
| Harts Cove | 05/01/2013 | 09/30/2012 | 12 | 09/30/2022 |
| Narrow Bay | 05/01/2013 | 09/30/2012 | 16 | 09/30/2022 |
| Bellport Bay, Beaver Dam Creek | 05/01/2013 | 09/30/2012 | 94 | 09/30/2022 |
| Bellport Bay, West Cove | 05/01/2013 | 09/30/2012 | 94 | 09/30/2022 |
| Patchogue Bay, Swan River | 05/01/2013 | 09/30/2012 | 90 | 09/30/2022 |
| Patchogue Bay, Mud Creek | 05/01/2013 | 09/30/2012 | 71 | 09/30/2022 |

By the deadlines specified in Table IX.C, covered entities that own or operate MS4s within the listed watersheds shall develop and implement the following pollutant specific BMPs in MS4 sewersheds discharging to the listed waters. Covered entities who own or operate MS4s within these watersheds shall also submit to the Department, progress reports as specified in Part V.D.

(Part IX.C)

1. Public Education and Outreach on Stormwater Impacts- applicable to *traditional land use control, traditional non-land use control and non-traditional MS4s*

a. Plan and conduct an ongoing public education and outreach program designed to describe the impacts of Pathogens (the *POC*) on waterbodies. The program must identify potential sources of Pathogens in *stormwater* runoff and describe steps that contributors can take to reduce the Pathogens in *stormwater* runoff. The program must also describe steps that contributors of non-*stormwater discharges* can take to reduce Pathogens.

b. *Develop*, or acquire if currently available, specific educational material dealing with sources of Pathogens in *stormwater* and pollutant reduction practices. At a minimum, the educational material should address the following topics:

i. where, why, and how Pathogens pose threats to the environment and to the community;

ii. septic systems, geese and pets as a source of pathogens;

iii. dissemination of educational materials / surveys to households/businesses in proximity to Pathogen *TMDL* waterbodies; and

iv. education for livestock / horse boarders regarding manure *BMPs*.

2. Public Involvement / Participation

No additional requirements proposed at this time.

3. Illicit Discharge Detection and Elimination, SWMP Development / Implementation- Mapping applicable to *traditional land use control and traditional non-land use control MS4s*.

a. Develop, implement, and enforce a program to detect and eliminate discharges to the municipal separate storm sewer system from on-site sanitary systems in areas where factors such as shallow groundwater, low infiltrative soils, historical on-site sanitary system failures, or proximity to pathogen-impaired waterbodies, indicate a reasonable likelihood of system discharge.

In such areas, ensure that on-site sanitary systems designed for less than 1000 gallons per day (septic systems, cesspools, including any installed absorption fields) are inspected at a minimum frequency of once every five years and, where necessary, maintained or rehabilitated. Conduct regular field investigations/inspections in accordance with the most current version of the EPA publication entitled Illicit Discharge

(Part IX.C.3.a)

Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, to detect the presence of ongoing and/or intermittent on-site sanitary discharges to the storm sewer system. An advanced system inspection requiring completion by a certified professional is not required by this permit, but may be used where site specific conditions warrant.

On-site sanitary system IDDE program development shall include the establishment of the necessary legal authority (such as new or revised local laws) for implementation and enforcement.

b. Develop and maintain a map showing the entire *small MS4* conveyance system. The *covered entity* shall complete the mapping of approximately 20% of the system every year, with the entire system being mapped by May 1, 2015. At a minimum, the map and/or supportive documentation for the conveyance system shall include the following information:

- i. type of conveyance system - closed pipe or open drainage;
- ii. for closed pipe systems - pipe material, shape, and size;
- iii. for open drainage systems - channel/ditch lining material, shape, and dimensions; location and dimensions of any culvert crossings;
- iv. drop inlet, catch basin, and manhole locations; and
- v. number and size of connections (inlets/outlets) to catch basins and manholes, direction of flow.

All information shall be prepared in digital format suitable for use in GIS software and in accordance with the *Department's* guidance on Illicit Discharge Detection and Elimination. The scale shall be 1:24000 or better.

4. Construction Site Stormwater Runoff Control

No additional requirements at this time.

5. Post-Construction Stormwater Management- applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*.

Develop and commence implementation of a Retrofit Program that addresses runoff from sites to correct or reduce pollutant loading problems, with a particular emphasis placed on the pollutant Pathogens. At a minimum, the MS4 shall:

- a. establish procedures to identify sites with erosion and/or pollutant loading problems;

(Part IX.C.5.)

- b. establish policy and procedures for project selection. Project selection should be based on the Pathogen reduction potential of the specific retrofit being constructed/installed; the ability to use standard, proven technologies; and the economic feasibility of constructing/installing the retrofit. As part of the project selection process, the *covered entity* should participate in locally based watershed planning efforts which involve the *Department*, other *covered entities*, stakeholders and other interested parties;
- c. establish policy and procedures for project permitting, design, funding, construction and maintenance
- d. by March 9, 2011, develop and submit approvable plans and schedules for completing retrofit projects. Upon DEC approval of those plans and schedules and identification of funding sources, the plans and schedules shall become enforceable requirements of this permit.

6. Pollution Prevention/Good Housekeeping For Municipal Operations, - applicable to *traditional land use control* and traditional non-land use control MS4s.

- a. *Develop*, enact and enforce a local law prohibiting pet waste on municipal properties and prohibiting goose feeding.
- b. *Develop* and *implement* a pet waste bag program for collection and proper disposal of pet waste.
- c. *Develop* a program to manage goose populations.

(Part IX.)

D. Nitrogen Watershed MS4s (Mapped in Appendix 8)

Table IX.D - Pollutant Load Reduction and Timetable for Nitrogen Watershed Improvement Strategy Area

| Watershed | Watershed Improvement Strategy Deadline | Retrofit Plan Submission Deadline | Pollutant Reduction (Load Allocation %) | Pollutant Load Reduction Deadline |
|--|---|-----------------------------------|---|-----------------------------------|
| Lower Peconic River & Tidal Tributaries | 05/01/2011 | 03/09/2011 | 15 | 03/09/2021 |
| Western Flanders Bay & Lower Sawmill Creek | | | | |
| Meetinghouse Creek | | | | |
| Terrys Creek & Tributaries | | | | |

By the deadlines specified in Table IX.D, covered entities that own or operate MS4s within the listed watersheds shall develop and implement the following pollutant specific BMPs for MS4 sewersheds discharging to the listed waterbodies. Covered entities that own or operate MS4s within these watersheds shall also submit to the Department, progress reports as specified in Part V.D.

1. Public Education and Outreach on Stormwater Impacts - applicable to *traditional land use control, traditional non-land use control and non-traditional MS4s*.

- a. Plan and conduct an ongoing public education and outreach program designed to describe the impacts of Nitrogen (the POC) on waterbodies. The program must identify potential sources of Nitrogen in stormwater runoff and describe steps that contributors can take to reduce the Nitrogen in stormwater runoff.
- b. develop, or acquire if currently available, specific educational material dealing with sources of Nitrogen in stormwater and pollutant reduction practices. At a minimum, the educational material should address the following topics:
 - i. understanding the Nitrogen issue;
 - ii. septic systems as a source of Nitrogen; and

(Part IX.D.1.b)

- iii. Nitrogen concerns with fertilizer use.

2. Public Involvement/ Participation

No additional requirements proposed for at this time.

3. Illicit Discharge Detection and Elimination - applicable to *traditional land use control* and *traditional non-land use control MS4s*

a. Develop and maintain a map showing the entire small MS4 conveyance system. The covered entity shall complete the mapping of approximately 20% of the system every year, with the entire system being mapped by May 1, 2015. At a minimum, the map and/or supportive documentation for the conveyance system shall include the following information:

- i. type of conveyance system - closed pipe or open drainage;
- ii. for closed pipe systems - pipe material, shape, and size;
- iii. for open drainage systems - channel/ditch lining material, shape, and dimensions; location and dimensions of any culvert crossings;
- iv. drop inlet, catch basin, and manhole locations; and
- v. number and size of connections (inlets/outlets) to catch basins and manholes, direction of flow.

All information shall be prepared in digital format suitable for use in GIS software and in accordance with the *Department's* guidance on Illicit Discharge Detection and Elimination. The scale shall be 1:24000 or better.

4. Construction Site Stormwater Runoff Control

No additional requirements at this time.

5. Post-Construction Stormwater Management - applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*.

Develop and commence implementation of a Retrofit Program that addresses runoff from sites to correct or reduce existing erosion and/or pollutant loading problems, with a particular emphasis placed on the pollutant Nitrogen. At a minimum, the MS4 shall:

- a. establish procedures to identify sites with erosion and/or pollutant loading problems;

(Part IX.D.5)

- b. establish policy and procedures for project selection. Project selection should be based on the Nitrogen reduction potential of the specific retrofit being constructed/installed; the ability to use standard, proven technologies; and the economic feasibility of constructing/installing the retrofit. As part of the project selection process, the *covered entity* should participate in locally based watershed planning efforts which involve the *Department*, other *covered entities*, stakeholders and other interested parties;
- c. establish policy and procedures for project permitting, design, funding, construction and maintenance; and
- d. by March 9, 2011, develop and submit approvable plans and schedules for completing retrofit projects, including identification of funding sources. Upon DEC approval of those plans and schedules, the plans and schedules shall become enforceable requirements of this permit.

6. Pollution Prevention/Good Housekeeping For Municipal Operations - applicable to *traditional land use control, traditional non-land use control and non-traditional MS4s.*

- a. Develop a turf management practices and procedures policy. The policy should address the following:
 - i. procedures for proper fertilizer application on municipally-owned lands. The application of any Nitrogen-containing fertilizer shall only be allowed under the supervision of a Certified Crop Advisor or Certified Landscape Architect; and
 - ii. the planting of native plant material to lessen the frequency of mowing and reduce the use of chemicals to control vegetation.

Part X. ACRONYMS AND DEFINITIONS

A. Acronym List

BMP - Best Management Practice
CFR - Code of Federal Regulations
CWA - Clean Water Act
ECL - Environmental Conservation Law
MCC - Municipal Compliance Certification
MCM - Minimum Control Measure
MEP - Maximum Extent Practicable
MS4 - Municipal Separate Storm Sewer System
NPDES - National Pollutant Discharge Elimination System
POC - Pollutant of Concern
SPDES - State Pollutant Discharge Elimination System
SWMP - Stormwater Management Program
SWMP Plan - Stormwater Management Program Plan
SWPPP - Stormwater Pollution Prevention Plan
TMDL - Total Maximum Daily Load
UA - Urbanized Area

B. Definitions

Activities - See best management practice

Additionally Designated Areas - EPA required the Department to develop a set of criteria for designating additional MS4 areas as subject to these regulations. The following criteria have been adopted to designate additional MS4s in New York State:

Criteria 1: MS4s discharging to waters for which and EPA-approved TMDL required reduction of a pollutant associated with stormwater beyond what can be achieved with existing programs (and the area is not already covered under automatic designation as UA).

Criteria 2: MS4s contiguous to automatically designated urbanized areas (town lines) that discharge to sensitive waters classified as AA Special (fresh surface waters), AA (fresh surface waters) with filtration avoidance determination or SA (saline surface waters).

Criterion 3: Automatically designated MS4 areas are extended to Town, Village or City boundaries, but only for Town, Village or City implementation of Minimum Control Measures (4) Construction Site Stormwater Runoff Control and (5) Post Construction Stormwater Management in Development and Redevelopment. This additional designation may be waived, by written request to the Department, where the automatically designated area is a small portion of the total area of the Town, Village or City (less than 15 %) and where there is

little or no construction activity in the area outside of the automatically designated area (less than 5 disturbed acres per year).

Best Management Practice - means schedules activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements (if determined necessary by the covered entity), operating procedures, and practices to control runoff, spillage and leaks, sludge or waste disposal, or drainage from areas that could contribute pollutants to stormwater discharges. BMP is referred to in EPA's fact sheets and other materials. BMPs are also referred to as "activities" or "management practices" throughout this *SPDES general permit*.

Better Site Design (BSD) - Better Site Design incorporates non-structural and natural approaches to new and redevelopment projects to reduce impacts on watersheds by conserving natural areas, reducing impervious cover and better integrating stormwater treatment. Better site design is a form of Green Infrastructure and is similar to Low Impact Development (LID). See also Green Infrastructure and Low Impact Development.

Construction Activity(ies) - means any clearing, grading, excavation, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include but are not limited to logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Covered entity - means the holder of this *SPDES general permit* or an entity required to gain coverage under this *SPDES general permit*. The owner / operator of the small MS4.

Department - means the New York State Department of Environmental Conservation as well as meaning the Department 's designated agent.

Development - period after initial authorization under this *SPDES general permit* when the covered entity creates, designs or develops activities, BMPs, tasks or other measures to include in their SWMP

Discharge(s) - any addition of any pollutant to waters of the State through an outlet or point source.

Discharge Authorized by a SPDES Permit - means discharges of wastewater or stormwater from sources listed in the permit, that do not violate ECL Section 17-0501, that are through outfalls listed in the permit, and that are:

1. discharges within permit limitations of pollutants limited in the SPDES permit;

2. discharges within permit limitations of pollutants limited by an indicator limit in the SPDES permit;
3. discharges of pollutants subject to action level requirements in the SPDES permit;
4. discharges of pollutants not explicitly listed in the SPDES permit, but reported in the SPDES permit application record as detected in the discharge or as something the covered entity knows or has reason to believe to be present in the discharge, provided the special conditions section of the applicable SPDES permit does not otherwise forbid such a discharge and provided that such discharge does not exceed, by an amount in excess of normal effluent variability, the level of discharge that may reasonably be expected for that pollutant from information provided in the SPDES permit application record;
5. discharges of pollutants not required to be reported on the appropriate and current New York State SPDES permit application; provided the special conditions section of the permit does not otherwise forbid such a discharge. The Department may, in accordance with law and regulation, modify the permit to include limits for any pollutant even if that pollutant is not required to be reported on the SPDES permit application; or
6. discharges from fire fighting activities; fire hydrant flushings; testing of fire fighting equipment, provided that such equipment is for water only fire suppression; potable water sources including waterline flushings; irrigation drainage; lawn watering; uncontaminated infiltration and inflow; leakage from raw water conveyance systems; routine external building washdown and vehicle washing which does not use detergents or other compounds; pavement washwaters where spills or leaks of toxic or hazardous materials, other than minor and routine releases from motor vehicles, have not occurred (unless such material has been removed) and where detergents are not used; air conditioning and steam condensate; springs; uncontaminated groundwater; and foundation or footing drains where flows are not contaminated with process materials such as solvents provided that the covered entity has implemented an effective plan for minimizing the discharge of pollutants from all of the sources listed in this subparagraph.

Environmental Conservation Law - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

Green Infrastructure - Green infrastructure approaches essentially infiltrate, evapotranspire or reuse stormwater, with significant utilization of soils and vegetation rather than traditional hardscape collection, conveyance and storage structures. Common green infrastructure approaches include green roofs, trees and tree boxes, rain gardens, vegetated swales, pocket wetlands, infiltration planters, vegetated median strips, reforestation, and protection and enhancement of riparian buffers and floodplains. See also Low Impact Development and Better Site Design.

Groundwater - means waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the

atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

Illicit Discharges - discharges not entirely composed of stormwater into the small MS4, except those identified in Part I.A.2. Examples of illicit discharges are non-permitted sanitary sewage, garage drain effluent, and waste motor oil. However, an illicit discharge could be any other non-permitted discharge which the covered entity or Department has determined to be a substantial contributor of pollutants to the small MS4.

Impaired Water - a water is impaired if it does not meet its designated use(s). For purposes of this permit 'impaired' refers to impaired waters for which TMDLs have been established, for which existing controls such as permits are expected to resolve the impairment, and those needing a TMDL. Impaired waters compilations are also sometimes referred to as 303(d) lists; 303(d) lists generally include only waters for which TMDLs have not yet been developed. States will generally have associated, but separate lists of impaired waters for which TMDLs have already been established.

Implementation - period after development of SWMP, where the covered entity puts into effect the practices, tasks and other activities in their SWMP.

Individual SPDES Permit - means a SPDES permit issued to a single facility in one location in accordance with this Part (as distinguished from a *SPDES general permit*).

Industrial Activity - as defined by the SPDES Multi-Sector General Permit (GP-0-12-001).

Larger Common Plan of Development or Sale - means a contiguous area where multiple separate and distinct construction activities are occurring, or will occur, under one plan. The term "plan" in "larger common plan of development or sale" is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, State Environmental Quality Review Act Application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that construction activities may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed.

Low Impact Development - is a site design strategy with a goal of maintaining or replicating the predevelopment hydrologic regime through the use of design techniques to create a functionally equivalent hydrologic landscape. Hydrologic functions of storage, infiltration,

and ground water recharge, as well as the volume and frequency of discharges are maintained through the use of integrated and distributed micro scale stormwater retention and detention areas, reduction of impervious surfaces, and the lengthening of flow paths and runoff time. Other strategies include the preservation/protection of environmentally sensitive site features such as riparian buffers, wetlands, steep slopes, valuable (mature) trees, flood plains, woodlands and highly permeable soils. LID principles are based on controlling stormwater at the source by the use of micro scale controls that are distributed throughout the site. This is unlike conventional approaches that typically convey and manage runoff in large facilities located at the base of drainage areas. See also Green Infrastructure and Better Site Design.

Management Practices - See best management practices

Maximum Extent Practicable - is a technology-based standard established by Congress in the Clean Water Act '402(p)(3)(B)(iii). Since no precise definition of MEP exists, it allows for maximum flexibility on the part of MS4 operators as they develop their programs. (40CFR 122.2 See also: Stormwater Phase II Compliance Assistance Guide EPA 833-R-00-002, March 2000). When trying to reduce pollutants to the MEP, there must be a serious attempt to comply, and practical solutions may not be lightly rejected. If a covered entity chooses only a few of the least expensive methods, it is likely that MEP has not been met. On the other hand, if a covered entity employs all applicable BMPs except those where it can be shown that they are not technically feasible in the locality, or whose cost would exceed any benefit to be derived, it would have met the standard. MEP required covered entities to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive.

Measurable Goals - are the goals of the SWMP that should reflect the needs and characteristics of the covered entity and the areas served by its small MS4. Furthermore, the goals should be chosen using an integrated approach that fully addresses the requirements and intent of the MCM. The assumption is that the program schedules would be created over a 5 year period and goals would be integrated into that time frame. For example, a larger MS4 could do an outfall reconnaissance inventory for 20% of the collection system every year so that every outfall is inspected once within the permit cycle

Municipal / Municipalities - referred to in the federal rule that describes the Phase II stormwater program includes not only the State's municipal governments (cities, towns, villages and counties), but any publicly funded entity that owns or operates a separate storm sewer system. Examples of other public entities that are included in this program include the State Department of Transportation, State University Campuses, federal and State prisons, State and federal hospitals, Thruway and Dormitory Authorities, public housing authorities, school and other special districts.

Municipal Separate Storm Sewer System - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

1. owned or operated by a State, city, town, village, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA, that discharges to surface waters of the State;
2. designed or used for collecting or conveying stormwater;
3. which is not a combined sewer; and
4. which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

Non-traditional MS4s - state and federal prisons, office complexes, hospitals; state: transportation agencies; university campuses, public housing authorities, schools, other special districts.

Open Meetings Law - per Public Officers Law, Article 7, Open Meetings Law, Section 104, Public notice:

1. Public notice of the time and place of a meeting scheduled at least one week prior thereto shall be given to the news media and shall be conspicuously posted in one or more designated public locations at least seventy two hours before such meeting.
2. Public notice of the time and place of every other meeting shall be given, to the extent practicable, to the news media and shall be conspicuously posted in one or more designated public locations at a reasonable time prior thereto.
3. The public notice provided for by this section shall not be construed to require publication as a legal notice.
4. If videoconferencing is used to conduct a meeting, the public notice for the meeting shall inform the public that videoconferencing will be used, identify the locations for the meeting, and state that the public has the right to attend the meeting at any of the locations.

Operator - the person, persons or legal entity that is responsible for the small MS4, as indicated by signing the NOI to gain coverage for the MS4 under this *SPDES general permit*.

Outfall - is defined as any point where a municipally owned and operated separate storm sewer system discharges to either surface waters of the State or to another MS4. Outfalls

include discharges from pipes, ditches, swales, and other points of concentrated flow. However, areas of non-concentrated (sheet) flow which drain to surface waters of the State or to another MS4's system are not considered outfalls and should not be identified as such on the system map.

Pollutants of Concern - there are POCs that are primary (comprise the majority) sources of stormwater pollutants and others that are secondary (less likely).

- The POCs that are primarily of concern are: nitrogen, phosphorus, silt and sediment, pathogens, flow, and floatables impacting impaired waterbodies listed on the Priority Waterbody List known to come in contact with stormwater that could be discharged to that water body.
- The POCs that are secondarily of concern include but are not limited to petroleum hydrocarbons, heavy metals, and polycyclic aromatic hydrocarbons (PAHs), where stormwater or runoff is listed as the source of this impairment.
- The primary and secondary POCs can also impair waters not on the 303(d) list. Thus, it is important for the covered entity to assess known and potential POCs within the area served by their small MS4. This will allow the covered entity to address POCs appropriate to their MS4.

Qualified Professional - means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics in order to prepare a SWPPP that conforms to the Department's technical standard. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

Reporting Date – means the end of the annual reporting period, March 9, as indicated in Part V.C.1.

Retrofit - means modifying or adding to existing infrastructure for the purpose of reducing pollutant loadings. Examples, some of which may not be effective for all pollutants, include:

Better site design approaches such as roof top disconnection, diversion of runoff to infiltration areas, soil de-compaction, riparian buffers, rain gardens, cisterns

Rehabilitation of existing storm sewer system by installation of standard stormwater treatment systems (ponds, wetlands, filtering, infiltration) or proprietary practices

Stabilize dirt roads (gravel, stone, water bar, check dam, diversion)

Conversion of dirt parking lots to pervious pavement, grassed or stone cover

Conversion of dry detention ponds to extended detention or wetland treatment systems

Retrofit by converting abandoned buildings to stormwater treatment systems

Retrofit of abandoned building to open space

Retrofit road ditches to enhance open channel design

Control the downstream effects of runoff from existing paved surfaces resulting in flooding and erosion in receiving waters

Control stream erosion by plunge pool, velocity dissipaters, and flow control devices for discharges from conveyance systems

Upgrade of an existing conveyance system to provide water quality and /or quantity control within the drainage structure

Section 303(d) Listed Waters - Section 303(d) is part of the federal CWA that requires the Department to periodically to prepare a list of all surface waters in the State for which beneficial uses of the water – such as for drinking, recreation, aquatic habitat, and industrial use – are impaired by pollutants. These are water quality-limited estuaries, lakes, and streams that fall short of state surface water quality standards, and are not expected to improve within the next two years. Refer to impaired waters for more information.

Single entity - An entity, formed in accordance with the applicable state and/or local legislation, with a legal authority and capacity (financial, resources, etc...) that gains coverage under the MS4 general permit to implement all or parts of the MS4 program within a jurisdiction on behalf of multiple MS4s in that geographic area.

Small MS4 - MS4 system within an urbanized area or other areas designated by the State.

SPDES general permit - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 authorizing a category of discharges.

Staff - actual employees of the covered entity or contracted entity.

State - means the State of New York.

State Pollutant Discharge Elimination System - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

Stormwater - means that portion of precipitation that, once having fallen to the ground, is in excess of the evaporative or infiltrative capacity of soils, or the retentive capacity of surface features, which flows or will flow off the land by surface runoff to waters of the state.

Stormwater Management Program - the program implemented by the covered entity. Covered entities are required at a minimum to develop, implement and enforce a SWMP designed to address POCs and reduce the discharge of pollutants from the small MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the *ECL* and Clean Water Act. The SWMP must address the MCM described in Part VIII.

The *SWMP* needs to include *measurable goals* for each of the *BMPs*. The measurable goals will help the covered entities assess the status and progress of their program. The SWMP should:

1. describe the BMP / measureable goal;
2. identify time lines / schedules and milestones for development and implementation;
3. include quantifiable goals to assess progress over time; and
4. describe how the covered entity will address POCs.

Guidance on developing SWMPs is available from the Department on its website. Examples of successful SWMPs and suggested measurable goals are also provided in EPA's Menu of BMPs available from its website. Note that this information is for guidance purposes only. An MS4 may choose to develop or implement equivalent methods equivalent to those made available by the Department and EPA to demonstrate compliance with the MCMs.

When creating the *SWMP*, the *covered entities* should assess activities already being performed that could help meet, or be modified to meet, permit requirements and be included in the *SWMP*. *Covered entities* can create their *SWMP* individually, with a group of other individual *covered entities* or a coalition of *covered entities*, or through the work of a third party entity.

Stormwater Management Program Plan- used by the covered entity to document developed, planned and implemented SWMP elements. The *SWMP plan* must describe how pollutants in stormwater runoff will be controlled. For previously unauthorized *small MS4s* seeking coverage, information included in the NOI should be obtained from the *SWMP plan*.

The *SWMP plan* is a separate document from the NOI and should not be submitted with the NOI or any annual reports unless requested.

The *SWMP plan* should include a detailed written explanation of all management practices, activities and other techniques the covered entity has developed, planned and implemented for their SWMP to address POCs and reduce pollutant discharges from their small MS4 to the MEP. The *SWMP plan* shall be revised to incorporate any new or modified *BMPs* or *measurable goals*.

Covered entities can create their *SWMP plan* individually, with a group of other individual *covered entities* or a coalition of *covered entities*, or through the work of a third party entity.

Documents to include are: applicable local laws, inter-municipal agreements and other legal authorities; staffing and staff development programs and organization charts; program budget; policy, procedures, and materials for each minimum measure; outfall and small MS4 system maps; stormwater management practice selection and measurable goals; operation and maintenance schedules; documentation of public outreach efforts and public comments; submitted construction site SWPPPs and review letters and construction site inspection reports.

The *SWMP plan* shall be made readily available to the covered entity's staff and to the public and regulators, such as *Department* and EPA staff. Portions of the *SWMP plan*, primarily policies and procedures, must be available to the management and staff of a *covered entity* that will be called upon to use them. For example, the technical standards and associated technical assistance documents and manuals for stormwater controls should be available to code enforcement officers, review engineers and planning boards. The local laws should be readily available to the town board and planning board. An integrated pest management program would have to be available to the parks department and the stormwater outfall and available sewer system mapping and catch basin cleaning schedule would have to be available to the department of public works.

Storm sewershed - the catchment area that drains into the storm sewer system based on the surface topography in the area served by the stormsewer. Adjacent catchment areas that drain to adjacent outfalls are not separate storm sewersheds.

Surface Waters of the State - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, 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. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

Storm sewers are not waters of the state unless they are classified in 6 NYCRR Parts 800 to 941. Nonetheless, a discharge to a storm sewer shall be regulated as a discharge at the point where the storm sewer discharges to waters of the state. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Act and Environmental Conservation Law (other than cooling ponds as defined in 40 CFR 423.11(m)(see section 750 - 1.24) 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.

SWPPP - as defined per the NYS DEC SPDES General Permit for Stormwater Discharges from Construction Activity or NYS DEC SPDES Multi-Sector General Permit for Stormwater Associated with Industrial Activity .

Total Maximum Daily Load - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. It is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations for point source discharges, load allocations for nonpoint sources, and a margin of safety.

Traditional Land Use Control MS4s - means a city, town or village with land use control authority.

Traditional Non-land Use Control MS4s - means any county agency without land use control.

Urbanized Area - is a land area comprising one or more places (central place(s)) and the adjacent densely settled surrounding area (urban fringe) that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile, as defined by the US Bureau of Census. Outlines the extent of automatically regulated areas, often do not extend to the political boundaries of a city, town, or village. SWMPs are only required within the UA. However, the Department encourages covered entities to voluntarily extend their SWMP programs at least to the extent of the storm sewershed that flows into the UA or extend further to their entire jurisdiction. For ease of creation and administration of local laws, ordinances or other regulatory mechanisms, these should be created to apply to the full jurisdictional boundary of municipalities.

Water Quality Standard - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

Part XI. RE-OPENER CLAUSE

If there is evidence indicating that the stormwater discharges authorized by this permit cause or have the reasonable potential to cause or contribute to a violation of a water quality standard, the covered entity may be required at the Department's sole discretion to obtain an individual SPDES permit or an alternative *SPDES general permit* or the permit may be modified. In addition, coverage under this permit could terminate, meaning the discharge must cease.

APPENDICES

APPENDIX 1. LIST OF NYS DEC REGIONAL OFFICES

| <u>Region</u> | <u>COVERING THE FOLLOWING COUNTRIES:</u> | <u>DIVISION OF ENVIRONMENTAL PERMITS (DEP) PERMIT ADMINISTRATORS</u> | <u>DIVISION OF WATER (DOW) WATER (SPDES) PROGRAM</u> |
|---------------|--|--|--|
| 1 | NASSAU AND SUFFOLK | 50 CIRCLE ROAD STONY BROOK, NY 11790 TEL. (631) 444-0365 | 50 CIRCLE ROAD STONY BROOK, NY 11790-3409 TEL. (631) 444-0405 |
| 2 | BRONX, KINGS, NEW YORK, QUEENS AND RICHMOND | 1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4997 | 1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4933 |
| 3 | DUTCHESS, ORANGE, PUTNAM, ROCKLAND, SULLIVAN, ULSTER AND WESTCHESTER | 21 SOUTH PUTT CORNERS ROAD NEW PALTZ, NY 12561-1696 TEL. (845) 256-3059 | 100 HILLSIDE AVENUE, SUITE 1W WHITE PLAINS, NY 10603 TEL. (914) 428 - 2505 |
| 4 | ALBANY, COLUMBIA, DELAWARE, GREENE, MONTGOMERY, OTSEGO, RENSSELAER, SCHENECTADY AND SCHOHARIE | 1150 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2069 | 1130 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2045 |
| 5 | CLINTON, ESSEX, FRANKLIN, FULTON, HAMILTON, SARATOGA, WARREN AND WASHINGTON | 1115 STATE ROUTE 86, PO BOX 296 RAY BROOK, NY 12977-0296 TEL. (518) 897-1234 | 232 GOLF COURSE ROAD, PO BOX 220 WARRENSBURG, NY 12885-0220 TEL. (518) 623-1200 |
| 6 | HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE | STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245 | STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554 |
| 7 | BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS | 615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438 | 615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500 |
| 8 | CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES | 6274 EAST AVON-LIMA ROAD AVON, NY 14414-9519 TEL. (585) 226-2466 | 6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466 |
| 9 | ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING | 270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165 | 270 MICHIGAN AVE. BUFFALO, NY 14203-2999 TEL. (716) 851-7070 |

APPENDIX 2. IMPAIRED SEGMENTS AND PRIMARY POLLUTANTS OF CONCERN

**APPENDIX 2 (CONTINUED)
IMPAIRED SEGMENTS AND SECONDARY POLLUTANTS OF CONCERN**

| COUNTY | WATERBODY NAME | POLLUTANT |
|------------------|-------------------------------------|---------------|
| Albany | Ann Lee (Shakers) Pond, Stump Pond | phosphorus |
| Albany | Basic Creek Reservoir | phosphorus |
| Bronx | Van Cortlandt Lake | phosphorus |
| Bronx | Bronx River, Lower | pathogens |
| Bronx | Bronx River, Lower | floatables |
| Bronx | Bronx River, Middle, and tribs | pathogens |
| Bronx | Bronx River, Middle, and tribs | floatables |
| Bronx | Westchester Creek | floatables |
| Bronx | Hutchinson River, Lower, and tribs | Floatables |
| Broome | Susquehanna River, Lower, Main Stem | Pathogens |
| Broome | Whitney Point Lake/Reservoir | phosphorus |
| Broome | Park Creek and tribs | pathogens |
| Broome | Beaver Lake | phosphorus |
| Broome | White Birch Lake | phosphorus |
| Cayuga | Little Sodus Bay | phosphorus |
| Cayuga | Owasco Lake | pathogens |
| Cayuga, Tompkins | Owasco Inlet, Upper, and tribs | phosphorus |
| Chautauqua | Lake Erie (Dunkirk Harbor) | pathogens |
| Chautauqua | Chadakoin River and tribs | phosphorus |
| Chautauqua | Chautauqua Lake, South | phosphorus |
| Chautauqua | Chautauqua Lake, North | phosphorus |
| Chautauqua | Bear Lake | phosphorus |
| Chautauqua | Lower Cassadaga Lake | phosphorus |
| Chautauqua | Middle Cassadaga Lake | phosphorus |
| Chautauqua | Findley Lake | phosphorus |
| Chenango | Unadilla River, Lower, Main Stem | pathogens |
| Clinton | Lake Champlain, Main Lake, North | phosphorus |
| Clinton | Lake Champlain, Main Lake, Middle | phosphorus |
| Clinton | Great Chazy River, Lower, Main Stem | silt/sediment |
| Columbia | Robinson Pond | phosphorus |
| Columbia | Kinderhook Lake | phosphorus |
| Delaware | Cannonsville Reservoir | phosphorus |
| Dutchess | Hillside Lake | phosphorus |
| Dutchess | Wappinger Lakes | phosphorus |
| Dutchess | Wappinger Lakes | silt/sediment |
| Dutchess | Fall Kill and tribs | phosphorus |
| Dutchess | Rudd Pond | phosphorus |

| COUNTY | WATERBODY NAME | POLLUTANT |
|-----------|--|---------------|
| Erie | Ellicott Creek, Lower, and tribs | phosphorus |
| Erie | Ellicott Creek, Lower, and tribs | silt/sediment |
| Erie | Ransom Creek, Lower, and tribs | pathogens |
| Erie | Ransom Creek, Upper, and tribs | pathogens |
| Erie | Beeman Creek and tribs | phosphorus |
| Erie | Beeman Creek and tribs | pathogens |
| Erie | Murder Creek, Lower, and tribs | phosphorus |
| Erie | Murder Creek, Lower, and tribs | pathogens |
| Erie | Two Mile Creek and tribs | pathogens |
| Erie | Two Mile Creek and tribs | floatables |
| Erie | Scajaquada Creek, Lower, and tribs | floatables |
| Erie | Scajaquada Creek, Lower, and tribs | pathogens |
| Erie | South Branch Smoke Cr, Lower, and tribs | phosphorus |
| Erie | South Branch Smoke Cr, Lower, and tribs | silt/sediment |
| Erie | Rush Creek and tribs | pathogens |
| Erie | Rush Creek and tribs | phosphorus |
| Erie | Little Sister Creek, Lower, and tribs | phosphorus |
| Erie | Little Sister Creek, Lower, and tribs | pathogens |
| Essex | Lake Champlain, Main Lake, South | phosphorus |
| Essex | Lake Champlain, South Lake | phosphorus |
| Genesee | Tonawanda Creek, Middle, Main Stem | phosphorus |
| Genesee | Tonawanda Creek, Middle, Main Stem | silt/sediment |
| Genesee | Tonawanda Creek, Upper, and minor tribs | silt/sediment |
| Genesee | Bowen Brook and tribs | phosphorus |
| Genesee | Little Tonawanda Creek, Lower, and tribs | silt/sediment |
| Genesee | Oak Orchard Cr, Upper, and tribs | phosphorus |
| Genesee | Black Creek, Upper, and minor tribs | phosphorus |
| Genesee | Bigelow Creek and tribs | phosphorus |
| Greene | Schoharie Reservoir | silt/sediment |
| Greene | Shingle Kill and tribs | pathogens |
| Greene | Sleepy Hollow Lake | silt/sediment |
| Herkimer | Unadilla River, Middle, and minor tribs | pathogens |
| Herkimer | Mohawk River, Main Stem | pathogens |
| Herkimer | Mohawk River, Main Stem | floatables |
| Herkimer | Steele Creek tribs | phosphorus |
| Herkimer | Steele Creek tribs | silt/sediment |
| Jefferson | Moon Lake | phosphorus |
| Kings | Coney Island Creek | pathogens |
| Kings | Coney Island Creek | floatables |
| Kings | Gowanus Canal | floatables |
| Kings | Hendrix Creek | nitrogen |
| Kings | Hendrix Creek | pathogens |

| COUNTY | WATERBODY NAME | POLLUTANT |
|------------|--|---------------|
| Kings | Hendrix Creek | floatables |
| Kings | Paerdegat Basin | floatables |
| Kings | Mill Basin and tidal tribs | floatables |
| Lewis | Beaver River, Lower, and tribs | pathogens |
| Lewis | Beaver River, Lower, and tribs | floatables |
| Lewis | Mill Creek/South Branch, and tribs | phosphorus |
| Lewis | Mill Creek/South Branch, and tribs | pathogens |
| Livingston | Conesus Lake | phosphorus |
| Livingston | Jaycox Creek and tribs | phosphorus |
| Livingston | Jaycox Creek and tribs | silt/sediment |
| Livingston | Mill Creek and minor tribs | silt/sediment |
| Madison | Canastota Creek, Lower, and tribs | pathogens |
| Monroe | Rochester Embayment - West | pathogens |
| Monroe | Mill Creek and tribs | phosphorus |
| Monroe | Mill Creek and tribs | pathogens |
| Monroe | Shipbuilders Creek and tribs | phosphorus |
| Monroe | Shipbuilders Creek and tribs | pathogens |
| Monroe | Minor Tribs to Irondequoit Bay | phosphorus |
| Monroe | Minor Tribs to Irondequoit Bay | pathogens |
| Monroe | Thomas Creek/White Brook and tribs | phosphorus |
| Monroe | Buck Pond | phosphorus |
| Monroe | Long Pond | phosphorus |
| Monroe | Cranberry Pond | phosphorus |
| Monroe | Genesee River, Lower, Main Stem | phosphorus |
| Monroe | Genesee River, Lower, Main Stem | pathogens |
| Monroe | Genesee River, Lower, Main Stem | silt/sediment |
| Monroe | Genesee River, Middle, Main Stem | phosphorus |
| Monroe | Black Creek, Lower, and minor tribs | phosphorus |
| Nassau | Long Island Sound, Nassau County | pathogens |
| Nassau | Long Island Sound, Nassau County | nitrogen |
| Nassau | Manhasset Bay, and tidal tribs | pathogens |
| Nassau | Manhasset Bay, and tidal tribs | pathogens |
| Nassau | Hempstead Harbor, south, and tidal tribs | pathogens |
| Nassau | Glen Cove Creek, Lower, and tribs | pathogens |
| Nassau | Glen Cove Creek, Lower, and tribs | silt/sediment |
| Nassau | Dosoris Pond | pathogens |
| Nassau | Mill Neck Creek and tidal tribs | pathogens |
| Nassau | South Oyster Bay | pathogens |
| Nassau | East Bay | pathogens |
| Nassau | LI Tribs (fresh) to East Bay | phosphorus |
| Nassau | LI Tribs (fresh) to East Bay | silt/sediment |
| Nassau | Middle Bay | pathogens |

| COUNTY | WATERBODY NAME | POLLUTANT |
|----------|---|---------------|
| Nassau | East Rockaway Inlet | pathogens |
| Nassau | Reynolds Channel, east | pathogens |
| Nassau | East Meadow Brook, Upper, and tribs | silt/sediment |
| Nassau | Hempstead Bay | Nitrogen |
| Nassau | Hempstead Bay | Pathogens |
| Nassau | Hempstead Lake | Phosphorus |
| Nassau | Grant Park Pond | Phosphorus |
| Nassau | Woodmere Channel | Pathogens |
| New York | East River, Lower | Floatables |
| New York | Harlem River | Floatables |
| Niagara | Bergholtz Creek and tribs | Phosphorus |
| Niagara | Bergholtz Creek and tribs | Pathogens |
| Oneida | Utica Harbor | Pathogens |
| Oneida | Utica Harbor | Floatables |
| Oneida | Mohawk River, Main Stem | Pathogens |
| Oneida | Mohawk River, Main Stem | Floatables |
| Oneida | Mohawk River, Main Stem | Pathogens |
| Oneida | Mohawk River, Main Stem | Floatables |
| Oneida | Ballou, Nail Creeks and tribs | Phosphorus |
| Oneida | Ninemile Creek, Lower, and tribs | Pathogens |
| Onondaga | Limestone Creek, Lower, and minor tribs | Pathogens |
| Onondaga | Seneca River, Lower, Main Stem | Pathogens |
| Onondaga | Onondaga Lake, northern end | Phosphorus |
| Onondaga | Onondaga Lake, southern end | pathogens |
| Onondaga | Onondaga Lake, southern end | phosphorus |
| Onondaga | Minor Tribs to Onondaga Lake | phosphorus |
| Onondaga | Minor Tribs to Onondaga Lake | pathogens |
| Onondaga | Bloody Brook and tribs | pathogens |
| Onondaga | Ley Creek and tribs | pathogens |
| Onondaga | Ley Creek and tribs | phosphorus |
| Onondaga | Onondaga Creek, Lower, and tribs | phosphorus |
| Onondaga | Onondaga Creek, Lower, and tribs | pathogens |
| Onondaga | Onondaga Creek, Middle, and tribs | silt/sediment |
| Onondaga | Onondaga Creek, Middle, and tribs | phosphorus |
| Onondaga | Onondaga Creek, Middle, and tribs | pathogens |
| Onondaga | Onondaga Creek, Upper, and minor tribs | silt/sediment |
| Onondaga | Harbor Brook, Lower, and tribs | phosphorus |
| Onondaga | Harbor Brook, Lower, and tribs | pathogens |
| Onondaga | Ninemile Creek, Lower, and tribs | phosphorus |
| Onondaga | Ninemile Creek, Lower, and tribs | pathogens |
| Ontario | Hemlock Lake Outlet and minor tribs | phosphorus |
| Ontario | Hemlock Lake Outlet and minor tribs | pathogens |

| COUNTY | WATERBODY NAME | POLLUTANT |
|------------|---------------------------------------|---------------|
| Ontario | Honeoye Lake | phosphorus |
| Ontario | Great Brook and minor tribs | phosphorus |
| Ontario | Great Brook and minor tribs | silt/sediment |
| Orange | Greenwood Lake | phosphorus |
| Oswego | Lake Neatahwanta | phosphorus |
| Otsego | Susquehanna River, Main Stem | pathogens |
| Putnam | Croton Falls Reservoir | phosphorus |
| Putnam | West Branch Reservoir | phosphorus |
| Putnam | Boyd Corners Reservoir | phosphorus |
| Putnam | Middle Branch Reservoir | phosphorus |
| Putnam | Lake Carmel | phosphorus |
| Putnam | Diverting Reservoir | phosphorus |
| Putnam | East Branch Reservoir | phosphorus |
| Putnam | Bog Brook Reservoir | phosphorus |
| Putnam | Oscawana Lake | phosphorus |
| Queens | Newtown Creek and tidal tribs | floatables |
| Queens | East River, Upper | floatables |
| Queens | East River, Upper | floatables |
| Queens | Flushing Creek/Bay | nitrogen |
| Queens | Flushing Creek/Bay | floatables |
| Queens | Little Neck Bay | pathogens |
| Queens | Alley Creek/Little Neck Bay Trib | floatables |
| Queens | Jamaica Bay, Eastern, and tribs | nitrogen |
| Queens | Jamaica Bay, Eastern, and tribs | pathogens |
| Queens | Jamaica Bay, Eastern, and tribs | floatables |
| Queens | Thurston Basin | floatables |
| Queens | Bergen Basin | Nitrogen |
| Queens | Bergen Basin | pathogens |
| Queens | Bergen Basin | floatables |
| Queens | Shellbank Basin | nitrogen |
| Queens | Spring Creek and tribs | pathogens |
| Queens | Spring Creek and tribs | floatables |
| Rensselaer | Snyders Lake | phosphorus |
| Richmond | Raritan Bay (Class SA) | pathogens |
| Richmond | Arthur Kill (Class I) and minor tribs | floatables |
| Richmond | Newark Bay | floatables |
| Richmond | Kill Van Kull | floatables |
| Richmond | Grasmere, Arbutus and Wolfes Lakes | phosphorus |
| Saratoga | Dwaas Kill and tribs | Phosphorus |
| Saratoga | Dwaas Kill and tribs | silt/sediment |
| Saratoga | Schuyler Creek and tribs | phosphorus |
| Saratoga | Schuyler Creek and tribs | pathogens |

| COUNTY | WATERBODY NAME | POLLUTANT |
|-------------|---|---------------|
| Saratoga | Lake Lonely | phosphorus |
| Saratoga | Tribs to Lake Lonely | Phosphorus |
| Saratoga | Tribs to Lake Lonely | pathogens |
| Schenectady | Collins Lake | phosphorus |
| Schoharie | Cobleskill Creek, Lower, and tribs | pathogens |
| Schoharie | Engleville Pond | phosphorus |
| Schoharie | Summit Lake | phosphorus |
| St.Lawrence | Black Lake Outlet/Black Lake | phosphorus |
| Steuben | Lake Salubria | phosphorus |
| Steuben | Smith Pond | phosphorus |
| Suffolk | Millers Pond | phosphorus |
| Suffolk | Beach/Island Ponds, Fishers Island | pathogens |
| Suffolk | Dering Harbor | pathogens |
| Suffolk | Tidal Tribs to Gr Peconic Bay, Northshr | pathogens |
| Suffolk | Mattituck (Marratooka) Pond | phosphorus |
| Suffolk | Mattituck (Marratooka) Pond | pathogens |
| Suffolk | Flanders Bay, West/Lower Sawmill | nitrogen |
| Suffolk | Meetinghouse/Terrys Creeks and tribs | nitrogen |
| Suffolk | Meetinghouse/Terrys Creeks and tribs | pathogens |
| Suffolk | Peconic River, Lower, and tidal tribs | nitrogen |
| Suffolk | Peconic River, Lower, and tidal tribs | pathogens |
| Suffolk | Scallop Pond | pathogens |
| Suffolk | Oyster Pond/Lake Munchogue | pathogens |
| Suffolk | Phillips Creek, Lower, and tidal tribs | pathogens |
| Suffolk | Quogue Canal | pathogens |
| Suffolk | Forge River, Lower and Cove | pathogens |
| Suffolk | Tidal tribs to West Moriches Bay | Nitrogen |
| Suffolk | Tidal tribs to West Moriches Bay | pathogens |
| Suffolk | Canaan Lake | silt/sediment |
| Suffolk | Canaan Lake | phosphorus |
| Suffolk | Nicoll Bay | pathogens |
| Suffolk | Lake Ronkonkoma | phosphorus |
| Suffolk | Lake Ronkonkoma | pathogens |
| Suffolk | Great Cove | pathogens |
| Tompkins | Cayuga Lake, Southern End | phosphorus |
| Tompkins | Cayuga Lake, Southern End | silt/sediment |
| Tompkins | Cayuga Lake, Southern End | pathogens |
| Ulster | Ashokan Reservoir | silt/sediment |
| Ulster | Esopus Creek, Upper, and minor tribs | silt/sediment |
| Warren | Lake George | silt/sediment |
| Warren | Tribs to L.George, Village of L George | silt/sediment |
| Warren | Huddle/Finkle Brooks and tribs | silt/sediment |

| COUNTY | WATERBODY NAME | POLLUTANT |
|-------------|-------------------------------------|----------------|
| Warren | Indian Brook and tribs | silt/sediment |
| Warren | Hague Brook and tribs | silt/sediment |
| Washington | Lake Champlain, South Bay | phosphorus |
| Washington | Tribs to L. George, East Shore | silt/sediment |
| Washington | Cossayuna Lake | phosphorus |
| Wayne | Blind Sodus Bay | phosphorus |
| Wayne | Port Bay | phosphorus |
| Westchester | Saw Mill River, Lower, and tribs | floatables |
| Westchester | New Croton Reservoir | phosphorus |
| Westchester | Upper New Croton/Muscoot Reservoir | phosphorus |
| Westchester | Amawalk Reservoir | phosphorus |
| Westchester | Lake Lincolndale | phosphorus |
| Westchester | Peach Lake | pathogens |
| Westchester | Peach Lake | phosphorus |
| Westchester | Titicus Reservoir | phosphorus |
| Westchester | Cross River Reservoir | phosphorus |
| Westchester | Lake Meahaugh | phosphorus |
| Westchester | Bronx River, Upper, and tribs | pathogens |
| Westchester | New Rochelle Harbor | pathogens |
| Westchester | New Rochelle Harbor | floatables |
| Westchester | Long Island Sound, Westchester Co | pathogens |
| Westchester | Long Island Sound, Westchester Co | nitrogen |
| Westchester | Larchmont Harbor | pathogens |
| Westchester | Larchmont Harbor | floatables |
| Westchester | Hutchinson River, Middle, and tribs | pathogens |
| Westchester | Mamaroneck Harbor | pathogens |
| Westchester | Mamaroneck Harbor | floatables |
| Westchester | Mamaroneck River, Lower | silt/sediment |
| Westchester | Mamaroneck River, Upper, and minor | silt/sediment |
| Westchester | Sheldrake River and tribs | phosphorus |
| Westchester | Sheldrake River and tribs | silt/sediment |
| Westchester | Milton Harbor | pathogens |
| Westchester | Milton Harbor | floatables |
| Westchester | Blind Brook, Lower | silt/sediment |
| Westchester | Blind Brook, Upper, and tribs | silt/sediment |
| Westchester | Port Chester Harbor | pathogens |
| Westchester | Port Chester Harbor | floatables |
| Westchester | Byram River, Lower | pathogens |
| Wyoming | Java Lake | phosphorus |
| Wyoming | Silver Lake | phosphorus |
| | | ppp |
| Westchester | Hutchinson River, Middle and tribs | Oil and Grease |

**APPENDIX 3. NEW YORK CITY WATERSHED EAST OF THE HUDSON RIVER
WATERSHED MAP**

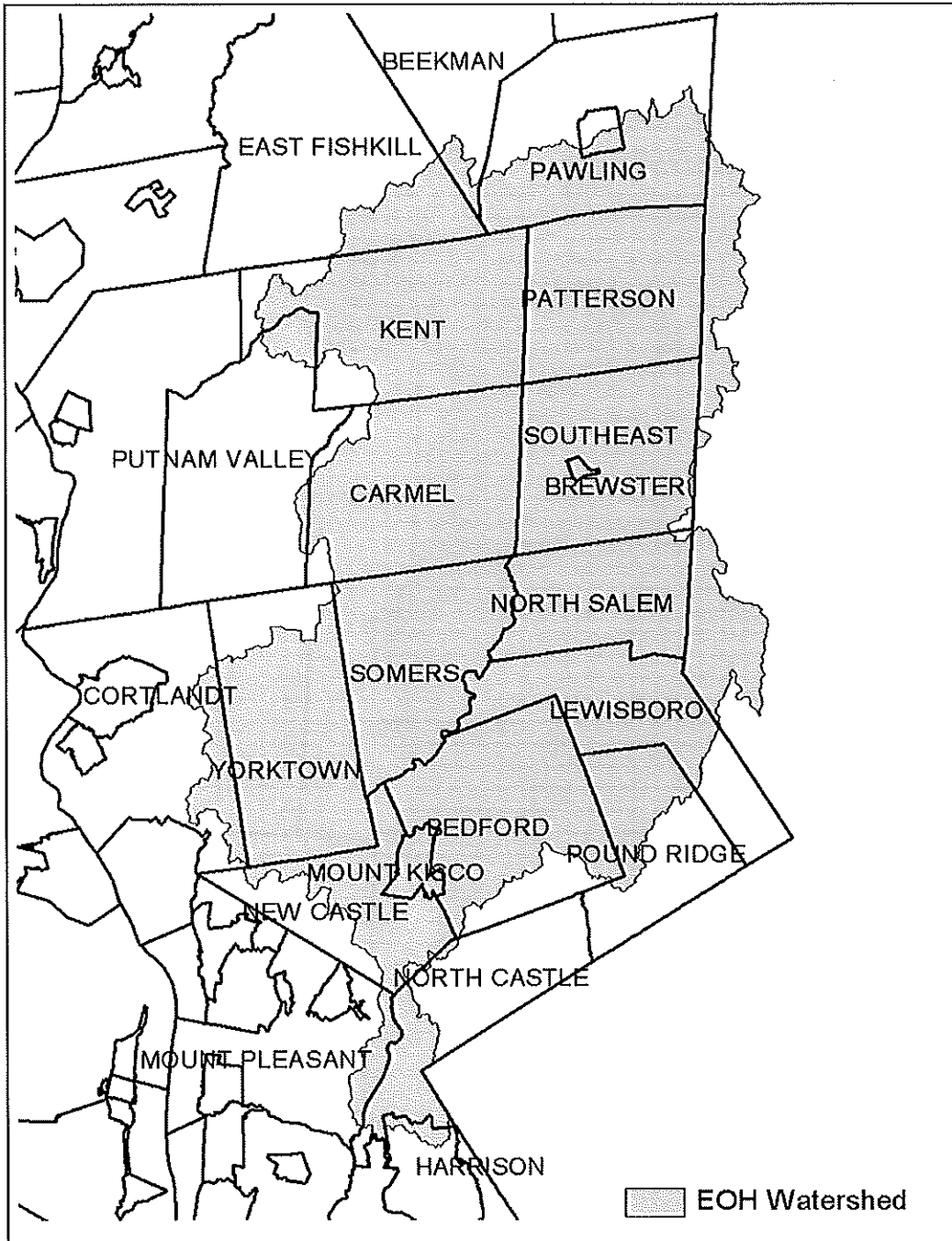


Figure 1. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 4. ONONDAGA LAKE WATERSHED MAP

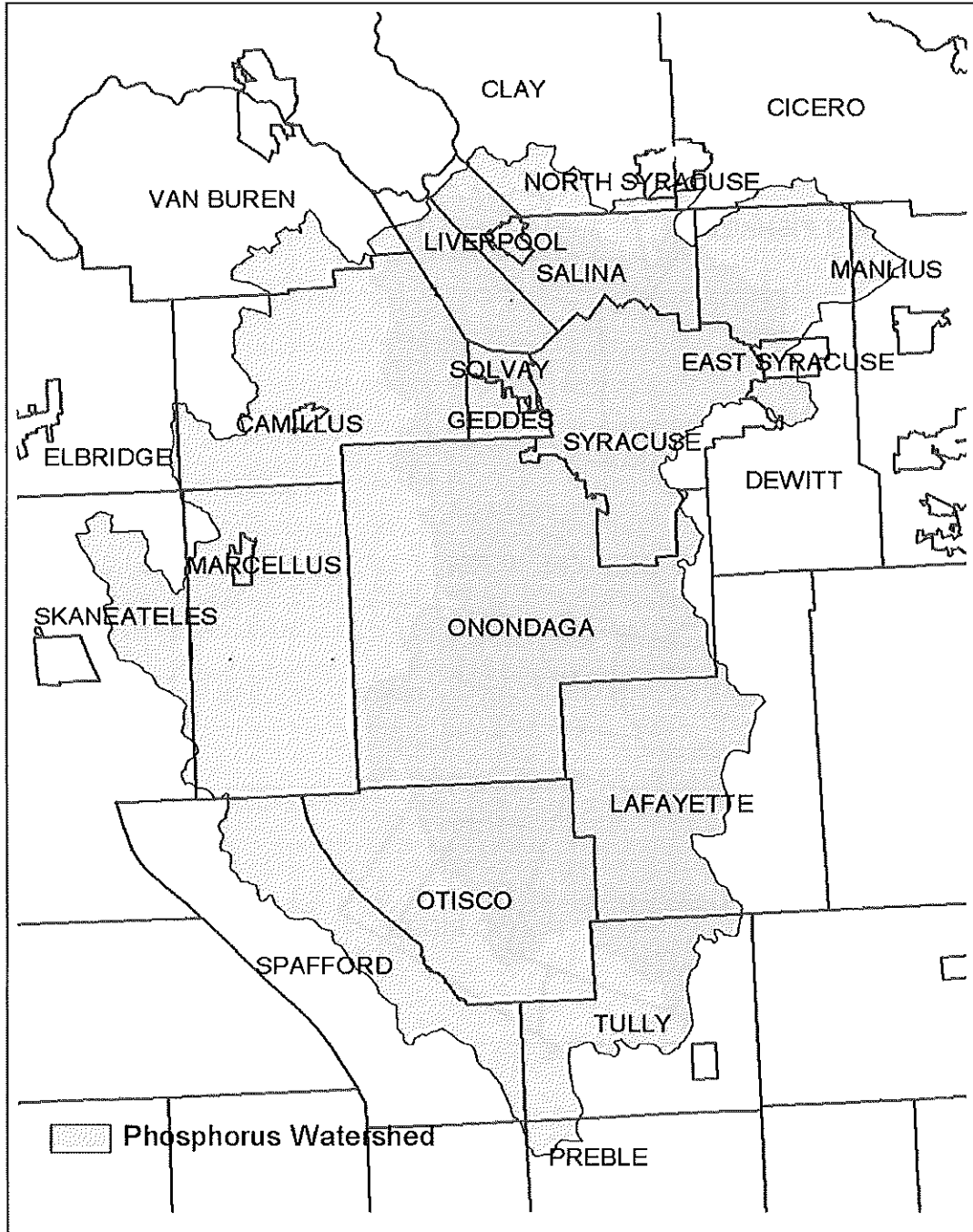


Figure 2. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 5. GREENWOOD LAKE WATERSHED MAP

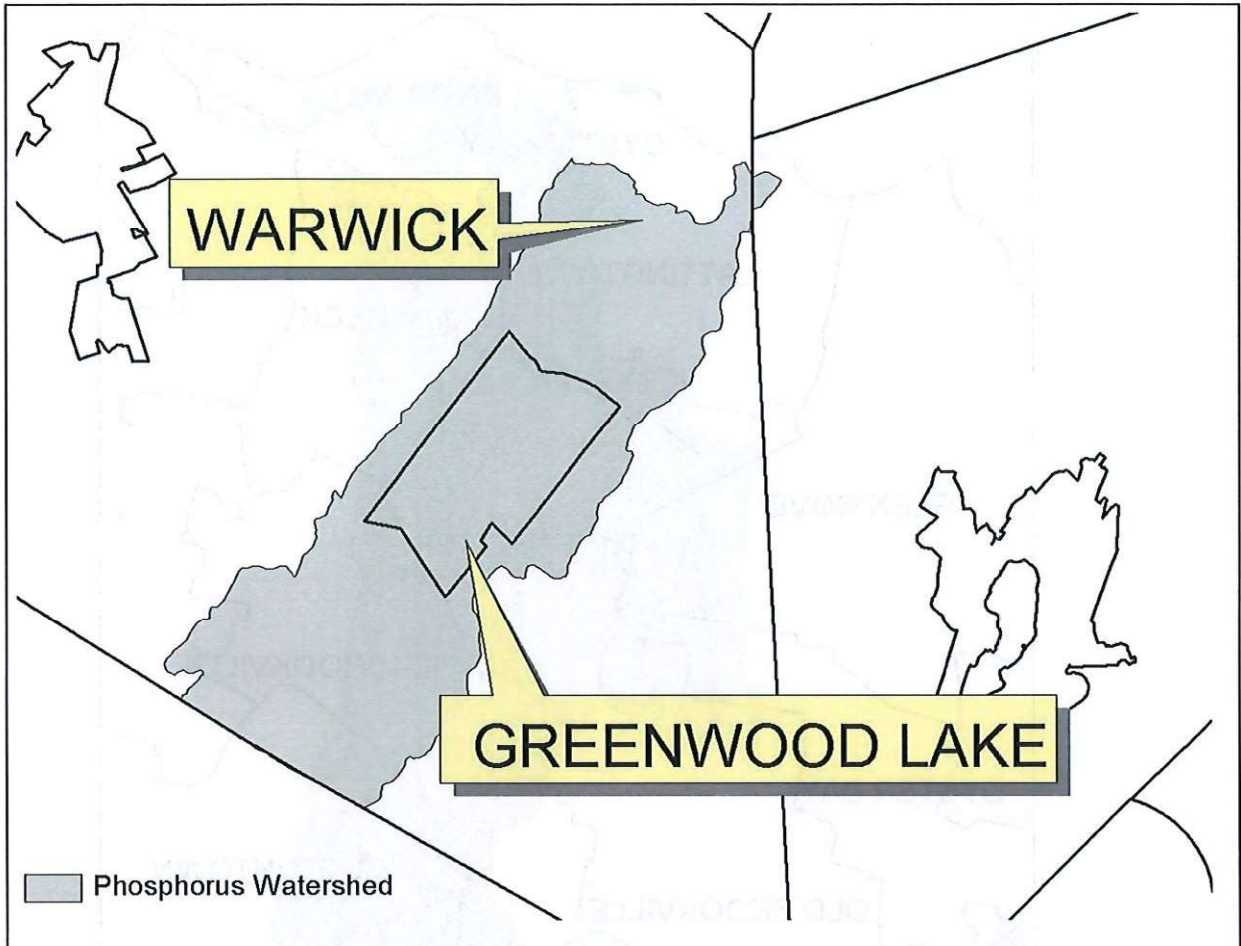


Figure 3. The requirements of watershed improvement strategies apply to the sewer sheds within the shaded areas.

APPENDIX 6. OYSTER BAY WATERSHED MAP

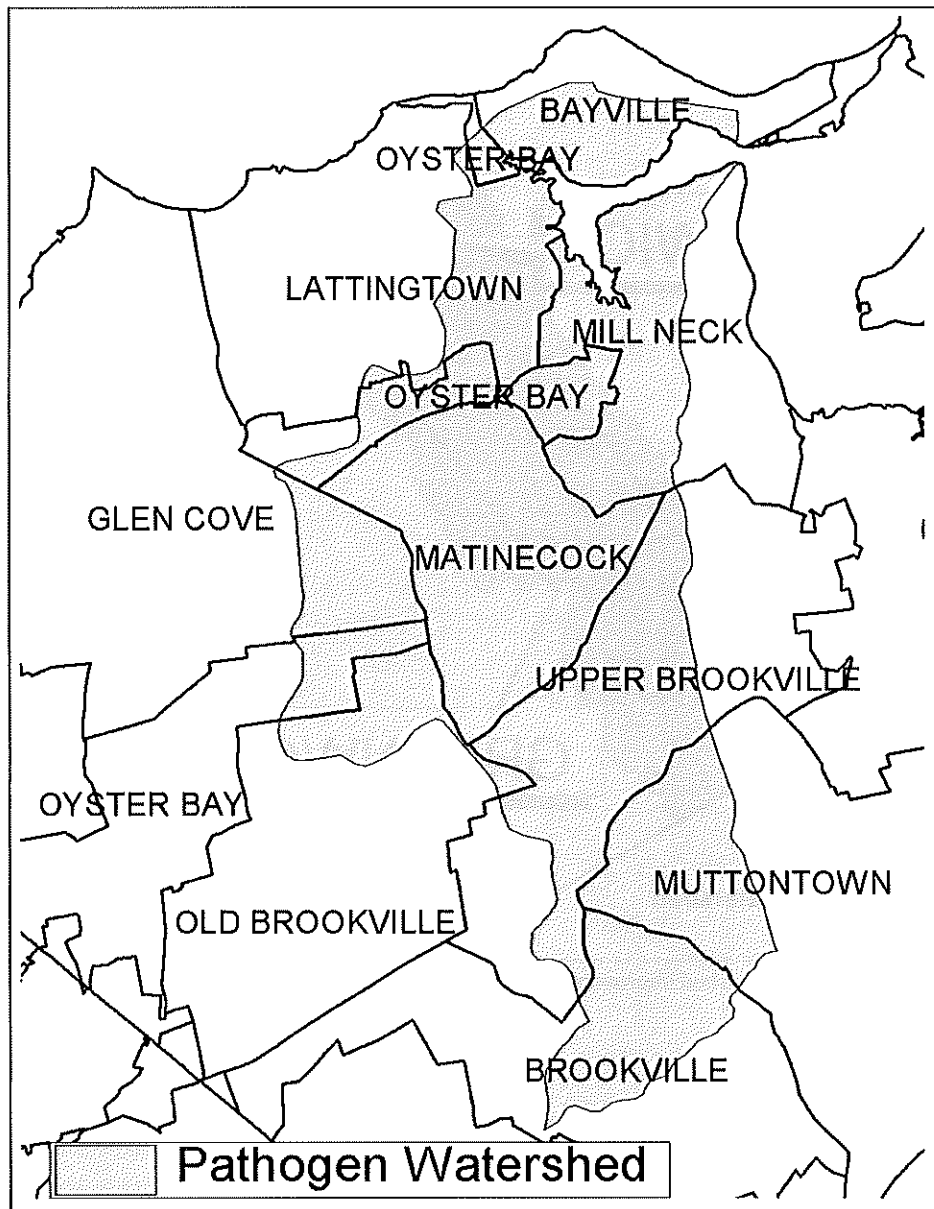


Figure 4. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 7. PECONIC ESTUARY PATHOGEN WATERSHED MAP

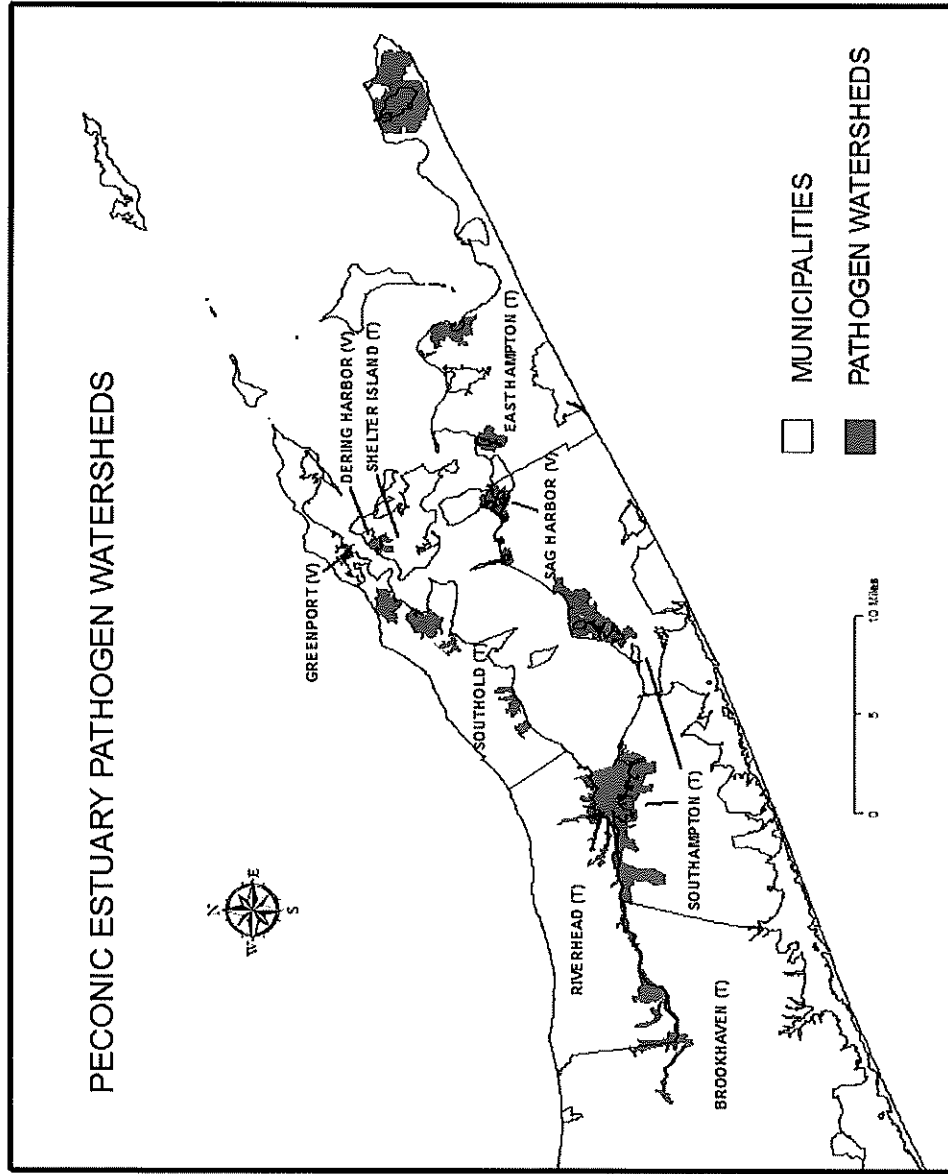


Figure 5. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 8. PECONIC ESTUARY NITROGEN WATERSHED MAP

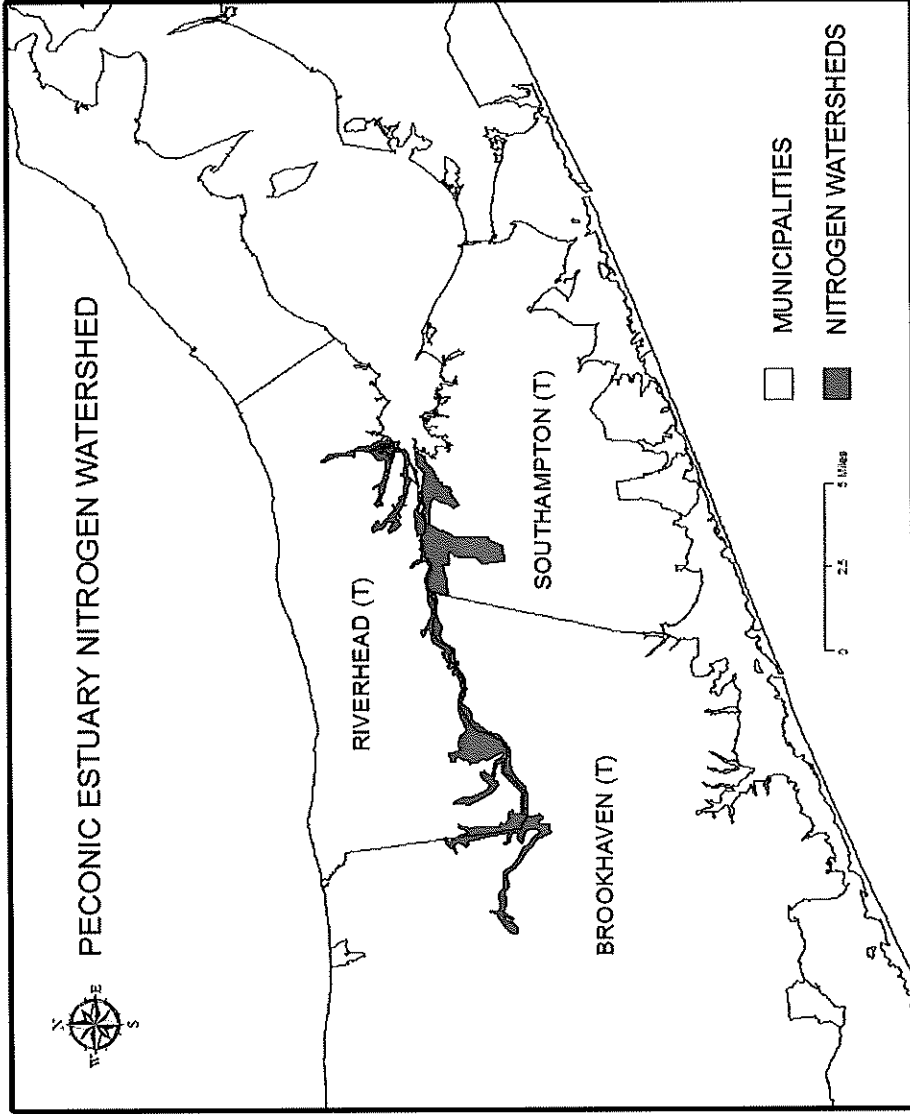


Figure 6. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 9. THE 27 LONG ISLAND SHELLFISHING IMPAIRED EMBAYMENT MAP

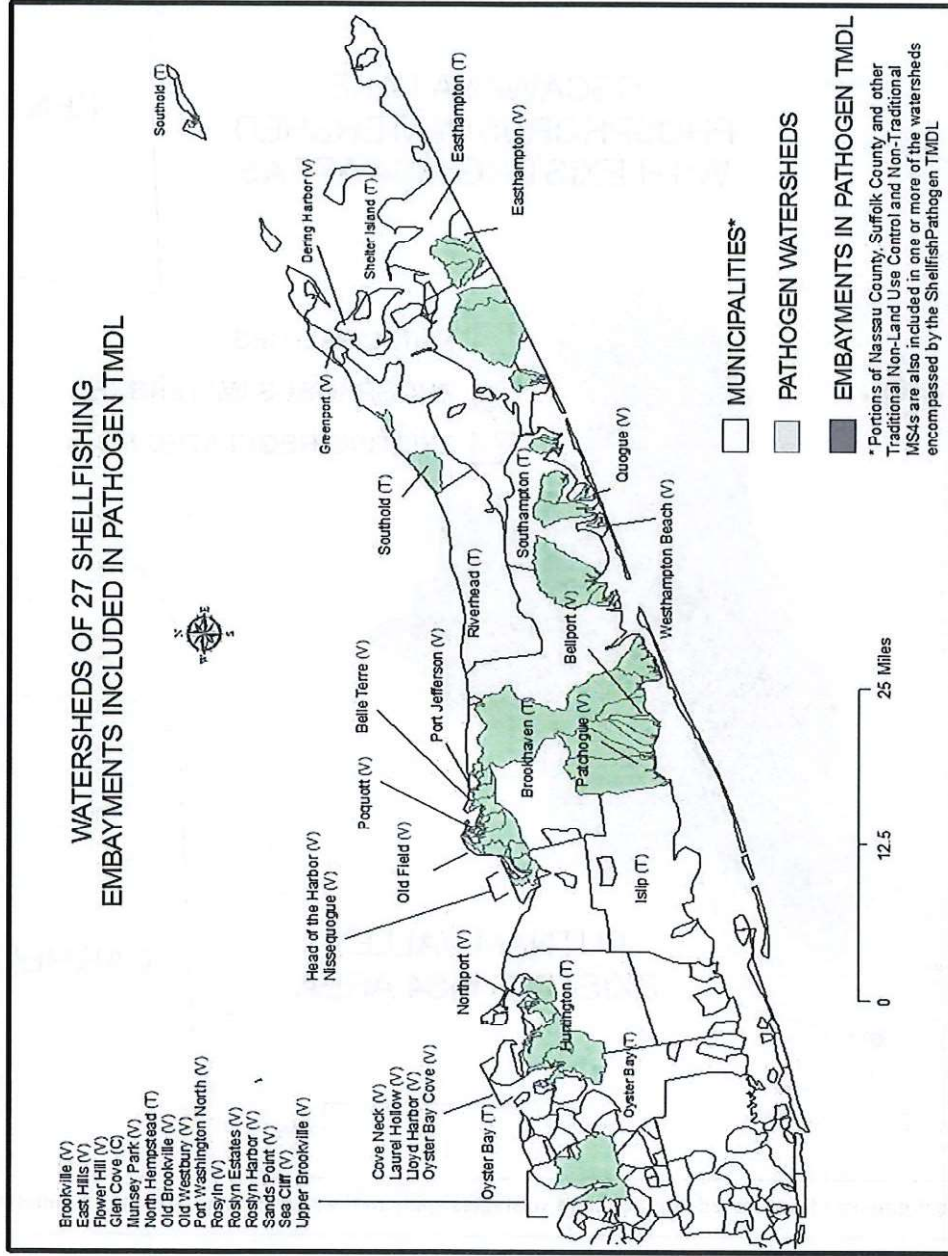


Figure 7. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 10. LAKE OSCAWANA WATERSHED MAP

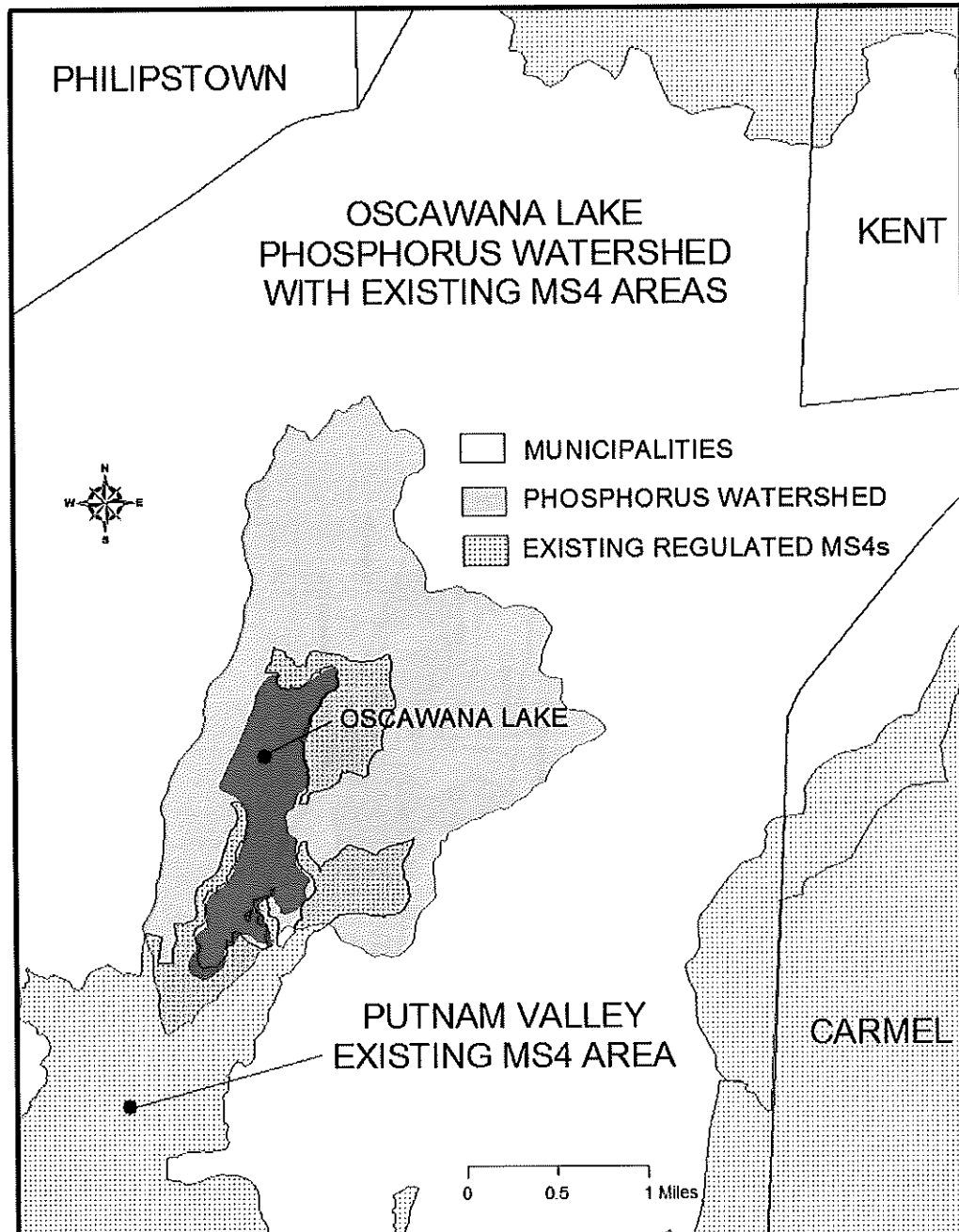


Figure 8. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

Appendix C

Village Organizational Charts

VILLAGE OF WALDEN
MS4

ORGANIZATION/RESPONSIBILITY CHART

| VILLAGE MANAGER | VILLAGE CLERK | BUILDING INSPECTOR/DPW SUPERVISOR (SMO) | PLANNING BOARD | VILLAGE ENGINEER | DEPT. OF PUBLIC WORKS |
|--|---|---|---|--|---|
| <ul style="list-style-type: none"> -Overview of NYSDEC Regulations -Coordination with Mayor & Village Board -Yearly meeting on Annual Report -Coordination with SMO & Village Engineer -Coordination with Village Building Dept. & Engineer on Report and any MS4 activity -Assistance in preparation of annual report | <ul style="list-style-type: none"> -Record keeper of annual reports & all documentation pertaining to MS4 criteria -Coordination of Village Board agenda & annual meeting -Public Notice Village Hall mailings website | <ul style="list-style-type: none"> -Point of Contact for any inquiries into regulations on projects with MS4 -Public access and information for contractors and residents within regulated area. -Coordination w/Village Engineer, Bldg. Dept. & Town Clerk on projects Within MS4 area. -Prepare Annual Report -Enforcement of Local Stormwater Regulations -ongoing attendance at Stormwater Seminars | <ul style="list-style-type: none"> -Review Subdivisions or Site Plans within MS4 Regulated area -Notice to SMO thru Village Engineer any activity Within regulated area | <ul style="list-style-type: none"> -Coordination with Planning Board on projects within MS4 area -Assistance in Annual Report preparation -Monthly coordination with Village Clerk and SMO on Projects within regulated Area. -Conduct oversight of construction activities within MS4 area -Review all SWPPP, NOI or Engineering Drainage Reports within MS4 area. -Ongoing attendance at seminars, pass information on to Village PB & Mayor | <ul style="list-style-type: none"> -Annual maintenance of stormwater facilities and outfalls in MS4 regulated areas. -assistance in preparation of annual report -ongoing attendance at stormwater seminars -maintenance of roads and observation of area -maintenance vehicles. |



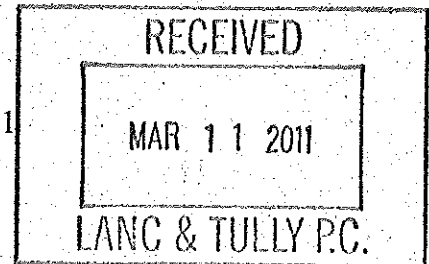
Appendix D

**Illicit Discharge Detection and Elimination Municipal Code
Construction and Post-Construction Runoff Control Municipal Code**

Kevin T. Dowd, Esq.
46 Daisy Lane
Montgomery, New York 12549

Telephone/Facsimile (845) 778-5442

March 8, 2011



Lanc & Tully Engineers
P.O. Box 687
Goshen, NY 10924
ATTN: John Queenan

RE: Village of Walden Storm Water Local Law

Dear John:

Please be advised that the undersigned is the attorney for the Village of Walden. I write to you to certify that the Village of Walden did, in fact, duly enact and adopt by Local Law dated November 27, 2007, and designated as Local law No. 8 of 2007, the required necessary Storm Water Management and Erosion Control Law. This Law is set forth in Chapter 126A of the Village Code of the Village of Walden. The Village of Walden separately adopted a new Chapter 104 of the Village Code that prohibits illicit discharges, activities and connections to separate storm sewer systems (MS4) on November 13, 2007 through the enactment of Local law No. 7 of 2007.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Kevin T. Dowd".

KEVIN T. DOWD
Attorney for the Village

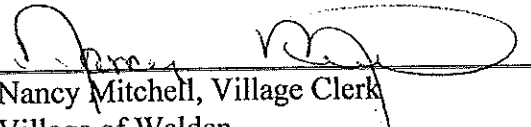
cc. John Revella, Village Manager
Board of Trustees

(Complete the certification in the paragraph that applies to the filing of this local law and strike out that which is not applicable.)

1. (Final Adoption by local legislative body only.)

I hereby certify that the local law annexed hereto, designated as local law No. 7 of 2007 of the Village of Walden was duly passed by the Board of Trustees on November 13, 2007, in accordance with the applicable provisions of law.

I further certify that I have compared the preceding local law with the original on file in this office and that the same is a correct transcript therefrom and of the whole of such original local law, and was finally adopted in the manner indicated in paragraph 1 above.



Nancy Mitchell, Village Clerk
Village of Walden

(Seal)

Date: 11.13.07


(Certification to be executed by County Attorney, Corporation Counsel, Town Attorney, Village Attorney or other authorized attorney of locality.)

STATE OF NEW YORK

§

COUNTY OF ORANGE

I, the undersigned, hereby certify that the foregoing local law contains the correct text and that all proper proceedings have been had or taken for the enactment of the local law annexed hereto.



KEVIN T. DOWD

Attorney for the Village
Title

Village of Walden

Date: 11.13.07

INTRODUCTORY LOCAL LAW I-7 OF 2007

A LOCAL LAW ADDING A NEW CHAPTER 104 TO THE CODE OF THE VILLAGE OF WALDEN ENTITLED "MUNICIPAL SEPARATE STORM SEWER SYSTEM" TO ESTABLISH METHODS FOR CONTROLLING THE INTRODUCTION OF NON-STORMWATER POLLUTANTS INTO THE VILLAGE'S SEPARATE STORM SEWER SYSTEM.

BE IT ENACTED by the Board of Trustees of the Village of Walden as follows:

SECTION 1. Legislative intent.

The purpose of this law is to provide for the health, safety, and general welfare of the citizens of the Village of Walden through the regulation of non-stormwater discharges to the Municipal Separate Storm Sewer System (MS4) to the maximum extent practicable as required by federal and state law. This law establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems. The objectives of this law are:

- A. To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit no. GP-02-02 or as amended or revised;
- B. To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge non-stormwater wastes;
- C. To prohibit Illicit Connections, Activities and Discharges to the MS4;
- D. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this law; and
- E. To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.

SECTION 2. Definitions.

Whenever used in this law, unless a different meaning is stated in a definition applicable to only a portion of this law, the following terms will have meanings set forth below:

BEST MANAGEMENT PRACTICES (BMPs). Schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater,

receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

CLEAN WATER ACT. The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.) and any subsequent amendments thereto.

CONSTRUCTION ACTIVITIES. Activities requiring authorization under the SPDES permit for stormwater discharges from construction activity, GP-02-01, as amended or revised. These activities include construction projects resulting in land disturbance of one or more acres. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

DEPARTMENT. The New York State Department of Environmental Conservation.

DESIGN PROFESSIONAL. A New York State licensed professional engineer or licensed architect.

HAZARDOUS MATERIALS. Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

ILLICIT CONNECTIONS. Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the MS4, including but not limited to, any conveyances which allow any non-stormwater discharge including treated or untreated sewage, process wastewater, and wash water to enter the MS4 and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency; or any drain or conveyance connected from a commercial or industrial land use to the MS4 which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

ILLICIT DISCHARGE. Any direct or indirect non-stormwater discharge to the MS4, except as exempted in Section 6 of this law

INDIVIDUAL SEWAGE TREATMENT SYSTEM. A facility serving one or more parcels of land or residential households, or a private, commercial or institutional facility, that treats sewage or other liquid wastes for discharge into the groundwaters of New York State, except where a permit for such a facility is required under the applicable provisions of Article 17 of the Environmental Conservation Law.

INDUSTRIAL ACTIVITY. Activities requiring the SPDES permit for discharges from industrial activities except construction, GP-98-03, as amended or revised.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4). A conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains owned or operated by the Village of Walden and designed or used for collecting or conveying stormwater and which is not a combined sewer and which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40CFR 122.2.

MUNICIPALITY. The Village of Walden

NON-STORMWATER DISCHARGE. Any discharge to the MS4 that is not composed entirely of stormwater.

PERSON. Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

POLLUTANT. Dredged spoil, filter backwash, solid waste, incinerator residue, treated or untreated sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal or agricultural waste and ballast discharged into water which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards.

PREMISES. Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

SPECIAL CONDITIONS.

1. **Discharge Compliance with Water Quality Standards.** The condition that applies where a municipality has been notified that the discharge of stormwater authorized under their MS4 permit may have caused or has the reasonable potential to cause or contribute to the violation of an applicable water quality standard. Under this condition the municipality must take all necessary actions to ensure future discharges do not cause or contribute to a violation of water quality standards.
2. **303(d) Listed Waters.** The condition in the municipality's MS4 permit that applies where the MS4 discharges to a 303(d) listed water. Under this condition the stormwater management program must ensure no increase of the listed pollutant of concern to the 303(d) listed water.
3. **Total Maximum Daily Load (TMDL) Strategy.** The condition in the municipality's MS4 permit

where a TMDL including requirements for control of stormwater discharges has been approved by EPA for a water body or watershed into which the MS4 discharges. If the discharge from the MS4 did not meet the TMDL stormwater allocations prior to September 10, 2003, the municipality was required to modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.

4. **The condition in the municipality's MS4 permit that applies if a TMDL is approved in the future by EPA for any water body or watershed into which an MS4 discharges.** Under this condition the municipality must review the applicable TMDL to see if it includes requirements for control of stormwater discharges. If an MS4 is not meeting the TMDL stormwater allocations, the municipality must, within six (6) months of the TMDL's approval, modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) STORMWATER DISCHARGE PERMIT. A permit issued by the Department that authorizes the discharge of pollutants to waters of the state.

STORMWATER. Rain water, surface runoff, snowmelt and drainage.

STORMWATER MANAGEMENT OFFICER. The Building Inspector, the municipal engineer or other employee designated by the Village Manager to enforce this local law. The Stormwater Management Officer may also be 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.

303(d) LIST. A list of all surface waters in the state for which beneficial uses of the water (drinking, recreation, aquatic habitat, and industrial use) are impaired by pollutants, prepared periodically by the Department as required by Section 303(d) of the Clean Water Act. 303(d) listed waters are estuaries, lakes and streams that fall short of state surface water quality standards and are not expected to improve within the next two years.

TOTAL MAXIMUM DAILY LOAD (TMDL). The maximum amount of a pollutant to be allowed to be released into a water body so as not to impair uses of the water, allocated among the sources of that pollutant.

WASTEWATER. Water that is not stormwater, is contaminated with pollutants and is or will be discarded.

SECTION 3. Applicability.

This law shall apply to all water entering the MS4 generated on any developed and undeveloped lands unless explicitly exempted by an authorized enforcement agency.

SECTION 4. Responsibility for administration.

The Stormwater Management Officer(s) shall administer, implement, and enforce the provisions of this law. Such powers granted or duties imposed upon the authorized enforcement official may be delegated in writing by the Stormwater Management Officer as may be authorized by the municipality.

SECTION 5. Discharge prohibitions.

A. No person shall discharge or cause to be discharged into the MS4 any materials other than stormwater except as provided in Subparagraph (1) below. The commencement, conduct or continuance of any illegal discharge to the MS4 is prohibited except as described as follows:

- (1) The following discharges are exempt from discharge prohibitions established by this local law, unless the Department or the municipality has determined them to be substantial contributors of pollutants: water line flushing or other potable water sources, landscape irrigation or lawn watering, existing diverted stream flows, rising ground water, uncontaminated ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains, crawl space or basement sump pumps, air conditioning condensate, irrigation water, springs, water from individual residential car washing, natural riparian habitat or wetland flows, de-chlorinated swimming pool discharges, residential street wash water, water from fire fighting activities, and any other water source not containing pollutants. Such exempt discharges shall be made in accordance with an appropriate plan for reducing pollutants.
- (2) Discharges approved in writing by the Stormwater Management Officer to protect life or property from imminent harm or damage, provided that, such approval shall not be construed to constitute compliance with other applicable laws and requirements, and further provided that such discharges may be permitted for a specified time period and under such conditions as the Stormwater Management Officer may deem appropriate to protect such life and property while reasonably maintaining the purpose and intent of this local law.
- (3) Dye testing in compliance with applicable state and local laws is an allowable discharge, but requires a verbal notification to the Stormwater Management Officer prior to the time of the test.
- (4) The prohibition shall not apply to any discharge permitted under an SPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Department, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written

approval has been granted for any discharge to the MS4.

B. Prohibition of Illicit Connections.

- (1) The construction, use, maintenance or continued existence of illicit connections to the MS4 is prohibited.
- (2) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- (3) A person is considered to be in violation of this local law if the person connects a line conveying sewage to the municipality's MS4 or allows such a connection to continue.

SECTION 6. Prohibition against failing individual sewage treatment systems.

No persons shall operate a failing individual sewage treatment system in areas tributary to the municipality's MS4. A failing individual sewage treatment system is one that has one or more of the following conditions:

- A. The backup of sewage into a structure.
- B. Discharges of treated or untreated sewage onto the ground surface.
- C. A connection or connections to a separate stormwater sewer system.
- D. Liquid level in the septic tank above the outlet invert.
- E. Structural failure of any component of the individual sewage treatment system that could lead to any of the other failure conditions as noted in this section.
- F. Contamination of off-site groundwater.

SECTION 7. Prohibition against activities contaminating stormwater.

- A. Activities that are subject to the requirements of this section are those types of activities that cause or contribute to a violation of the municipality's MS4 SPDES permit or cause or contribute to the municipality being subject to the Special Conditions as defined in Section 2 (Definitions) of this local law.
- B. Such activities include failing individual sewage treatment systems as defined in Section 6, improper management of pet waste or any other activity that causes or contributes to violations of the municipality's MS4 SPDES permit authorization.
- C. Upon notification to a person that he or she is engaged in activities that cause or contribute to violations of the municipality's MS4 SPDES permit authorization, that person shall take all reasonable actions to correct such activities such that he or she no longer causes or contributes to violations of the municipality's MS4 SPDES permit authorization.

SECTION 8. Requirement to prevent, control, and reduce stormwater pollutants by the use of Best Management Practices.

A. Best Management Practices.

Where the Stormwater Management Officer has identified illicit discharges as defined in Section 2 or activities contaminating stormwater as defined in Section 7, the municipality may require implementation of Best Management Practices (BMPs) to control those illicit discharges and activities.

- (1) The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 through the use of structural and non-structural BMPs.
- (2) Any person responsible for a property or premise, which is, or may be, the source of an illicit discharge as defined in Section 2 or an activity contaminating stormwater as defined in Section 7, may be required to implement, at said person's expense, additional structural and non-structural BMPs to reduce or eliminate the source of pollutant(s) to the MS4.
- (3) Compliance with all terms and conditions of a valid SPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section.

B. Individual Sewage Treatment Systems - Response to Special Conditions Requiring No Increase of Pollutants or Requiring a Reduction of Pollutants

Where individual sewage treatment systems are contributing to the municipality's being subject to the Special Conditions as defined in Section 2 of this local law, the owner or operator of such individual sewage treatment systems shall be required to:

- (1) Maintain and operate individual sewage treatment systems as follows:
 - (i) Inspect the septic tank annually to determine scum and sludge accumulation. Septic tanks must be pumped out whenever the bottom of the scum layer is within three inches of the bottom of the outlet baffle or sanitary tee or the top of the sludge is within ten inches of the bottom of the outlet baffle or sanitary tee.
 - (ii) Avoid the use of septic tank additives.
 - (iii) Avoid the disposal of excessive quantities of detergents, kitchen wastes, laundry wastes, and household chemicals; and
 - (iv) Avoid the disposal of cigarette butts, disposable diapers, sanitary napkins, trash and other such items

- (2) Repair or replace individual sewage treatment systems as follows:
- (i) In accordance with 10NYCRR Appendix 75A to the maximum extent practicable.
 - (ii) A design professional licensed to practice in New York State shall prepare design plans for any type of absorption field that involves:
 - a. Relocating or extending an absorption area to a location not previously approved for such
 - b. Installation of a new subsurface treatment system at the same location.
 - c. Use of alternate system or innovative system design or technology.
 - (iii) A written certificate of compliance shall be submitted by the design professional to the municipality at the completion of construction of the repair or replacement system.

SECTION 9. Suspension of access to MS4.

- A. The Stormwater Management Officer may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, to the health or welfare of persons, or to the MS4. The Stormwater Management Officer shall notify the person of such suspension within a reasonable time thereafter in writing of the reasons for the suspension. If the violator fails to comply with a suspension order issued in an emergency, the Stormwater Management Officer may take such steps as deemed necessary to prevent or minimize damage to the MS4 or to minimize danger to persons.
- B. Any person discharging to the municipality's MS4 in violation of this law may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The Stormwater Management Officer will notify a violator in writing of the proposed termination of its MS4 access and the reasons therefor. The violator may petition the Stormwater Management Officer for a reconsideration and hearing. Access may be granted by the Stormwater Management Officer if he/she finds that the illicit discharge has ceased and the discharger has taken steps to prevent its recurrence. Access may be denied if the Stormwater Management Officer determines in writing that the illicit discharge has not ceased or is likely to recur. A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this Section, without the prior approval of the Stormwater Management Officer.

SECTION 10. Industrial or construction activity discharges.

Any person subject to an industrial or construction activity SPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the municipality prior to the allowing of discharges to the MS4.

SECTION 11. Access and monitoring of discharges.

- A. Applicability. This section applies to all facilities that the Stormwater Management Officer must inspect to enforce any provision of this Law, or whenever the authorized enforcement agency has cause to believe that there exists, or potentially exists, in or upon any premises any condition which constitutes a violation of this Law.
- B. Access to Facilities.
- (1) The Stormwater Management Officer shall be permitted to enter and inspect facilities subject to regulation under this law as often as may be necessary to determine compliance with this Law. If a discharger has security measures in force that require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to the Stormwater Management Officer.
 - (2) Facility operators shall allow the Stormwater Management Officer ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records as may be required to implement this law.
 - (3) The municipality shall have the right to set up on any facility subject to this law such devices as are necessary in the opinion of the Stormwater Management Officer to conduct monitoring and/or sampling of the facility's stormwater discharge.
 - (4) The municipality has the right to require the facilities subject to this law to install monitoring equipment as is reasonably necessary to determine compliance with this law. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.
 - (5) Unreasonable delays in allowing the municipality access to a facility subject to this law is a violation of this law. A person who is the operator of a facility subject to this law commits an offense if the person denies the municipality reasonable access to the facility for the purpose of conducting any activity authorized or required by this law.
 - (6) If the Stormwater Management Officer has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this law, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this

Management Officer may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

SECTION 17. Alternative remedies.

A. Where a person has violated a provision of this Law, he/she may be eligible for alternative remedies in lieu of a civil penalty, upon recommendation of the Municipal Attorney and concurrence of the Municipal Code Enforcement Officer, where:

- (1) The violation was unintentional
- (2) The violator has no history of previous violations of this Law.
- (3) Environmental damage was minimal.
- (4) The violator acted quickly to remedy the violation.
- (5) The violator cooperated in the investigation and resolution.

B. Alternative remedies may consist of one or more of the following:

- (1) Attendance at compliance workshops
- (2) Storm drain stenciling or storm drain marking
- (3) River, stream or creek cleanup activities

SECTION 18. Remedies not exclusive.

The remedies listed in this law are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

SECTION 19. Severability.

If any provision, clause, sentence, paragraph, section or part of this local law shall be adjudicated by any court of competent jurisdiction to be invalid, such judgment shall be confined in its operation to the clause, sentence, paragraph, section or part thereof directly involved in the controversy in which such judgment shall have been rendered.

SECTION 20. Effective date.

This local law take effect immediately upon filing in the Office of the Secretary of State in Albany. All prior laws and parts of law in conflict with this law are hereby repealed.

INTRODUCTORY LOCAL LAW I-8 OF 2007

A LOCAL LAW ADDING A NEW CHAPTER 126A OF THE CODE OF THE VILLAGE OF WALDEN ENTITLED "STORMWATER, SOIL EROSION AND SEDIMENT CONTROL" TO ESTABLISH MINIMUM REQUIREMENTS AND PERFORMANCE STANDARDS FOR STORMWATER MANAGEMENT IN ORDER TO PREVENT SOIL EROSION AND SEDIMENTATION AND TO PROTECT THE HEALTH, SAFETY AND WELFARE OF THE CITIZENS OF THE VILLAGE.

BE IT ENACTED by the Board of Trustees of the Village of Walden as follows:

SECTION 1. Legislative intent.

The Village of Walden finds that land development activities, associated increases in site impervious cover, disturbances to the natural vegetative cover, and changes to the topography of the land can often alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes. These changes to the hydrology of the watershed can cause an increase in flooding, stream bank erosion, impairment to aquatic resources from silt or other pollutants, degradation of water quality and a loss of wildlife habitat. Land development activities can also cause unchecked erosion, sediment transport and deposition that can impair aquatic resources, clog drainage ways and cause increased flooding. The potential impairment of the Village's natural resources caused by unchecked erosion, sedimentation and increased stormwater runoff results in a significant economic and social loss to the community. It is the purpose of this Chapter to protect the public health, safety and welfare in the Village of Walden, and its aquatic resources by establishing minimum requirements for stormwater management, preventing erosion and controlling sedimentation for activities which cause changes to the watershed hydrology and may increase erosion and sediment transport including but not limited to construction activities, land alterations including excavation, filling, grading, land stripping and tree clearing, and increases in the rate of stormwater runoff.

Regulating land development activities by means of performance standards governing stormwater management, erosion and sediment control 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 stormwater runoff from changes in the natural conditions due to development. It will also protect the Village and other governmental bodies from the additional expense of having to undertake, as a public obligation, increased maintenance of stormwater management practices, programs of repairing roads and other public facilities, of providing flood protection facilities and of compensating private property owners for the destruction of properties arising from the adverse effects of site preparation and construction.

To accomplish the aforementioned purpose, the Board of Trustees of the Village of Walden has promulgated these, standards and regulations which seek

to achieve the following objectives:

- A. Minimize increases in peak rate of 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;
- B. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;
- C. Minimize the total volume of stormwater runoff which flows from any specific site during, and following development to the maximum extent practicable in order to minimize the economic impact of installation, operation and maintenance of drainage facilities;
- D. Reduce soil erosion and sediment transport, wherever possible, through appropriate structural and non-structural best management practices (BMPs), and to ensure that these management practices are properly maintained to eliminate threats to public safety.
- E. 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;
- F. 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.

SECTION 2. Definitions.

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

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 land development.

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

CLEARING - Any activity that removes the vegetative surface cover.

CLEARCUTTING - the removal of trees over eight inches in diameter measured at four feet above ground level, and includes the stripping of soil.

COMMON PLAN OF DEVELOPMENT - where multiple construction activities are occurring, or will occur, whether in stages or phases on a contiguous area.

DAY - Day shall mean a calendar day.

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

DEPARTMENT - the New York State Department of Environmental Conservation

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

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

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

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".

EXCAVATION - Any activity which removes or significantly disturbs rock, gravel, sand, soil or other natural deposits.

FARM OPERATIONS - All activities and practices which contribute to the growing or raising of crops, livestock and livestock products as a commercial enterprise, including a commercial horse boarding operation

FILLING - Any activity which deposits natural or artificial material so as to modify the surface or subsurface conditions of land, lakes, ponds, wetlands or watercourses.

FINAL STABILIZATION - when all soil-disturbing activities at the site have been completed and a uniform perennial vegetative cover with a density of eighty percent has been established or equivalent stabilization measures (such as the use of mulches, riprap or geotextiles) have been employed on all areas not permanently improved by pavement, concrete or structures.

GRADING - The alteration or reshaping of the surface or subsurface conditions of land, lakes, ponds, wetlands or watercourses by excavation or filling.

IMPERVIOUS SURFACE OR COVER- Those surfaces in the urban landscape which do not have a permanent vegetative cover and/or cannot effectively infiltrate rainfall including, but not limited to building rooftops, pavement, sidewalks, driveways and roads with a surface of compacted dirt or gravel, asphalt or concrete, decks and swimming pools.

INFILTRATION - the process of percolating stormwater into the subsoil.

LAND DEVELOPMENT ACTIVITY - construction activity including clearing, grading, excavating, soil disturbance or placement of fill that results in land disturbance. Regulated land disturbance are activities as defined in Section 3 of this Chapter.

MULCHING -The application of a layer of organic material such as wood chips, hay, pine bark or other material at a sufficient thickness for the purpose of effectively controlling erosion.

PARCEL - A designated lot, tract or area of land to be used, disturbed, developed or built upon as a unit.

REDEVELOPMENT - the reconstruction or modification to any existing, previously developed land, regardless of use, which involves disturbance to soil or its existing overlying cover.

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

SITE PREPARATION- The activities of stripping, excavation, filling and grading, no matter what the purpose of these activities.

SOIL - All unconsolidated mineral or nonliving organic material of whatever origin which overlies bedrock.

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

STORMWATER MANAGEMENT OFFICER - The Building Inspector, municipal engineer or other employee designated by the Village Manager to accept and review stormwater pollution prevention plans, forward the plans to the applicable municipal board and inspect stormwater management practices.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) - A plan for controlling stormwater runoff and pollutants from a site during and after construction activities.

STRIPPING - Any activity which removes or significantly disturbs trees, brush, grass or any other kind of vegetation.

TOPSOIL - The natural surface layer of soil, usually darker than subsurface layers, to a depth of at least six (6) inches within an undisturbed area of soils.

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), that are wholly or partially within or bordering the state or within its jurisdiction. Storm sewers and waste treatment systems, including treatment ponds or lagoons that 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 - Any natural or artificial stream, river, creek, ditch, channel, canal, conduit, culvert, drainage way, gully, ravine or wash in which water flows in a definite direction or course, either continuously or intermittently, and which has a definite channel, bed and bank and any area adjacent thereto subject to inundation by reason of overflow, flood or stormwater. For the purpose of this Chapter, the term "watercourse" shall be deemed to include ponds and lakes.

WETLANDS - Shall mean those wetlands as regulated by the New York State Department of Environmental Conservation and/or the United States Army Corps of Engineers.

SECTION 3. Regulated activities.

A. None of the following activities shall be commenced until a Land

Development Permit has been issued under the provisions of this Chapter.

- (1) Clearing, filling, and grading as defined in Chapter 63A.
- (2) A subdivision of a parcel into two (2) or more lots.
- (3) Any activity requiring approval of a site plan by the Planning Board.

B. Notwithstanding the requirement that certain activities obtain a permit under this section, or any exemption therefrom, any filling, grading, excavation, or any other activity that disturbs the natural vegetative cover shall not cause or contribute to an impairment of aquatic resources, a degradation of water quality, or otherwise harm the natural resources of the Village of Walden as described in Section 9, below, and in all cases shall utilize appropriate erosion control measures in accordance with the New York Standards and Specifications for Erosion and Sediment Control.

C. Any temporary or permanent alteration of the land surface associated with the following, including but not limited to, removal of fifty percent of the vegetative cover, grading or filling, or any of the activities provided in Subsection A, shall be deemed to be a "Major Land Development" activity: commercial development projects disturbing 0.25 or more acres, modifications to existing commercial projects which increase impervious surfaces by 20 percent, residential projects disturbing an acre or more, residential projects creating 5 or more lots, residential subdivisions adjacent to a wetland or water course. Smaller disturbances which are part of a common plan of development equal to, or greater than one acre shall also be considered a Major Land Development activity.

(1) All Major Land Development activities shall prepare a Stormwater Pollution Prevention Plan which shall include means and measures for control of stormwater quality and quantity and soil erosion and sedimentation.

(2) Any activity that shall be deemed to be a Major Land Development activity shall obtain a permit from the Storm Water Management Officer, excepting as provided in Section 5, below.

D. All other activities described in Subsection A, above, shall be considered a "Minor Land Development" activity including, but not limited to, any temporary or permanent alteration of the land surface involving the removal of fifty percent of the vegetative cover, grading, or filling, and any activities which do not exceed the requirements in Subsection C above but fall within the following: commercial development projects disturbing between 5000 square feet to 0.25 acres and residential subdivisions creating less than 5 lots provided they disturb less than an acre and are not adjacent to a

wetland or water source.

(1) Any Activity that shall be deemed a Minor Land Development activity as defined herein shall prepare an Erosion and Sediment Control Plan which meets the requirements contained herein.

(2) Any activity that shall be deemed to be a Minor Land Development activity shall obtain a permit from the Stormwater Management Officer, excepting as provided in Section 5, below.

SECTION 4. Exemptions.

The following activities are exempt from obtaining a permit pursuant to this Chapter, however such activities shall not be conducted in a manner that causes or results in soil erosion, sedimentation or a visible change in the quality of runoff as set forth in Section 9, below.

A. Excavations for the basements and footings of single-family houses and for septic tank systems, wells and swimming pools attendant to single-family homes, excepting where those excavations are proposed in such locations as described under Subsection A(1) and (2) of Section 3, above. The area of excavation set forth herein shall be included in calculating the total amount of site disturbance for the purposes of compliance with Section 3C and 3D, above.

B. Farm Operations as defined by Article 25AA of the Agriculture and Markets Law.

C. Cemetery graves.

D. Activities of an individual engaging in home gardening by growing flowers, vegetables or other plants primarily for use by that person and his or her family.

E. Landscaping and horticultural activities in connection with an existing structure that result in less than 11,000 square feet in aggregate of disturbance.

F. Emergency activities immediately necessary to protect life, property or natural resources.

G. Governmental activities, but only to the extent that such activities are exempted from the provisions of this Chapter or are otherwise exempt pursuant to state law.

H. Repairs to stormwater management facilities authorized by the

Stormwater Management Officer.

SECTION 5. Erosion control permits with site plan or subdivision approval.

A Site Plan, approved pursuant to §148-56, or a Subdivision Plat approved pursuant to Chapter 130 of the Code of the Village of Walden, which also includes a separate Erosion and Sediment Control Plan meeting the requirements of this Chapter, approved by the Planning Board shall constitute an Erosion and Sediment Control Permit approved under this Chapter.

SECTION 6.

A. Where a major or minor Land Development Permit is required pursuant to Section 3(C) or 3(D), an application shall be submitted to the Stormwater Management Officer which includes the following:

- (1) Eight (8) copies of a Land Development Application Form.
- (2) An application fee as set from time to time by resolution of the Village Board. The fee shall be deemed a reasonable sum to cover the costs of administration and shall in no part be returnable to the applicant(s).
- (3) Eight (8) copies of an Erosion and Sediment Control Plan or a Stormwater Pollution Prevention Plan, or both as may be required herein. Maps and plans accompanying the application shall be prepared by an individual authorized by the State of New York to prepare such plans which may include an architect, engineer or landscape architect licensed by the State of New York, or a Certified Professional in Erosion and Sediment Control.
- (4) An Environmental Assessment Form (EAF) pursuant to SEQRA prepared and submitted by the applicant, unless the application concerns a site plan or subdivision project already before the Planning Board for which a SEQRA declaration has already been made.

SECTION 7. Review Standards.

A. Within thirty days of the receipt of an application or any plans or material in support thereof, the Stormwater Management Officer shall notify the Applicant if the application is determined to be complete or if additional information is required.

B. The Stormwater Management Officer shall approve, with or without modifications or deny all permits within thirty (30) days of the date

of determining that the application is complete, unless the applicant consents, in writing, to a time extension.

C. Prior to granting a permit, the Stormwater Management Officer shall determine that the request is in harmony with the purpose and standards set forth in this chapter.

D. In granting a permit, the Stormwater Management Officer may fix a reasonable time limit for the termination of the permit and may attach any conditions which he deems necessary to assure compliance with the provisions of this Chapter. Any permit issued for a major or minor land disturbance shall not exceed one (1) year in duration. The performance guaranty so specified under Section 26, shall be posted before any permits may be granted or site work commenced.

E. Modifications of the terms of an approved permit shall follow the same application, review and approval procedures as those set forth in this section for the original permit.

F. It shall be the responsibility of the Stormwater Management Officer to inspect any sites for which a permit has been issued under this Chapter as frequently as necessary to assure compliance with the terms and conditions of the approved permit and the provisions of this Chapter and to submit written notification of any violations of these terms or provisions of the Permit to the property owner to which the permit has been issued.

G. If, at any time during the effective period of a permit issued by the Stormwater Management Officer the terms of the permit are violated, or if the permit expires prior to the completion of the work, the Stormwater Management Officer may revoke the permit and thereafter recommend to the Village Board that the performance guaranty be forfeited to the Village. If the applicant becomes unable to complete the project or any phase thereof within the specified time, he shall within thirty (30) days prior to the specified date of completion, present, in writing, a request for an extension of time, setting forth therein the reasons for the request. If, in the discretion of the Stormwater Management Officer, such an extension is warranted, the Stormwater Management Officer may grant additional time for the completion of the work.

H. The Stormwater Management Officer is authorized to consult with and obtain recommendations from the Village Planning Board and/or its Chairman, the Village Engineer, the Village Department of Public Works Superintendent, the Orange County Soil and Water Conservation District, and the New York State Department of Environmental Conservation.

SECTION 8. Additional costs and expenses.

In the event that an application requires the Village to incur additional expenses for technical assistance in the review of an application, the applicant shall pay the reasonable expenses incurred by the Village. The applicant shall be notified of the expenses and shall deposit said funds in escrow as necessary to cover to the costs being incurred.

SECTION 9. Performance standards.

Upon the approval of this Chapter by the Village Board, all Land Development activities regulated under this Chapter shall be in conformance with the provisions set forth herein. It shall be a violation of this Chapter, or for any permit issued thereof, to either cause or contribute to an impairment of aquatic resources, a degradation of water quality, or to otherwise harm the natural resources of the Village of Walden. More specifically:

- A. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions of surface water;
- B. There shall be no increase in suspended, colloidal and settleable solids that will cause deposition or impair the waters for their best usages;
- C. There shall be no residue from oil and floating substances, or visible oil film, or globules of grease.
- D. No uncontrolled sedimentation shall occur from any land disturbance which;
 - (1) is not properly managed by appropriate erosion and sediment control practices
 - (2) causes, or may potentially cause an impairment to water quality.
- E. There shall no increase in the peak rate of runoff which causes an impairment to any stream, channel or drainage structure.

SECTION 10. Technical standards.

The following technical standards shall be used in the design and installation of all erosion control, sediment control and stormwater practices designed or installed under this Chapter:

- A. New York Standards and Specifications for Erosion and Sediment Control (Empire State Chapter of the Soil and Water Conservation Society) 2004 or the most current version or its successor (also referred to as the Erosion Control Manual).
- B. New York State Stormwater Design Manual, latest edition (New York State Department of Environmental Conservation).
- C. Urban Hydrology for Small Watersheds (TR55) (USDA Natural Resource Conservation Service).
- D. Soil Survey of Orange County, New York (USDA Soil Conservation Service).

SECTION 11. Erosion and Sediment Control Plan requirements.

An Erosion and Sediment Control Plan shall be prepared in accordance with the Technical Standards provided for herein, and at a minimum shall include the following information:

- (1) Existing features map(s), at a scale no smaller than one (1) inch equals fifty (50) feet indicating:
 - (a) The boundaries of all parcels on which site preparation activities are proposed to be undertaken.
 - (b) All public improvements within a distance of two hundred (200) feet of the parcel on which site preparation activities are proposed to be undertaken, the structures identified by their uses and capacities, and the roads identified by their surface material and width of surface.
 - (c) All wetlands, greater than 4,000 square feet in size and any watercourses located either on the site or within a distance of one hundred (100) feet of the parcels on which site preparation activities are proposed to be undertaken.
 - (d) Existing topography at contour intervals of two (2) feet referenced to USGS datum.
 - (e) All sewer, water, gas and electric lines and all other utilities within the parcels on which site preparation activities are proposed to be undertaken.
 - (f) The location and description of all vegetation located within the area of proposed disturbance, and including the area within one hundred (100) feet of the disturbance.
 - (g) The depth to bedrock on the site proposed for site preparation activities.

(h) The depth to permanent groundwater aquifers on the site proposed for site preparation activities.

(i) The boundary of the one-hundred-year floodplain, together with wetland boundaries.

(2) Drainage computations to evaluate the peak rates, and volumes of runoff for the site in its pre-developed and post-developed conditions may be required.

(3) Development standards. All development plans, specifications and timing schedules, including extensions of previously approved plans, shall comply with the Technical Standards identified herein and shall be designed for "newly graded" or "during construction" conditions. In the event of conflict with this Chapter, the requirements that, to the greater extent, will serve to minimize erosion shall apply.

(4) Site plan. A site plan shall be prepared at a scale no smaller than one (1) inch equals fifty (50) feet, which shows the proposed developed conditions for the site and the proposed erosion and sediment control measures including:

(a) The location of all excavation, filling and grading proposed to be undertaken, identified as to the depth, volume and nature of the materials involved.

b) The location of all soil stripping or tree cutting, identified as to the nature of vegetation affected.

(c) All areas where topsoil is to be removed, stockpiled and ultimately placed.

(d) All temporary and permanent vegetation to be placed on the site, identified as to plant type, size, quantity, location, seed mixture and rate of application, as appropriate.

(e) The type, location and application rate of all mulch.

(f) All temporary and permanent drainage, erosion and sediment control practices, including such practices as stormwater ponds and temporary sediment basins, identified as to the type of facility, the materials from which it is constructed, its specifications or manufacturer product identification number, its dimensions and its capacity.

(g) The anticipated pattern of surface drainage during periods of peak runoff, upon completion of site preparation and construction activities, identified as to rate and direction of flow at all major points within the drainage systems.

- (h) The location of all roads, driveways, sidewalks, structures, utilities and other improvements, including the finished grade of any proposed structures.
 - (i) The final contours of the areas of the site affected by an action requiring a permit in intervals of no greater than two (2) feet.
- (5) Supporting calculations to demonstrate the suitability of erosion and sediment control measures.
- (6) A construction schedule which is keyed to the site plan indicating:
- (a) When major phases of the proposed project are to be initiated and completed.
 - (b) When major site preparation activities are to be initiated and completed.
 - (c) When the installation of temporary and permanent vegetation and drainage, erosion and sediment control facilities are to be completed.
 - (d) The anticipated duration, in days, of exposure of all major areas of site preparation before the installation of erosion and sediment control measures.
- (7) An estimate of the costs of providing temporary and permanent vegetation and drainage, erosion and sediment control facilities prepared by a qualified individual as contained herein.

SECTION 12. Stormwater Pollution Prevention Plan (SPPP) requirements.

A. When required pursuant to this Chapter, a stormwater pollution prevention plan shall be prepared in accordance with the New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activities (Permit No. GP-02-01), using the Technical Standards identified herein, and at a minimum shall include the following information:

- (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 at a scale no smaller than one (1) inch equals fifty (50) feet. 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 grades at two-foot contours; locations of off-site material, waste, borrow or

equipment storage areas; and location(s) of the stormwater discharges(s);

(3) A location map at a scale of not less than one (1) inch equals two thousand feet.

(4) Description of the soil(s) present at the site;

(5) 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 SPPP.

(6) 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;

(7) 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;

(8) 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;

(9) A site map/construction drawing(s) specifying the location(s), size(s) and length(s) of each erosion and sediment control practice;

(10) Dimensions, material specifications and installation details for all erosion and sediment control practices, including the location and sizing of any temporary sediment basins or traps;

(11) Temporary practices that will be converted to permanent control measures;

(12) 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;

(13) Maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practice;

(14) Name(s) of the receiving water(s);

- (15) Delineation of SPPP implementation responsibilities for each part of the site;
- (16) 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 reasonably attainable; and
- (17) Any existing data that describes the stormwater runoff at the site.
- (18) Description of each post-construction stormwater management practice;
- (19) Site map/construction drawing(s) showing the specific location(s) and size(s) of each post-construction stormwater management practice;
- (20) Hydrologic and hydraulic analysis for all structural components of the stormwater management system for the applicable design storms
- (21) Comparison of post-development stormwater runoff conditions with pre-development conditions.
- (22) Dimensions, material specifications and installation details for each post-construction stormwater management practice;
- (23) Maintenance schedule to ensure continuous and effective operation of each post-construction stormwater management practice.
- (24) 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 and where required by law shall be filed with the Village and/or County Clerk.
- (25) Inspection and maintenance agreement binding on all subsequent landowners served by the on-site stormwater management measures.

B. The SPPP shall be prepared by a landscape architect, Certified Professional in Erosion and Sediment Control (CPESC) or licensed professional engineer and must be signed by the professional preparing the plan, who shall certify that the design of all stormwater management practices meet the requirements if this local law.

C. Each contractor and subcontractor identified in the SPPP 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."

D. 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.

E. The certification statement(s) shall become part of the SPPP for the land development activity, a copy of which shall be filed with the Walden Planning Department.

F. A copy of the SPPP 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 13. Maintenance During Construction.

A. 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 basins whenever their design capacity has been reduced by fifty (50) percent.

B. 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 or more inches of precipitation. The reports shall be delivered to the Walden Planning Department and also copied to the site log book.

SECTION 14. 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 Village of Walden 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 Village Attorney of the Village of Walden.

SECTION 15. Maintenance after Construction.

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

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

(2) Written procedures for operation and maintenance and training new maintenance personnel.

B. Discharges from stormwater management facilities shall not exceed design criteria or cause or contribute to water quality standard violations in accordance with Section 10.

SECTION 16. Maintenance Agreements.

As a condition of the approval of a Land Development Permit the Stormwater Management Officer may require that a maintenance agreement for the future operation and maintenance of one or more of the stormwater management facilities proposed for the site, in a form acceptable to the Village Attorney and binding on all subsequent landowners, be executed and recorded in the office of the County Clerk as a deed restriction on the property.

SECTION 17. Notations.

The following notations are to be included on all subdivision and site plan erosion and sediment control plans, and may be required on erosion and sediment control plans prepared for major and minor Land Development Permits:

A. Road and drainage improvements.

(1) All topsoil to be stripped from the area being developed shall be stockpiled not less than two hundred (200) feet from

any body of surface water and shall be immediately seeded with rye grass mixture with a quick germination time.

(2) On all embankment fill slopes, topsoil shall be stripped at least five (5) feet wider than required for the embankment toe of slope. All fill slopes shall be immediately stabilized using appropriate techniques which meet the design criteria described in the New York Standards and Specifications for Erosion and Sediment Control.

(3) Erosion and sediment control measures, including but not limited to silt fencing, sediment traps, and check dams, shall also be employed where necessary for supplementary erosion control measures.

(4) All cut slopes and embankment fills are to be immediately laid back and stabilized using appropriate techniques which meet the design criteria described in the New York Standards and Specifications for Erosion and Sediment Control which may include the following:

(a) Grade to finished slopes.

(b) Scarified.

(c) Topsoiled with not less than four (4) inches of suitable topsoil material.

(d) Seeded with perennial rye grass. Seed shall be applied at the rate of not less than five (5) pounds per one thousand (1,000) square feet.

(e) Mulched with not less than one (1) inch and not more than three (3) inches of straw [two (2) tons per acre] and anchored in a suitable manner.

(5) Temporary on-site sedimentation basins for the immediate control of erosion and sediment transport are to be provided when and where required or ordered. The length, width and depth of such basins are to be determined in the field in accordance with the New York Standards and Specifications for Erosion and Sediment Control.

(6) All erosion control structures are to be maintained in proper functioning order and are to be replaced or repaired as necessary.

B. General.

(1) Construction equipment shall not unnecessarily cross live streams except by means of bridges and culverts or other approved methods.

(2) Wherever feasible, natural vegetation should be retained and protected.

(3) Only the smallest practical area of land should be exposed at any one time during development.

(4) Erosion control requirements shall include surface 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 seven (7) days after the construction activity in that portion of the site has temporarily or permanently ceased. From November 1 through March 31 any disturbed area must be stabilized using a heavy mulch layer, a rolled erosion control product or another method that does not require seed germination to control erosion.

(5) The permanent final vegetation and structures shall be installed as soon as practical and as may be directed by the Stormwater Management Officer or Village Engineer.

(6) All erosion control measures employed during construction shall comply with the standards found in New York Standards and Specifications for Erosion and Sediment Control, latest edition.

(7) Phasing shall be required on all sites disturbing greater than five (5) acres, with the size of each phase to be established by the Planning Board or Stormwater Management Officer.

SECTION 18. Permit standards.

The standards and requirements contained herein shall be applied in reviewing and approving all permit pursuant to this Chapter.

A. An Erosion and Sediment Control Plan shall seek to return the quality of the stormwater leaving the site to its pre-disturbance condition to the maximum extent practicable.

B. Excavation, filling, grading and stripping shall be permitted to be undertaken only in such locations and in such a manner as to minimize the potential of erosion and sediment and the threat to the health, safety and welfare of neighboring property owners and the general public. Alterations of grade, or disturbances to the natural vegetative cover on slopes greater than thirty percent shall be avoided.

C. Site preparation and construction shall be fitted to the vegetation, topography and other natural features of the site and shall preserve as many of these features as feasible.

D. The control of erosion and sediment shall be a continuous process

undertaken as necessary prior to, during and after site preparation and construction.

E. The smallest practical area of land shall be exposed by site preparation at any given time.

F. Mulching or temporary vegetation suitable to the site shall be used where necessary to protect areas exposed by site preparation, and permanent vegetation which is well adapted to the site shall be installed as soon as practical.

G. Where slopes that have been exposed or re-graded during site preparation are to be re-vegetated, the slopes shall not be of such steepness that vegetation cannot be readily established or that problems of erosion or sediment may result.

H. Site preparation and construction shall not cause a permanent adverse effect on the free flow of water by encroaching on, blocking or restricting watercourses.

I. All fill material shall be of a composition suitable for the ultimate use of the fill, free of rubbish and brush, stumps, tree debris, rocks, frozen material and soft or easily compressible material.

J. Fill material shall be compacted sufficiently to prevent problems of erosion, and where the material is to support structures, it shall be compacted to a minimum density of ninety percent (90%) of modified proctor with proper moisture control.

K. All topsoil that is excavated from a site shall be stockpiled and used for the restoration of the site, and such stockpiles, where necessary, shall be seeded or otherwise treated to minimize the effects of erosion. Topsoil is not to be removed or sold from the site unless restoration has been completed.

L. Prior to, during and after site preparation and construction, an integrated drainage system shall be provided which at all times minimizes erosion, sediment, hazards of slope instability and adverse effect on neighboring property owners.

M. The natural drainage system shall generally be preserved in preference to modifications of this system, excepting where such modifications are necessary to reduce levels of erosion and sediment and adverse effects on neighboring property owners.

N. All drainage systems shall be designed to handle adequately the anticipated flows, both within the site and from the entire upstream

drainage basin, so as to achieve no net increase in peak rate of runoff from the site.

O. Sufficient grades and drainage facilities shall be provided to prevent the ponding of water, unless such ponding is proposed by the approved site plan, in which event there shall be sufficient water flow to maintain proposed water levels and to avoid stagnation.

P. There shall be provided, where necessary to minimize erosion and sediment, such measures as benches, berms, terraces, diversions, temporary sediment basins and retention basins. During the course of construction, where the Stormwater Management Officer or Village Engineer determines that additional erosion control measures are needed, they shall be provided by the Project Owner at no cost to the Village of Walden.

Q. Drainage systems, plantings and other erosion or sediment control devices shall be maintained as frequently as necessary to provide adequate protection against erosion and sediment and to ensure that the free flow of water is not obstructed by the accumulation of silt, debris or other material or by structural damage.

R. Wherever possible, clean water shall be diverted around any areas of disturbance.

S. For any proposed grades planned to have a slope greater than 3H:1V the design engineer shall provide calculations documenting that the slope will be stable as designed. Slope stability should be demonstrated by two-dimensional limiting equilibrium methods such as the Bishop Simplified Method. Further, the analysis should include an evaluation of seasonal high groundwater conditions, including subsurface investigations if deemed necessary, to assure that the slope will remain stable in "worst case" conditions."

T. The exposure of an area by site preparation shall be kept to the shortest practical period of time prior to the construction of structures or improvements or the restoration of the exposed areas to an attractive natural condition. The developer shall initiate stabilization measures as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than seven days after the construction activity in that portion of the site has temporarily or permanently ceased excepting where the initiation of stabilization measures by the seventh 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.

SECTION 19. Redevelopment.

A. The redevelopment of a site shall comply with the technical standards contained herein for water quality for the entire site, including the area proposed for redevelopment, except as noted in Subsection C below.

B. The redevelopment of a site shall comply with the technical standards contained herein for water quantity for any increase in the volume or rate of runoff due to the redevelopment, except as noted in Subsection C below.

C. A deviation from the technical and performance standards contained in this Chapter may be permitted where an owner or developer proposing to redevelop a site demonstrates that proper sizing and installation of acceptable stormwater management practices is not feasible due to inadequate space, head or other physical constraints of the site, and that the proposed change will not cause or contribute to a significant adverse change in any water resource within that drainage basin. Inadequate space in which to locate stormwater management practices caused directly by the size or location of the proposed redevelopment shall not be considered acceptable justification to permit a deviation from the standards.

SECTION 20. Contractor certification.

A copy of all Notice of Intents and all contractor's certification, required pursuant to the New York State General Permit for Stormwater Discharges from Construction Activity Permit No. GP-02-01 for all land disturbances, development or redevelopment located within the Village of Walden shall also be filed with the Walden Planning Board.

SECTION 21. Erosion and Sediment Control inspection.

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

- (1) Start of construction
- (2) Installation of sediment and erosion control measures
- (3) Completion of site clearing

- (4) Completion of rough grading
- (5) Completion of final grading
- (6) Close of the construction season
- (7) Completion of final landscaping
- (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.

SECTION 22. Stormwater Management Practice Inspections.

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

SECTION 23. Inspection of stormwater facilities after project completion.

A. 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.

SECTION 24. Submission of reports.

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

SECTION 25. Maintenance guaranty.

A. 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 Village of Walden 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 Village of Walden may draw upon the account to cover the costs of proper operation and maintenance, including engineering and inspection costs.

SECTION 26. Performance guaranty.

A. After the approval of the application and before the issuance of any permit, the applicant shall, when so required, file with the Village Board, surety for the amount of the estimated cost of the project, one (1) of the following performance guaranties:

(1) A joint savings account in both the name of the Village of Walden and the property owner, along with a withdrawal slip endorsed by the property owner.

(2) A performance bond which shall be satisfactory to the Village Board and Village Attorney as to form, sufficiency, manner of execution, surety and period of execution.

(3) An irrevocable letter of credit from a bank, which letter of credit shall be approved by the Village Board and Village Attorney.

B. The Stormwater Management Officer in approving an application submitted under Section 3, or the Village Planning Board, whichever shall retain jurisdiction of the application, may grant a waiver of such guaranty if it deems the proposed activities to be of minor scope and to be in full compliance with the intent of this Chapter.

C. The party or parties filing the performance guaranties shall certify that either upon termination of the permit or the operation, whichever may come first, the project shall be in conformity with both the approved specific requirements of the permit and the provisions of this Chapter. In the event of default of such and violation of any other applicable laws, such performance guaranty shall be forfeited to the Village. The Village shall return to the applicant any amount that is not needed to cover the costs of restoration, administration and any

other expenses incurred by the Village as a result of the applicant's default. Such performance guaranty shall continue in full force and effect until a certificate of compliance shall have been issued by the Stormwater Management Officer after such consultation with any agencies or individuals as he deems necessary to insure that all provisions of this Chapter and of the permit have been met.

SECTION 27. Waiver of requirements.

Where one or more of the requirements contained herein are not requisite in the interest of health, safety or general welfare or will provide information extraneous to the issuance of a permit, then one or more of the requirements may be waived by either the Planning Board or the Stormwater Management Officer, whichever shall have original jurisdiction.

SECTION 28. Damage due to violation; penalties for offenses.

A. If there is any damage due to violation of this Chapter, or if there is any damage to adjacent properties, or if any soil, liquid or other material is caused to be deposited upon or to roll, flow or wash upon any public property, private property or right-of-way in violation of this Chapter, the person, firm, partnership, corporation or other party responsible shall be notified and shall cause the same to be removed from such property or right-of-way within thirty-six (36) hours of written notice. In the event of an incident which presents an immediate danger to the public health or safety, notice shall be given by the most expeditious means and the violation shall be immediately remedied by the party responsible for the incident, or at its discretion and when the responsible party fails to adequately remedy the incident in a reasonable time, the Village shall cause such remedy and the cost of such remedy by the Village shall be paid to the Village by the party who failed to so remedy and shall be a debt owed to the Village.

B. Any person, firm or corporation, whether as owner, lessee, principal, agent, employee or otherwise, violating any of the provisions of this Local Law shall be guilty of a violation, which shall be punishable by a fine of not less than two hundred dollars (\$200) nor more than three hundred and fifty dollars (\$350) or imprisonment for a period not to exceed six months, or both, for a conviction of the 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 three hundred and fifty dollars (\$350) 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 (\$700) nor more than one thousand dollars (\$1,000) or imprisonment for a period not to exceed six months, or both.

C. Every day that a violation of any of the provisions of this chapter continues after written notice shall have been served upon the owner or his agent, either personally or by registered mail addressed to such person at his last known address, or after three days of having posted notice on the property on which the violation has occurred, shall constitute a separate violation.

D. The Stormwater Management Officer, in the administration of his duties contained herein, shall have the authority to issue stop work orders and appearance tickets for violations of this Chapter. The Code Enforcement Officer shall also have the authority to enforce the provisions of this Chapter.

SECTION 29. Conflict with other provisions.

Where this Chapter imposes greater restrictions than are imposed by the provision of any law, ordinance, regulation or private agreement, this chapter shall control. Where greater restrictions are imposed by any law, ordinance, regulation or private agreement than are imposed by this Chapter, such greater restrictions shall control.

SECTION 30. Appeals.

Any person aggrieved by an order or decision issued pursuant to this Chapter may seek review by the Walden Zoning Board of Appeals and then may seek judicial review pursuant to Article 78 of the Civil Practice Law and Rules in the Supreme Court for the County of Orange. Such appeals shall be filed within thirty (30) days after the date of a determination on the issuance of a permit or in the case of a decision by the Planning Board, the filing of the particular order or decision with the Walden Village Clerk.

SECTION 31. Savings Clause.

If any clause, sentence, paragraph, section or part of this Local Law shall be adjudicated by any court of competent jurisdiction to be invalid, such judgment shall be confined in its operation to the clause, sentence, paragraph, section or part thereof directly involved in the controversy in which such judgment shall have been rendered.

SECTION 32. Effective date.

This Local Law shall take effect immediately upon filing in the office of the Secretary of State in Albany.

Chapter 252. Stormwater Management

[HISTORY: Adopted by the Board of Trustees of the Village of Walden as indicated in article histories. Amendments noted where applicable.]

GENERAL REFERENCES

Appearance tickets — See Ch. 9.

Planning Board — See Ch. 67.

Clearing, filling and grading — See Ch. 128.

Land development fees — See Ch. 135, Art. I.

Flood damage prevention — See Ch. 149.

Performance and maintenance bonds — See Ch. 209.

Sewers — See Ch. 234.

Obstructions and encroachments, openings in streets and sidewalks — See Ch. 256, Arts. I, IV.

Subdivision of land — See Ch. 260.

Zoning — See Ch. 305.

Article I. Illicit Discharges, Activities and Connections to Separate Storm Sewer System

Adopted 11-13-2007 by L.L. No. 7-2007]

§ 252-1. Legislative intent.

The purpose of this article is to provide for the health, safety and general welfare of the citizens of the Village of Walden through the regulation of nonstormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the SPDES general permit for municipal separate storm sewer systems. The objectives of this article are:

- A. To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-02-02, or as amended or revised;
- B. To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge nonstormwater wastes;
- C. To prohibit illicit connections, activities and discharges to the MS4;
- D. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this article; and
- E. To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.

§ 252-2. Definitions.

Whenever used in this article, unless a different meaning is stated in a definition applicable to only a portion of

Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

CLEAN WATER ACT

The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.) and any subsequent amendments thereto.

CONSTRUCTION ACTIVITIES

Activities requiring authorization under the SPDES permit for stormwater discharges from construction activity, GP-02-01, as amended or revised. These activities include construction projects resulting in land disturbance of one or more acres. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

DEPARTMENT

The New York State Department of Environmental Conservation.

DESIGN PROFESSIONAL

A New York State licensed professional engineer or licensed architect.

HAZARDOUS MATERIALS

Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to a substantial present or potential hazard to human health, safety, property or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

ILLCIT CONNECTIONS

Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the MS4, including but not limited to any conveyances which allow any nonstormwater discharge including treated or untreated sewage, process wastewater, and wash water to enter the MS4 and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted or approved by an authorized enforcement agency; or any drain or conveyance connected from a commercial or industrial land use to the MS4 which has not been documented in plans, maps or equivalent records and approved by an authorized enforcement agency.

ILLCIT DISCHARGE

Any direct or indirect nonstormwater discharge to the MS4, except as exempted in § 252-5 of this article.

INDIVIDUAL SEWAGE TREATMENT SYSTEM

A facility serving one or more parcels of land or residential households or a private, commercial or institutional facility that treats sewage or other liquid wastes for discharge into the groundwaters of New York State, except where a permit for such a facility is required under the applicable provisions of Article 17 of the Environmental Conservation Law.

INDUSTRIAL ACTIVITY

Activities requiring the SPDES permit for discharges from industrial activities except construction, GP-98-03, as amended or revised.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

A conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains owned or operated by the Village of Walden and designed or used for collecting or conveying stormwater and which is not a combined sewer and which is not part of a publicly owned treatment works (POTW), as defined at 40 CFR 122.2.

The Village of Walden.

NONSTORMWATER DISCHARGE

Any discharge to the MS4 that is not composed entirely of stormwater.

PERSON

Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

POLLUTANT

Dredged spoil, filter backwash, solid waste, incinerator residue, treated or untreated sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal or agricultural waste and ballast discharged into water which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards.

PREMISES

Any building, lot, parcel of land, or portion of land, whether improved or unimproved, including adjacent sidewalks and parking strips.

SPECIAL CONDITIONS

- A. Discharge compliance with water quality standards. The condition that applies where a municipality has been notified that the discharge of stormwater authorized under its MS4 permit may have caused or has the reasonable potential to cause or contribute to the violation of an applicable water quality standard. Under this condition, the municipality must take all necessary actions to ensure future discharges do not cause or contribute to a violation of water quality standards.
- B. 303(d) Listed waters. The condition in the municipality's MS4 permit that applies where the MS4 discharges to a 303(d) listed water. Under this condition, the stormwater management program must ensure no increase of the listed pollutant of concern to the 303(d) listed water.
- C. Total maximum daily load (TMDL) strategy. The condition in the municipality's MS4 permit where a TMDL including requirements for control of stormwater discharges has been approved by EPA for a water body or watershed into which the MS4 discharges. If the discharge from the MS4 did not meet the TMDL stormwater allocations prior to September 10, 2003, the municipality was required to modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.
- D. The condition in the municipality's MS4 permit that applies if a TMDL is approved in the future by EPA for any water body or watershed into which an MS4 discharges. Under this condition, the municipality must review the applicable TMDL to see if it includes requirements for control of stormwater discharges. If an MS4 is not meeting the TMDL stormwater allocations, the municipality must, within six months of the TMDL's approval, modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) STORMWATER DISCHARGE PERMIT

A permit issued by the Department that authorizes the discharge of pollutants to waters of the state.

STORMWATER

Rainwater, surface runoff, snowmelt and drainage.

STORMWATER MANAGEMENT OFFICER

The Building Inspector, the Municipal Engineer or other employee designated by the Village Manager to enforce this article. The Stormwater Management Officer may also be 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.

A list of all surface waters in the state for which beneficial uses of the water (drinking, recreation, aquatic habitat, and industrial use) are impaired by pollutants, prepared periodically by the Department as required by Section 303(d) of the Clean Water Act. 303(d) listed waters are estuaries, lakes and streams that fall short of state surface water quality standards and are not expected to improve within the next two years.

TOTAL MAXIMUM DAILY LOAD (TMDL)

The maximum amount of a pollutant to be allowed to be released into a water body so as not to impair uses of the water, allocated among the sources of that pollutant.

WASTEWATER

Water that is not stormwater, is contaminated with pollutants, and is or will be discarded.

§ 252-3. Applicability.

This article shall apply to all water entering the MS4 generated on any developed and undeveloped lands unless explicitly exempted by an authorized enforcement agency.

§ 252-4. Responsibility for administration.

The Stormwater Management Officer(s) shall administer, implement, and enforce the provisions of this article. Such powers granted or duties imposed upon the authorized enforcement official may be delegated in writing by the Stormwater Management Officer as may be authorized by the municipality.

§ 252-5. Discharge prohibitions.

- A. No person shall discharge or cause to be discharged into the MS4 any materials other than stormwater except as provided in Subsection **A(1)** below. The commencement, conduct or continuance of any illegal discharge to the MS4 is prohibited except as described as follows:
- (1) The following discharges are exempt from discharge prohibitions established by this article, unless the Department or the municipality has determined them to be substantial contributors of pollutants: waterline flushing or other potable water sources; landscape irrigation or lawn watering; existing diverted stream flows; rising groundwater; uncontaminated groundwater infiltration to storm drains; uncontaminated pumped groundwater; foundation or footing drains, crawl space or basement sump pumps; air-conditioning condensate; irrigation water; springs; water from individual residential car washing; natural riparian habitat or wetland flows; dechlorinated swimming pool discharges; residential street wash water; water from fire-fighting activities, and any other water source not containing pollutants. Such exempt discharges shall be made in accordance with an appropriate plan for reducing pollutants.
 - (2) Discharges approved in writing by the Stormwater Management Officer to protect life or property from imminent harm or damage, provided that such approval shall not be construed to constitute compliance with other applicable laws and requirements, and further provided that such discharges may be permitted for a specified time period and under such conditions as the Stormwater Management Officer may deem appropriate to protect such life and property while reasonably maintaining the purpose and intent of this article.
 - (3) Dye testing in compliance with applicable state and local laws is an allowable discharge but requires a verbal notification to the Stormwater Management Officer prior to the time of the test.
 - (4) The prohibition shall not apply to any discharge permitted under an SPDES permit, waiver or waste discharge order issued to the discharger and administered under the authority of the Department, provided that the discharger is in full compliance with all requirements of the permit, waiver or order

any discharge to the MS4.

B. Prohibition of illicit connections.

- (1) The construction, use, maintenance or continued existence of illicit connections to the MS4 is prohibited.
- (2) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- (3) A person is considered to be in violation of this article if the person connects a line conveying sewage to the municipality's MS4 or allows such a connection to continue.

§ 252-6. Prohibition against failing individual sewage treatment systems.

No persons shall operate a failing individual sewage treatment system in areas tributary to the municipality's MS4. A failing individual sewage treatment system is one that has one or more of the following conditions:

- A. The backup of sewage into a structure.
- B. Discharges of treated or untreated sewage onto the ground surface.
- C. A connection or connections to a separate stormwater sewer system.
- D. Liquid level in the septic tank above the outlet invert.
- E. Structural failure of any component of the individual sewage treatment system that could lead to any of the other failure conditions as noted in this section.
- F. Contamination of off-site groundwater.

§ 252-7. Prohibition against activities contaminating stormwater.

- A. Activities that are subject to the requirements of this section are those types of activities that cause or contribute to a violation of the municipality's MS4 SPDES permit or cause or contribute to the municipality being subject to the special conditions as defined in § 252-2 (Definitions) of this article.
- B. Such activities include failing individual sewage treatment systems, as defined in § 252-6, improper management of pet waste or any other activity that causes or contributes to violations of the municipality's MS4 SPDES permit authorization.
- C. Upon notification to a person that he or she is engaged in activities that cause or contribute to violations of the municipality's MS4 SPDES permit authorization, that person shall take all reasonable actions to correct such activities such that he or she no longer causes or contributes to violations of the municipality's MS4 SPDES permit authorization.

§ 252-8. Requirement to prevent, control, and reduce stormwater pollutants by use of best management practices.

- A. Best management practices. Where the Stormwater Management Officer has identified illicit discharges, as defined in § 252-2, or activities contaminating stormwater, as defined in § 252-7, the municipality may require implementation of best management practices (BMPs) to control those illicit discharges and activities.

reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 through the use of structural and nonstructural BMPs.

- (2) Any person responsible for a property or premises which is or may be the source of an illicit discharge, as defined in § 252-2, or an activity contaminating stormwater, as defined in § 252-7, may be required to implement, at said person's expense, additional structural and nonstructural BMPs to reduce or eliminate the source of pollutant(s) to the MS4.
- (3) Compliance with all terms and conditions of a valid SPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section.

B. Individual sewage treatment systems. Response to special conditions requiring no increase of pollutants or requiring a reduction of pollutants. Where individual sewage treatment systems are contributing to the municipality's being subject to the special conditions, as defined in § 252-2 of this article, the owner or operator of such individual sewage treatment systems shall be required to:

(1) Maintain and operate individual sewage treatment systems as follows:

- (a) Inspect the septic tank annually to determine scum and sludge accumulation. Septic tanks must be pumped out whenever the bottom of the scum layer is within three inches of the bottom of the outlet baffle or sanitary tee or the top of the sludge is within 10 inches of the bottom of the outlet baffle or sanitary tee;
- (b) Avoid the use of septic tank additives;
- (c) Avoid the disposal of excessive quantities of detergents, kitchen wastes, laundry wastes, and household chemicals; and
- (d) Avoid the disposal of cigarette butts, disposable diapers, sanitary napkins, trash and other such items.

(2) Repair or replace individual sewage treatment systems as follows:

- (a) In accordance with 10 NYCRR Appendix 75A to the maximum extent practicable.
- (b) A design professional licensed to practice in New York State shall prepare design plans for any type of absorption field that involves:
 - [1] Relocating or extending an absorption area to a location not previously approved for such.
 - [2] Installation of a new subsurface treatment system at the same location.
 - [3] Use of alternate system or innovative system design or technology.
- (c) A written certificate of compliance shall be submitted by the design professional to the municipality at the completion of construction of the repair or replacement system.

§ 252-9. Suspension of access to MS4.

A. The Stormwater Management Officer may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, to the health or welfare of persons, or to the MS4. The Stormwater Management Officer shall notify the person of such suspension within a reasonable time thereafter in writing of the reasons for the suspension. If the violator fails to comply with a suspension order issued in an emergency, the Stormwater Management Officer may take such steps as deemed necessary to prevent or minimize damage to the MS4 or to minimize danger to persons.

B. Any person discharging to the municipality's MS4 in violation of this article may have his/her MS4 access terminated if such termination would abate or reduce an illicit discharge. The Stormwater Management Officer will notify a violator in writing of the proposed termination of its MS4 access and the reasons

Access may be granted by the Stormwater Management Officer if he/she finds that the illicit discharge has ceased and the discharger has taken steps to prevent its recurrence. Access may be denied if the Stormwater Management Officer determines in writing that the illicit discharge has not ceased or is likely to recur. A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this section without the prior approval of the Stormwater Management Officer.

§ 252-10. Industrial or construction activity discharges.

Any person subject to an industrial or construction activity SPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the municipality prior to the allowing of discharges to the MS4.

§ 252-11. Access and monitoring of discharges.

- A. Applicability. This section applies to all facilities that the Stormwater Management Officer must inspect to enforce any provision of this article or whenever the authorized enforcement agency has cause to believe that there exists or potentially exists in or upon any premises any condition which constitutes a violation of this article.
- B. Access to facilities.
- (1) The Stormwater Management Officer shall be permitted to enter and inspect facilities subject to regulation under this article as often as may be necessary to determine compliance with this article. If a discharger has security measures in force that require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to the Stormwater Management Officer.
 - (2) Facility operators shall allow the Stormwater Management Officer ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records as may be required to implement this article.
 - (3) The municipality shall have the right to set up on any facility subject to this article such devices as are necessary in the opinion of the Stormwater Management Officer to conduct monitoring and/or sampling of the facility's stormwater discharge.
 - (4) The municipality has the right to require the facilities subject to this article to install monitoring equipment as is reasonably necessary to determine compliance with this article. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.
 - (5) Unreasonable delays in allowing the municipality access to a facility subject to this article is a violation of this article. A person who is the operator of a facility subject to this article commits an offense if the person denies the municipality reasonable access to the facility for the purpose of conducting any activity authorized or required by this article. If the Stormwater Management Officer has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this article or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this article or any order issued hereunder, then the Stormwater Management Officer may seek issuance of a search warrant from any court of competent jurisdiction.

§ 252-12. Notification of spills.

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into the

release. In the event of such a release of hazardous materials, said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of nonhazardous materials, said person shall notify the municipality in person or by telephone or facsimile no later than the next business day. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the municipality within three business days of the telephone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

§ 252-13. Enforcement.

- A. Notice of violation. When the municipality's Stormwater Management Officer finds that a person has violated a prohibition or failed to meet a requirement of this article, he/she may order compliance by written notice of violation to the responsible person. Such notice may require, without limitation:
- (1) The elimination of illicit connections or discharges;
 - (2) That violating discharges, practices, or operations shall cease and desist;
 - (3) The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
 - (4) The performance of monitoring, analyses, and reporting;
 - (5) Payment of a fine; and
 - (6) The implementation of source control or treatment BMPs. If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor, and the expense thereof shall be charged to the violator.
- B. Penalties. In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this article shall be guilty of a violation punishable by a fine not exceeding \$350 or imprisonment for a period not to exceed six months, or both, for conviction of a first offense; for conviction of a second offense, both of which were committed within a period of five years, punishable by a fine not less than \$350 nor more than \$700 or imprisonment for a period not to exceed six months, or both; and upon conviction for a third or subsequent offense, all of which were committed within a period of five years, punishable by a fine not less than \$700 nor more than \$1,000 or imprisonment for a period not to exceed six months, or both. Each week's continued violation shall constitute a separate additional violation.

§ 252-14. Appeal of notice of violation.

Any person receiving a notice of violation may appeal the determination of the Stormwater Management Officer to the Village Board of Trustees within 15 days of its issuance, which shall hear the appeal within 30 days after the filing of the appeal and, within five days of making its decision, file its decision in the office of the Village Clerk and mail a copy of its decision by certified mail to the discharger.

§ 252-15. Corrective measures after appeal.

- A. If the violation has not been corrected pursuant to the requirements set forth in the notice of violation or, in the event of an appeal, within five business days of the decision of the Village Board of Trustees upholding the decision of the Stormwater Management Officer, then the Stormwater Management Officer

measures reasonably necessary to abate the violation and/or restore the property.

- B. If refused access to the subject private property, the Stormwater Management Officer may seek a warrant in a court of competent jurisdiction to be authorized to enter upon the property and to take any and all measures reasonably necessary to abate the violation and/or restore the property. The cost of implementing and maintaining such measures shall be the sole responsibility of the discharger.

§ 252-16. Injunctive relief.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this article. If a person has violated or continues to violate the provisions of this article, the Stormwater Management Officer may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation

§ 252-17. Alternative remedies.

- A. Where a person has violated a provision of this article, he/she may be eligible for alternative remedies in lieu of a civil penalty, upon recommendation of the Municipal Attorney and concurrence of the Municipal Code Enforcement Officer, where:
- (1) The violation was unintentional.
 - (2) The violator has no history of previous violations of this article.
 - (3) Environmental damage was minimal.
 - (4) The violator acted quickly to remedy the violation.
 - (5) The violator cooperated in the investigation and resolution.
- B. Alternative remedies may consist of one or more of the following:
- (1) Attendance at compliance workshops.
 - (2) Storm drain stenciling or storm drain marking.
 - (3) River, stream or creek cleanup activities.

§ 252-18. Remedies not exclusive.

The remedies listed in this article are not exclusive of any other remedies available under any applicable federal, state or local law, and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

Article II. Stormwater Management and Erosion and Sediment Control

[Adopted 11-27-2007 by L.L. No. 8-2007]

§ 252-19. Legislative intent.

- A. The Village of Walden finds that land development activities, associated increases in site impervious cover, disturbances to the natural vegetative cover, and changes to the topography of the land can often

These changes to the hydrology of the watershed can cause an increase in flooding, stream bank erosion, impairment to aquatic resources from silt or other pollutants, degradation of water quality and a loss of wildlife habitat. Land development activities can also cause unchecked erosion, sediment transport and deposition that can impair aquatic resources, clog drainageways and cause increased flooding. The potential impairment of the Village's natural resources caused by unchecked erosion, sedimentation and increased stormwater runoff results in a significant economic and social loss to the community. It is the purpose of this article to protect the public health, safety and welfare in the Village of Walden and its aquatic resources by establishing minimum requirements for stormwater management, preventing erosion and controlling sedimentation for activities which cause changes to the watershed hydrology and may increase erosion and sediment transport, including but not limited to construction activities, land alterations including excavation, filling, grading, land stripping and tree clearing, and increases in the rate of stormwater runoff.

- B. Regulating land development activities by means of performance standards governing stormwater management, erosion and sediment control 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 stormwater runoff from changes in the natural conditions due to development. It will also protect the Village and other governmental bodies from the additional expense of having to undertake, as a public obligation, increased maintenance of stormwater management practices, programs of repairing roads and other public facilities, of providing flood protection facilities and of compensating private property owners for the destruction of properties arising from the adverse effects of site preparation and construction.
- C. To accomplish the aforementioned purpose, the Board of Trustees of the Village of Walden has promulgated these standards and regulations, which seek to achieve the following objectives:
- (1) Minimize increases in peak rate of stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels;
 - (2) Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;
 - (3) Minimize the total volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable in order to minimize the economic impact of installation, operation and maintenance of drainage facilities;
 - (4) Reduce soil erosion and sediment transport, wherever possible, through appropriate structural and nonstructural best management practices (BMPs), and to ensure that these management practices are properly maintained to eliminate threats to public safety.
 - (5) 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; and
 - (6) Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities, GP-02-01, or as amended or revised.

§ 252-20. Definitions.

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

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.

CHANNEL

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

CLEAR-CUTTING

The removal of trees over eight inches in diameter measured at four feet above ground level and includes the stripping of soil.

CLEARING

Any activity that removes the vegetative surface cover.

COMMON PLAN OF DEVELOPMENT

Where multiple construction activities are occurring, or will occur, whether in stages or phases on a contiguous area.

DAY

A calendar day.

DEDICATION

The deliberate appropriation of property by its owner for general public use.

DEPARTMENT

The New York State Department of Environmental Conservation.

DESIGN MANUAL

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

DRAINAGE

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

EROSION

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

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."

EXCAVATION

Any activity which removes or significantly disturbs rock, gravel, sand, soil or other natural deposits.

FARM OPERATIONS

All activities and practices which contribute to the growing or raising of crops, livestock and livestock products as a commercial enterprise, including a commercial horse-boarding operation.

FILLING

Any activity which deposits natural or artificial material so as to modify the surface or subsurface conditions of land, lakes, ponds, wetlands or watercourses.

FINAL STABILIZATION

When all soil-disturbing activities at the site have been completed and a uniform perennial vegetative cover with a density of 80% has been established or equivalent stabilization measures (such as the use of mulches, riprap or geotextiles) have been employed on all areas not permanently improved by pavement, concrete or structures.

GRADING

watercourses by excavation or filling.

IMPERVIOUS SURFACE OR COVER

Those surfaces in the urban landscape which do not have a permanent vegetative cover and/or cannot effectively infiltrate rainfall, including but not limited to building rooftops, pavement, sidewalks, driveways and roads with a surface of compacted dirt or gravel, asphalt or concrete, decks and swimming pools.

INFILTRATION

The process of percolating stormwater into the subsoil.

LAND DEVELOPMENT ACTIVITY

Construction activity including clearing, grading, excavating, soil disturbance or placement of fill that results in land disturbance. Regulated land disturbance are activities as defined in § 252-21 of this article.

MULCHING

The application of a layer of organic material such as wood chips, hay, pine bark or other material at a sufficient thickness for the purpose of effectively controlling erosion.

PARCEL

A designated lot, tract or area of land to be used, disturbed, developed or built upon as a unit.

REDEVELOPMENT

The reconstruction or modification to any existing, previously developed land, regardless of use, which involves disturbance to soil or its existing overlying cover.

SEDIMENT

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

SITE PREPARATION

The activities of stripping, excavation, filling and grading, no matter what the purpose of these activities.

SOIL

All unconsolidated mineral or nonliving organic material of whatever origin which overlies bedrock.

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.

STORMWATER MANAGEMENT OFFICER

The Building Inspector, Municipal Engineer or other employee designated by the Village Manager to accept and review stormwater pollution prevention plans, forward the plans to the applicable municipal board, and inspect stormwater management practices.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A plan for controlling stormwater runoff and pollutants from a site during and after construction activities.

STRIPPING

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

SURFACE WATERS OF THE STATE OF NEW YORK

Lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries,

private waters that do not combine or effect a junction with natural surface or underground waters), that are wholly or partially within or bordering the state or within its jurisdiction. Storm sewers and waste treatment systems, including treatment ponds or lagoons that also meet the criteria of this definition, are not waters of the state. This exclusion applies only to man-made 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.

TOPSOIL

The natural surface layer of soil, usually darker than subsurface layers, to a depth of at least six inches within an undisturbed area of soils.

WATERCOURSE

Any natural or artificial stream, river, creek, ditch, channel, canal, conduit, culvert, drainageway, gully, ravine or wash in which water flows in a definite direction or course, either continuously or intermittently, and which has a definite channel, bed and bank, and any area adjacent thereto subject to inundation by reason of overflow, flood or stormwater. For the purpose of this article, the term "watercourse" shall be deemed to include ponds and lakes.

WETLANDS

Shall mean those wetlands as regulated by the New York State Department of Environmental Conservation and/or the United States Army Corps of Engineers.

§ 252-21. Regulated activities.

- A. None of the following activities shall be commenced until a land development permit has been issued under the provisions of this article.
- (1) Clearing, filling, and grading as defined in Chapter 116.
 - (2) A subdivision of a parcel into two or more lots.
 - (3) Any activity requiring approval of a site plan by the Planning Board.
- B. Notwithstanding the requirement that certain activities obtain a permit under this section, or any exemption therefrom, any filling, grading, excavation or any other activity that disturbs the natural vegetative cover shall not cause or contribute to an impairment of aquatic resources, a degradation of water quality, or otherwise harm the natural resources of the Village of Walden as described in § 252-27, below, and in all cases shall utilize appropriate erosion control measures in accordance with the New York Standards and Specifications for Erosion and Sediment Control.
- C. Any temporary or permanent alteration of the land surface associated with the following, including but not limited to removal of 50% of the vegetative cover, grading or filling, or any of the activities provided in Subsection A, shall be deemed to be a "major land development" activity: commercial development projects disturbing 0.25 or more acres, modifications to existing commercial projects which increase impervious surfaces by 20%, residential projects disturbing an acre or more, residential projects creating five or more lots, residential subdivisions adjacent to a wetland or watercourse. Smaller disturbances which are part of a common plan of development equal to or greater than one acre shall also be considered a major land development activity.
- (1) All major land development activities shall prepare a stormwater pollution prevention plan which shall include means and measures for control of stormwater quality and quantity and soil erosion and sedimentation.
 - (2) Any activity that shall be deemed to be a major land development activity shall obtain a permit from the Stormwater Management Officer, excepting as provided in § 252-23 below.
- D. All other activities described in Subsection A above shall be considered a "minor land development" activity, including, but not limited to, any temporary or permanent alteration of the land surface involving the removal of 50% of the vegetative cover, grading or filling, and any activities which do not exceed the

disturbing between 5,000 square feet to 0.25 acres and residential subdivisions creating less than five lots, provided they disturb less than an acre and are not adjacent to a wetland or water source.

- (1) Any activity that shall be deemed a minor land development activity, as defined herein, shall prepare an erosion and sediment control plan which meets the requirements contained herein.
- (2) Any activity that shall be deemed to be a minor land development activity shall obtain a permit from the Stormwater Management Officer, excepting as provided in § 252-23 below.

§ 252-22. Exemptions.

The following activities are exempt from obtaining a permit pursuant to this article; however, such activities shall not be conducted in a manner that causes or results in soil erosion, sedimentation or a visible change in the quality of runoff as set forth in § 252-27 below.

- A. Excavations for the basements and footings of single-family houses and for septic tank systems, wells and swimming pools attendant to single-family homes, excepting where those excavations are proposed in such locations as described under § 252-21A(1) and (2) above. The area of excavation set forth herein shall be included in calculating the total amount of site disturbance for the purposes of compliance with § 252-21C and D above.
- B. Farm operations, as defined by Article 25-AA of the Agriculture and Markets Law.
- C. Cemetery graves.
- D. Activities of an individual engaging in home gardening by growing flowers, vegetables or other plants primarily for use by that person and his or her family.
- E. Landscaping and horticultural activities in connection with an existing structure that result in less than 11,000 square feet in aggregate of disturbance.
- F. Emergency activities immediately necessary to protect life, property or natural resources.
- G. Governmental activities, but only to the extent that such activities are exempted from the provisions of this article or are otherwise exempt pursuant to state law.
- H. Repairs to stormwater management facilities authorized by the Stormwater Management Officer.

§ 252-23. Erosion control permits with site plan or subdivision approval.

A site plan approved pursuant to § 305-60 or a subdivision plat approved pursuant to Chapter 260 of the Code of the Village of Walden which also includes a separate erosion and sediment control plan meeting the requirements of this article, approved by the Planning Board, shall constitute an erosion and sediment control permit approved under this article.

§ 252-24. Application.

Where a major or minor land development permit is required pursuant to § 252-21C or D, an application shall be submitted to the Stormwater Management Officer which includes the following:

- A. Eight copies of a land development application form.
- B. An application fee, as set from time to time by resolution of the Village Board. The fee shall be deemed a reasonable sum to cover the costs of administration and shall in no part be returnable to the applicant(s).

as may be required herein. Maps and plans accompanying the application shall be prepared by an individual authorized by the State of New York to prepare such plans, which may include an architect, engineer or landscape architect licensed by the State of New York or a certified professional in erosion and sediment control.

7. An Environmental Assessment Form (EAF) pursuant to SEQRA prepared and submitted by the applicant, unless the application concerns a site plan or subdivision project already before the Planning Board for which a SEQRA declaration has already been made.

§ 252-25. Review standards.

- A. Within 30 days of the receipt of an application or any plans or material in support thereof, the Stormwater Management Officer shall notify the applicant if the application is determined to be complete or if additional information is required.
- B. The Stormwater Management Officer shall approve, with or without modifications, or deny all permits within 30 days of the date of determining that the application is complete, unless the applicant consents, in writing, to a time extension.
- C. Prior to granting a permit, the Stormwater Management Officer shall determine that the request is in harmony with the purpose and standards set forth in this chapter.
- D. In granting a permit, the Stormwater Management Officer may fix a reasonable time limit for the termination of the permit and may attach any conditions which he deems necessary to assure compliance with the provisions of this article. Any permit issued for a major or minor land disturbance shall not exceed one year in duration. The performance guaranty so specified under § 252-44 shall be posted before any permits may be granted or site work commenced.
- E. Modifications of the terms of an approved permit shall follow the same application, review and approval procedures as those set forth in this section for the original permit.
- F. It shall be the responsibility of the Stormwater Management Officer to inspect any sites for which a permit has been issued under this article as frequently as necessary to assure compliance with the terms and conditions of the approved permit and the provisions of this article and to submit written notification of any violations of these terms or provisions of the permit to the property owner to which the permit has been issued.
- G. If at any time during the effective period of a permit issued by the Stormwater Management Officer the terms of the permit are violated, or if the permit expires prior to the completion of the work, the Stormwater Management Officer may revoke the permit and thereafter recommend to the Village Board that the performance guaranty be forfeited to the Village. If the applicant becomes unable to complete the project or any phase thereof within the specified time, he shall, within 30 days prior to the specified date of completion, present in writing a request for an extension of time, setting forth therein the reasons for the request. If, in the discretion of the Stormwater Management Officer, such an extension is warranted, the Stormwater Management Officer may grant additional time for the completion of the work.
- H. The Stormwater Management Officer is authorized to consult with and obtain recommendations from the Village Planning Board and/or its Chairman, the Village Engineer, the Village Department of Public Works Superintendent, the Orange County Soil and Water Conservation District, and the New York State Department of Environmental Conservation.

§ 252-26. Additional costs and expenses.

In the event that an application requires the Village to incur additional expenses for technical assistance in the review of an application, the applicant shall pay the reasonable expenses incurred by the Village. The applicant shall be notified of the expenses and shall deposit said funds in escrow as necessary to cover the costs being incurred.

§ 252-27. Performance standards.

Upon the approval of this article by the Village Board, all land development activities regulated under this article shall be in conformance with the provisions set forth herein. It shall be a violation of this article or for any permit issued thereof to either cause or contribute to an impairment of aquatic resources, a degradation of water quality, or to otherwise harm the natural resources of the Village of Walden. More specifically:

- A. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions of surface water.
- B. There shall be no increase in suspended, colloidal and settleable solids that will cause deposition or impair the waters for their best usages.
- C. There shall be no residue from oil and floating substances, or visible oil film, or globules of grease.
- D. No uncontrolled sedimentation shall occur from any land disturbance which;
 - (1) Is not properly managed by appropriate erosion and sediment control practices.
 - (2) Causes or may potentially cause an impairment to water quality.
- E. There shall no increase in the peak rate of runoff which causes an impairment to any stream, channel or drainage structure.

§ 252-28. Technical standards.

The following technical standards shall be used in the design and installation of all erosion control, sediment control and stormwater practices designed or installed under this article:

- A. New York Standards and Specifications for Erosion and Sediment Control (Empire State Chapter of the Soil and Water Conservation Society), 2004, or the most current version or its successor (also referred to as the "Erosion Control Manual").
- B. New York State Stormwater Design Manual, latest edition (New York State Department of Environmental Conservation).
- C. Urban Hydrology for Small Watersheds (TR55) (USDA Natural Resource Conservation Service).
- D. Soil Survey of Orange County, New York (USDA Soil Conservation Service).

§ 252-29. Erosion and sediment control plan requirements.

An erosion and sediment control plan shall be prepared in accordance with the technical standards provided for herein and at a minimum shall include the following information.

- A. Existing features map(s), at a scale no smaller than one inch equals 50 feet, indicating:
 - (1) The boundaries of all parcels on which site preparation activities are proposed to be undertaken.
 - (2) All public improvements within a distance of 200 feet of the parcel on which site preparation activities are proposed to be undertaken, the structures identified by their uses and capacities, and the roads identified by their surface material and width of surface.
 - (3) All wetlands, greater than 4,000 square feet in size and any watercourses located either on the site or within a distance of 100 feet of the parcels on which site preparation activities are proposed to be undertaken.
 - (4) Existing topography at contour intervals of two feet referenced to USGS datum.

preparation activities are proposed to be undertaken.

- (6) The location and description of all vegetation located within the area of proposed disturbance and including the area within 100 feet of the disturbance.
 - (7) The depth to bedrock on the site proposed for site preparation activities.
 - (8) The depth to permanent groundwater aquifers on the site proposed for site preparation activities.
 - (9) The boundary of the one-hundred-year floodplain, together with wetland boundaries.
- B. Drainage computations to evaluate the peak rates and volumes of runoff for the site in its predeveloped and post-developed conditions may be required.
- C. Development standards. All development plans, specifications and timing schedules, including extensions of previously approved plans, shall comply with the technical standards identified herein and shall be designed for "newly graded" or "during construction" conditions. In the event of conflict with this article, the requirements that to the greater extent will serve to minimize erosion shall apply.
- D. Site plan. A site plan shall be prepared, at a scale no smaller than one inch equals 50 feet, which shows the proposed developed conditions for the site and the proposed erosion and sediment control measures including:
- (1) The location of all excavation, filling and grading proposed to be undertaken, identified as to the depth, volume and nature of the materials involved.
 - (2) The location of all soil stripping or tree cutting, identified as to the nature of vegetation affected.
 - (3) All areas where topsoil is to be removed, stockpiled and ultimately placed.
 - (4) All temporary and permanent vegetation to be placed on the site, identified as to plant type, size, quantity, location, seed mixture and rate of application, as appropriate.
 - (5) The type, location and application rate of all mulch.
 - (6) All temporary and permanent drainage, erosion and sediment control practices, including such practices as stormwater ponds and temporary sediment basins, identified as to the type of facility, the materials from which it is constructed, its specifications or manufacturer product identification number, its dimensions and its capacity.
 - (7) The anticipated pattern of surface drainage during periods of peak runoff, upon completion of site preparation and construction activities, identified as to rate and direction of flow at all major points within the drainage systems.
 - (8) The location of all roads, driveways, sidewalks, structures, utilities and other improvements, including the finished grade of any proposed structures.
 - (9) The final contours of the areas of the site affected by an action requiring a permit in intervals of no greater than two feet.
- E. Supporting calculations to demonstrate the suitability of erosion and sediment control measures.
- F. A construction schedule which is keyed to the site plan, indicating:
- (1) When major phases of the proposed project are to be initiated and completed.
 - (2) When major site preparation activities are to be initiated and completed.
 - (3) When the installation of temporary and permanent vegetation and drainage, erosion and sediment control facilities are to be completed.
 - (4) The anticipated duration, in days, of exposure of all major areas of site preparation before the installation of erosion and sediment control measures.

sediment control facilities prepared by a qualified individual as contained herein.

§ 252-30. Stormwater pollution prevention plan requirements.

When required pursuant to this article, a stormwater pollution prevention plan shall be prepared in accordance with the New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activities (Permit No. GP-02-01), using the technical standards identified herein, and at a minimum shall include the following information:

- (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 at a scale no smaller than one inch equals 50 feet. 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 grades at two-foot contours; locations of off-site material, waste, borrow or equipment storage areas; and location(s) of the stormwater discharge(s).
- (3) A location map at a scale of not less than one inch equals 2,000 feet.
- (4) Description of the soil(s) present at the site.
- (5) 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 acres shall be disturbed at any one time unless pursuant to an approved SPPP.
- (6) 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.
- (7) 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.
- (8) 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 closeout.
- (9) Site map/construction drawing(s) specifying the location(s), size(s) and length(s) of each erosion and sediment control practice.
- (10) Dimensions, material specifications and installation details for all erosion and sediment control practices, including the location and sizing of any temporary sediment basins or traps.
- (11) Temporary practices that will be converted to permanent control measures.
- (12) 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.
- (13) Maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practice.
- (14) Name(s) of the receiving water(s).
- (15) Delineation of SPPP implementation responsibilities for each part of the site
- (16) 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 reasonably attainable.

- (18) Description of each post-construction stormwater management practice.
- (19) Site map/construction drawing(s) showing the specific location(s) and size(s) of each post-construction stormwater management practice.
- (20) Hydrologic and hydraulic analysis for all structural components of the stormwater management system for the applicable design storms.
- (21) Comparison of post-development stormwater runoff conditions with predevelopment conditions.
- (22) Dimensions, material specifications and installation details for each post-construction stormwater management practice.
- (23) Maintenance schedule to ensure continuous and effective operation of each post-construction stormwater management practice.
- (24) 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 and, where required by law, shall be filed with the Village and/or County Clerk.
- (25) Inspection and maintenance agreement binding on all subsequent landowners served by the on-site stormwater management measures.

- B. The SPPP shall be prepared by a landscape architect, certified professional in erosion and sediment control (CPESC) or licensed professional engineer and must be signed by the professional preparing the plan, who shall certify that the design of all stormwater management practices meet the requirements of this article.
- C. Each contractor and subcontractor identified in the SPPP 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."
- D. 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.
- E. The certification statement(s) shall become part of the SPPP for the land development activity, a copy of which shall be filed with the Walden Planning Department.
- F. A copy of the SPPP 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.

§ 252-31. Maintenance during construction.

- A. 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 article. Sediment shall be removed from sediment traps or sediment basins whenever their design capacity has been reduced by 50%.
- B. The applicant or developer or its 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 seven days and within 24 hours of any storm event producing 0.5 or more inches of precipitation. The reports shall be delivered to the Walden Planning Department and also copied to the site log book.

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 Village of Walden to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this article. The easement shall be recorded by the grantor in the office of the County Clerk after approval by the Village Attorney of the Village of Walden.

§ 252-33. Maintenance after construction.

- A. The owner or operator of permanent stormwater management facilities installed in accordance with this article shall operate and maintain the stormwater management facilities to achieve the goals of this article. Proper operation and maintenance also includes, as a minimum, the following:
- (1) A preventive/corrective maintenance program for all critical facilities and systems of treatment and control (or related appurtenances) which are installed or used by the owner or operator to achieve the goals of this article.
 - (2) Written procedures for operation and maintenance and training new maintenance personnel.
- B. Discharges from stormwater management facilities shall not exceed design criteria or cause or contribute to water quality standard violations in accordance with § 252-28.

§ 252-34. Maintenance agreements.

As a condition of the approval of a land development permit, the Stormwater Management Officer may require that a maintenance agreement for the future operation and maintenance of one or more of the stormwater management facilities proposed for the site, in a form acceptable to the Village Attorney and binding on all subsequent landowners, be executed and recorded in the office of the County Clerk as a deed restriction on the property.

§ 252-35. Notations.

The following notations are to be included on all subdivision and site plan erosion and sediment control plans and may be required on erosion and sediment control plans prepared for major and minor land development permits:

- A. Road and drainage improvements.
- (1) All topsoil to be stripped from the area being developed shall be stockpiled not less than 200 feet from any body of surface water and shall be immediately seeded with rye grass mixture with a quick germination time.
 - (2) On all embankment fill slopes, topsoil shall be stripped at least five feet wider than required for the embankment toe of slope. All fill slopes shall be immediately stabilized using appropriate techniques which meet the design criteria described in the New York Standards and Specifications for Erosion and Sediment Control.
 - (3) Erosion and sediment control measures, including but not limited to silt fencing, sediment traps, and check dams, shall also be employed where necessary for supplementary erosion control measures.
 - (4) All cut slopes and embankment fills are to be immediately laid back and stabilized using appropriate techniques which meet the design criteria described in the New York Standards and Specifications for Erosion and Sediment Control. which may include the following:

- (b) Scarified.
 - (c) Topsoiled with not less than four inches of suitable topsoil material.
 - (d) Seeded with perennial rye grass. Seed shall be applied at the rate of not less than five pounds per 1,000 square feet.
 - (e) Mulched with not less than one inch and not more than three inches of straw (two tons per acre) and anchored in a suitable manner.
- (5) Temporary on-site sedimentation basins for the immediate control of erosion and sediment transport are to be provided when and where required or ordered. The length, width and depth of such basins are to be determined in the field in accordance with the New York Standards and Specifications for Erosion and Sediment Control.
 - (6) All erosion control structures are to be maintained in proper functioning order and are to be replaced or repaired as necessary.

B. General.

- (1) Construction equipment shall not unnecessarily cross live streams except by means of bridges and culverts or other approved methods.
- (2) Wherever feasible, natural vegetation should be retained and protected.
- (3) Only the smallest practical area of land should be exposed at any one time during development.
- (4) Erosion control requirements shall include surface 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 seven days after the construction activity in that portion of the site has temporarily or permanently ceased. From November 1 through March 31, any disturbed area must be stabilized using a heavy mulch layer, a rolled erosion control product or another method that does not require seed germination to control erosion.
- (5) The permanent final vegetation and structures shall be installed as soon as practical and as may be directed by the Stormwater Management Officer or Village Engineer.
- (6) All erosion control measures employed during construction shall comply with the standards found in New York Standards and Specifications for Erosion and Sediment Control, latest edition.
- (7) Phasing shall be required on all sites disturbing greater than five acres, with the size of each phase to be established by the Planning Board or Stormwater Management Officer.

§ 252-36. Permit standards.

The standards and requirements contained herein shall be applied in reviewing and approving all permits pursuant to this article.

- A. An erosion and sediment control plan shall seek to return the quality of the stormwater leaving the site to its predisturbance condition to the maximum extent practicable.
- B. Excavation, filling, grading and stripping shall be permitted to be undertaken only in such locations and in such a manner as to minimize the potential of erosion and sediment and the threat to the health, safety and welfare of neighboring property owners and the general public. Alterations of grade or disturbances to the natural vegetative cover on slopes greater than 30% shall be avoided.
- C. Site preparation and construction shall be fitted to the vegetation, topography and other natural features of the site and shall preserve as many of these features as feasible.
- D. The control of erosion and sediment shall be a continuous process undertaken as necessary prior to,

- F. Mulching or temporary vegetation suitable to the site shall be used where necessary to protect areas exposed by site preparation, and permanent vegetation which is well adapted to the site shall be installed as soon as practical.
- G. Where slopes that have been exposed or regraded during site preparation are to be revegetated, the slopes shall not be of such steepness that vegetation cannot be readily established or that problems of erosion or sediment may result.
- H. Site preparation and construction shall not cause a permanent adverse effect on the free flow of water by encroaching on, blocking or restricting watercourses.
- I. All fill material shall be of a composition suitable for the ultimate use of the fill, free of rubbish and brush, stumps, tree debris, rocks, frozen material and soft or easily compressible material.
- J. Fill material shall be compacted sufficiently to prevent problems of erosion, and where the material is to support structures, it shall be compacted to a minimum density of 90% of modified proctor with proper moisture control.
- K. All topsoil that is excavated from a site shall be stockpiled and used for the restoration of the site, and such stockpiles, where necessary, shall be seeded or otherwise treated to minimize the effects of erosion. Topsoil is not to be removed or sold from the site unless restoration has been completed.
- L. Prior to, during and after site preparation and construction, an integrated drainage system shall be provided which at all times minimizes erosion, sediment, hazards of slope instability and adverse effect on neighboring property owners.
- M. The natural drainage system shall generally be preserved in preference to modifications of this system, excepting where such modifications are necessary to reduce levels of erosion and sediment and adverse effects on neighboring property owners.
- N. All drainage systems shall be designed to handle adequately the anticipated flows, both within the site and from the entire upstream drainage basin, so as to achieve no net increase in peak rate of runoff from the site.
- O. Sufficient grades and drainage facilities shall be provided to prevent the ponding of water, unless such ponding is proposed by the approved site plan, in which event there shall be sufficient water flow to maintain proposed water levels and to avoid stagnation.
- P. There shall be provided, where necessary to minimize erosion and sediment, such measures as benches, berms, terraces, diversions, temporary sediment basins and retention basins. During the course of construction, where the Stormwater Management Officer or Village Engineer determines that additional erosion control measures are needed, they shall be provided by the project owner at no cost to the Village of Walden.
- Q. Drainage systems, plantings and other erosion or sediment control devices shall be maintained as frequently as necessary to provide adequate protection against erosion and sediment and to ensure that the free flow of water is not obstructed by the accumulation of silt, debris or other material or by structural damage.
- R. Wherever possible, clean water shall be diverted around any areas of disturbance.
- S. For any proposed grades planned to have a slope greater than 3H:1V, the design engineer shall provide calculations documenting that the slope will be stable as designed. Slope stability should be demonstrated by two-dimensional limiting equilibrium methods such as the Bishop Simplified Method. Further, the analysis should include an evaluation of seasonal high groundwater conditions, including subsurface investigations if deemed necessary, to assure that the slope will remain stable in "worst case" conditions.
- T. The exposure of an area by site preparation shall be kept to the shortest practical period of time prior to the construction of structures or improvements or the restoration of the exposed areas to an attractive natural condition. The developer shall initiate stabilization measures as soon as practicable in portions of

seven days after the construction activity in that portion of the site has temporarily or permanently ceased; except where the initiation of stabilization measures by the seventh 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.

§ 252-37. Redevelopment.

- A. The redevelopment of a site shall comply with the technical standards contained herein for water quality for the entire site, including the area proposed for redevelopment, except as noted in Subsection C below.
- B. The redevelopment of a site shall comply with the technical standards contained herein for water quantity for any increase in the volume or rate of runoff due to the redevelopment, except as noted in Subsection C below.
- C. A deviation from the technical and performance standards contained in this article may be permitted where an owner or developer proposing to redevelop a site demonstrates that proper sizing and installation of acceptable stormwater management practices is not feasible due to inadequate space, head or other physical constraints of the site, and that the proposed change will not cause or contribute to a significant adverse change in any water resource within that drainage basin. Inadequate space in which to locate stormwater management practices caused directly by the size or location of the proposed redevelopment shall not be considered acceptable justification to permit a deviation from the standards.

§ 252-38. Contractor certification.

A copy of all notices of intent and all contractors' certifications required pursuant to the New York State General Permit for Stormwater Discharges from Construction Activity, Permit No. GP-02-01, for all land disturbances, development or redevelopment located within the Village of Walden shall also be filed with the Walden Planning Board.

§ 252-39. Erosion and sediment control inspection.

- A. The Village of Walden Stormwater Management Officer may require such inspections as necessary to determine compliance with this article and may either approve that portion of the work completed or notify the applicant wherein the work fails to comply with the requirements of this article and the stormwater pollution prevention plan (SWPPP), as approved. To obtain inspections, the applicant shall notify the Village of Walden Enforcement Official at least 48 hours before any of the following, as required by the Stormwater Management Officer:
 - (1) Start of construction.
 - (2) Installation of sediment and erosion control measures.
 - (3) Completion of site clearing.
 - (4) Completion of rough grading.
 - (5) Completion of final grading.
 - (6) Close of the construction season.
 - (7) Completion of final landscaping.
 - (8) Successful establishment of landscaping in public areas.
- B. 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

the Stormwater Management Officer.

§ 252-40. Stormwater management practice inspections.

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

§ 252-41. Inspection of stormwater facilities after project completion.

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

§ 252-42. Submission of reports.

The Village of Walden Stormwater Management Officer may require monitoring and reporting from entities subject to this article as are necessary to determine compliance with this article.

§ 252-43. Maintenance guaranty.

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 Village of Walden 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 Village of Walden may draw upon the account to cover the costs of proper operation and maintenance, including engineering and inspection costs.

§ 252-44. Performance guaranty.

A. After the approval of the application and before the issuance of any permit, the applicant shall, when so required, file with the Village Board, as surety for the amount of the estimated cost of the project, one of the following performance guaranties:

- (1) A joint savings account in both the name of the Village of Walden and the property owner, along with a withdrawal slip endorsed by the property owner.
- (2) A performance bond which shall be satisfactory to the Village Board and Village Attorney as to form, sufficiency, manner of execution, surety and period of execution.
- (3) An irrevocable letter of credit from a bank, which letter of credit shall be approved by the Village

Planning Board, whichever shall retain jurisdiction of the application, may grant a waiver of such guaranty if it deems the proposed activities to be of minor scope and to be in full compliance with the intent of this article.

- C. The party or parties filing the performance guaranties shall certify that either upon termination of the permit or the operation, whichever may come first, the project shall be in conformity with both the approved specific requirements of the permit and the provisions of this article. In the event of default of such and violation of any other applicable laws, such performance guaranty shall be forfeited to the Village. The Village shall return to the applicant any amount that is not needed to cover the costs of restoration, administration and any other expenses incurred by the Village as a result of the applicant's default. Such performance guaranty shall continue in full force and effect until a certificate of compliance shall have been issued by the Stormwater Management Officer after such consultation with any agencies or individuals as he deems necessary to insure that all provisions of this article and of the permit have been met.

§ 252-45. Waiver of requirements.

Where one or more of the requirements contained herein are not requisite in the interest of health, safety or general welfare or will provide information extraneous to the issuance of a permit, then one or more of the requirements may be waived by either the Planning Board or the Stormwater Management Officer, whichever shall have original jurisdiction.

§ 252-46. Damage due to violation; penalties for offenses.

- A. If there is any damage due to violation of this article, or if there is any damage to adjacent properties, or if any soil, liquid or other material is caused to be deposited upon or to roll, flow or wash upon any public property, private property or right-of-way in violation of this article, the person, firm, partnership, corporation or other party responsible shall be notified and shall cause the same to be removed from such property or right-of-way within 36 hours of written notice. In the event of an incident which presents an immediate danger to the public health or safety, notice shall be given by the most expeditious means and the violation shall be immediately remedied by the party responsible for the incident or, at its discretion and when the responsible party fails to adequately remedy the incident in a reasonable time, the Village shall cause such remedy, and the cost of such remedy by the Village shall be paid to the Village by the party who failed to so remedy and shall be a debt owed to the Village.
- B. Any person, firm or corporation, whether as owner, lessee, principal, agent, employee or otherwise, violating any of the provisions of this article shall be guilty of a violation, which shall be punishable by a fine of not less than \$200 nor more than \$350 or imprisonment for a period not to exceed six months, or both, for a conviction of the 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.
- C. Every day that a violation of any of the provisions of this chapter continues after written notice shall have been served upon the owner or his agent, either personally or by registered mail addressed to such person at his last known address, or after three days of having posted notice on the property on which the violation has occurred, shall constitute a separate violation.
- D. The Stormwater Management Officer, in the administration of his duties contained herein, shall have the authority to issue stop-work orders and appearance tickets for violations of this article. The Code Enforcement Officer shall also have the authority to enforce the provisions of this article.

§ 252-47. Conflict with other provisions.

regulation or private agreement, this article shall control. Where greater restrictions are imposed by any law, ordinance, regulation or private agreement than are imposed by this article, such greater restrictions shall control.

§ 252-48. Appeals.

Any person aggrieved by an order or decision issued pursuant to this article may seek review by the Walden Zoning Board of Appeals and then may seek judicial review pursuant to Article 78 of the Civil Practice Law and Rules in the Supreme Court for the County of Orange. Such appeals shall be filed within 30 days after the date of a determination on the issuance of a permit, or in the case of a decision by the Planning Board, the filing of the particular order or decision with the Walden Village Clerk.

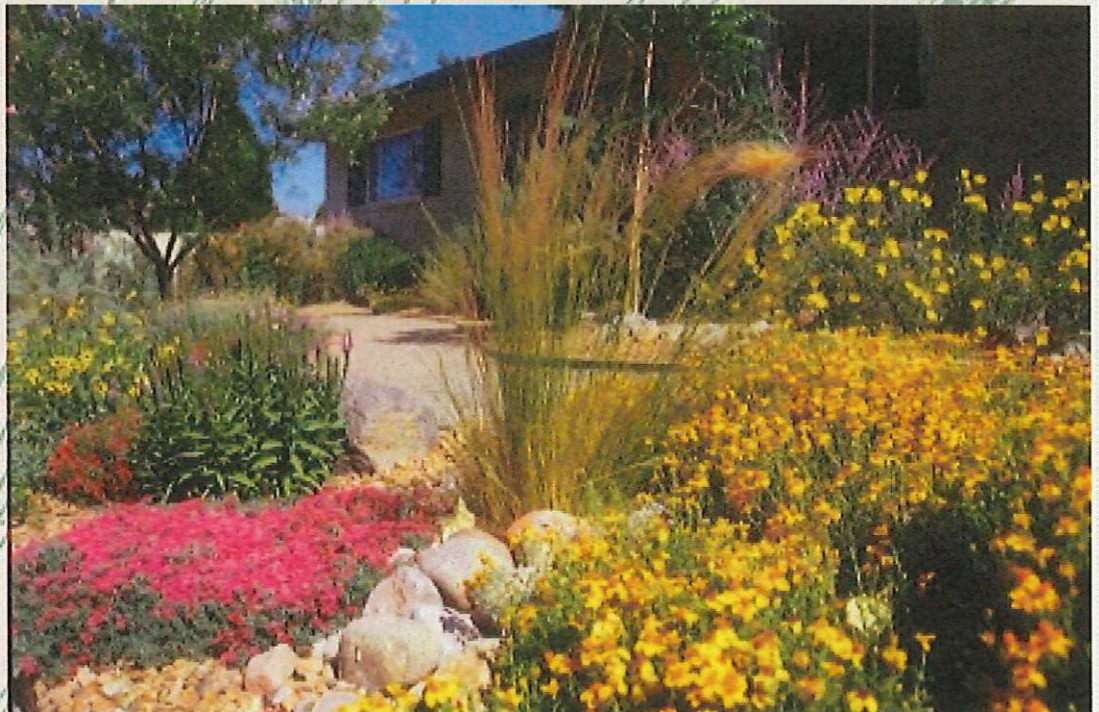
Appendix E

Examples of Education and Outreach Materials

VILLAGE OF WALDEN
 MINIMUM CONTROL MEASURE 1: PUBLIC EDUCATION AND OUTREACH
 QUANTITIES OF EDUCATIONAL AND PUBLIC OUTREACH MATERIALS

| LOCATION | DATE | NUMBER TAKEN |
|----------|---------|--------------|
| V. Hall | 5/20/11 | 9 |
| V. Hall | 4/6/12 | 2 |
| V. Hall | 5/15/13 | 2 |
| V. Hall | 5/23/16 | 5 |
| V. Hall | 5/25/17 | 5 |
| V. Hall | 5/20/19 | 5 |
| | | |
| | | |
| | | |
| | | |

Water-Efficient Landscaping:



Preventing
Pollution &
Using Resources
Wisely



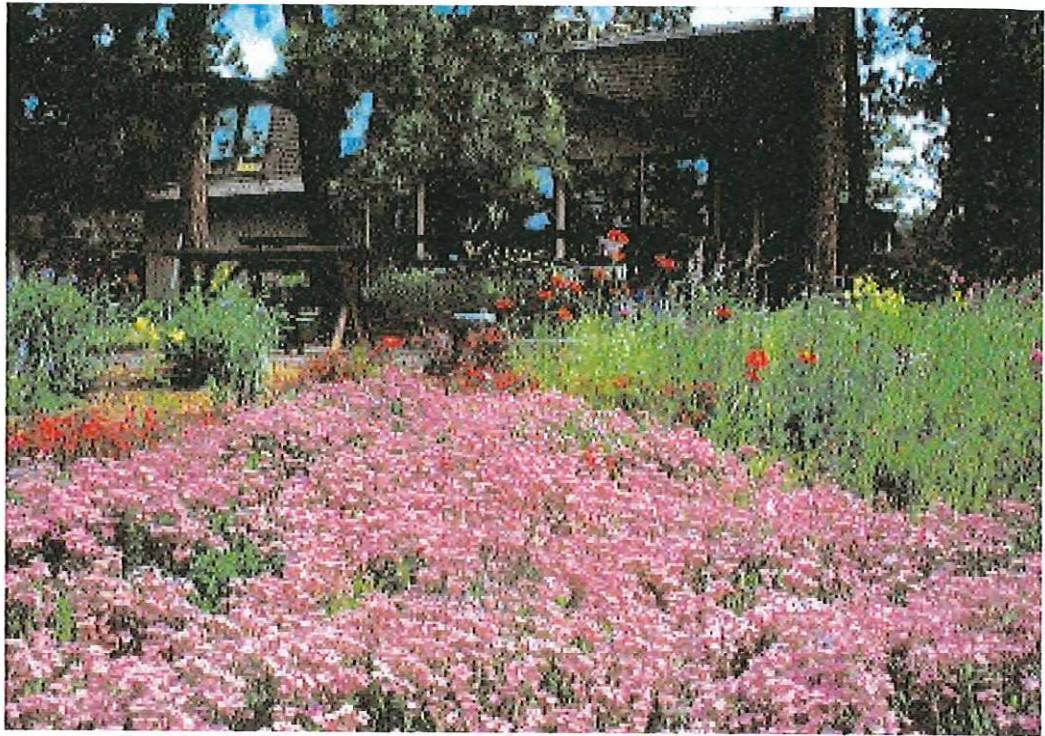
A Message from the Administrator

Christine Todd Whitman



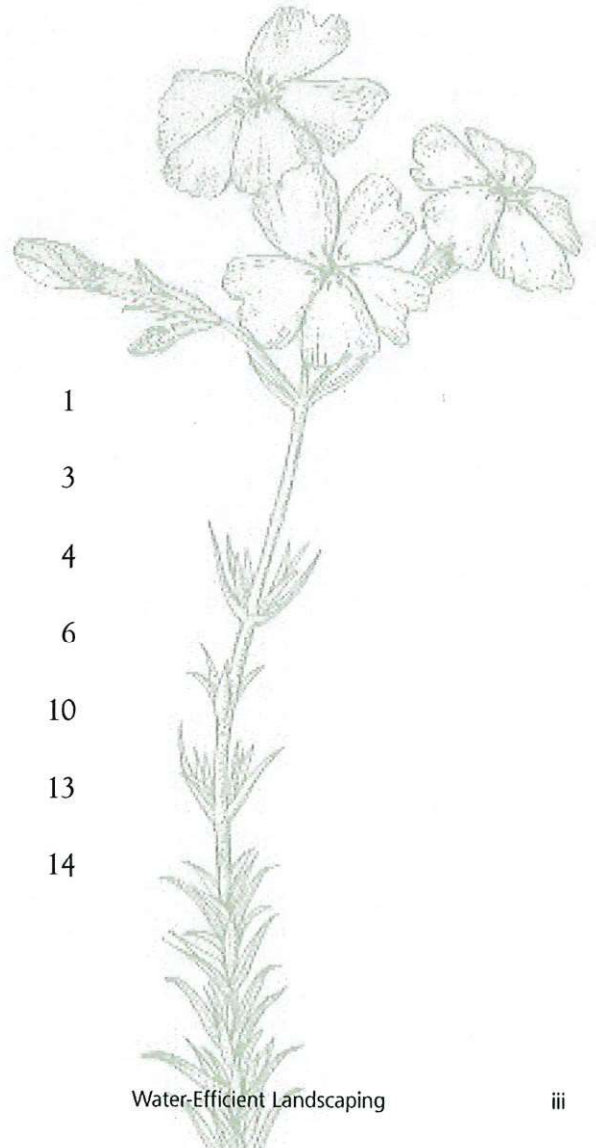
I believe water is the biggest environmental issue we face in the 21st Century in terms of both quality and quantity. In the 30 years since its passage, the Clean Water Act has dramatically increased the number of waterways that are once again safe for fishing and swimming. Despite this great progress in reducing water pollution, many of the nation's waters still do not meet water quality goals. I challenge you to join with me to finish the business of restoring and protecting our nation's waters for present and future generations.

United States Environmental Protection Agency
Office of Water (4204M)
EPA832-F-02-002
September 2002
www.epa.gov/owm/water-efficiency/index.htm



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|---|----|
| What is Water-efficient Landscaping? | 1 |
| Why Use Water-efficient Landscaping? | 3 |
| How is Water-efficient Landscaping Applied? | 4 |
| Water-efficient Landscape Irrigation Methods | 6 |
| Examples of Successful Water-efficient Landscaping Projects | 10 |
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Introduction

Chapter 1: Water-Efficient Landscaping

Chapter 2: Site Assessment and Planning

Chapter 3: Plant Selection and Installation

Chapter 4: Irrigation Systems

Chapter 5: Maintenance and Water Conservation

What is Water-efficient Landscaping?

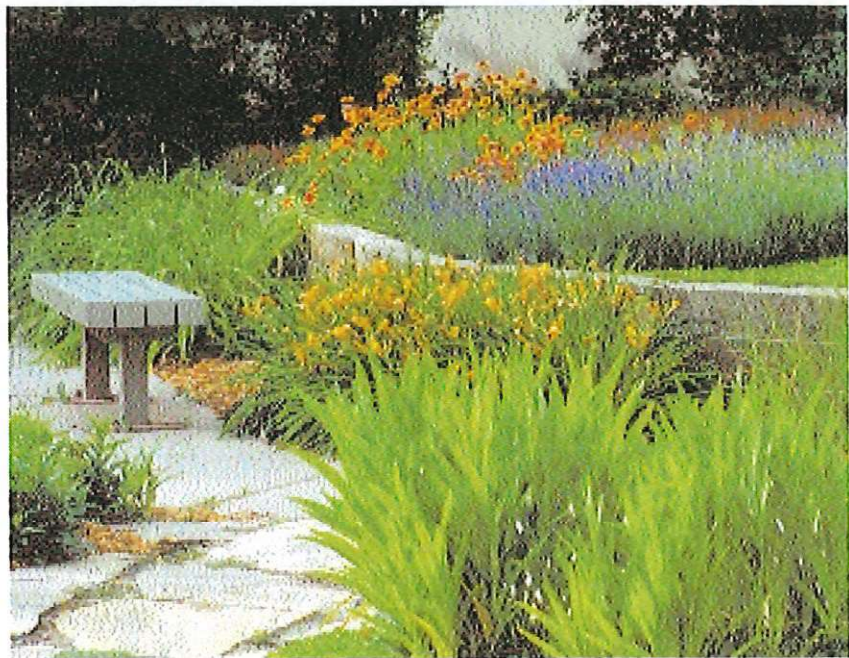
Water, many agree, is our most precious natural resource; without it, life ceases. Yet judging by our water use and consumption practices, many of us in the United States seem to take it for granted. A typical household uses approximately 260 gallons of water per day. "Water conscious" individuals often install high-efficiency shower heads and toilets and wash only full loads of clothes and dishes to reduce consumption. But in the summer, the amount of water used outdoors by a household can exceed the amount used for all other purposes in the entire year. This is especially true in hot, dry climates.

Gardening and lawn care account for the majority of this seasonal increase, but other outdoor activities, such as washing cars and filling swimming pools, also contribute. According to the U.S. Geological Survey, of the 26 billion gallons of water consumed daily in the United States¹, approximately 7.8 billion gallons, or 30 percent², is devoted to outdoor uses. The majority of this is used for landscaping. In fact, it is estimated that the typical suburban lawn consumes 10,000 gallons of water above and beyond rainwater each year (Vickers, p 140).

Many mistakenly believe that stunning gardens and beautiful lawns are only possible through extensive watering, fertilization, and pesticide application. As this booklet will demonstrate, eye-catching gardens and landscapes that save water, prevent pollution, and

protect the environment are, in fact, easily achieved by employing water-efficient landscaping. Water-efficient landscaping produces attractive landscapes because it utilizes designs and plants suited to local conditions.

This booklet describes the benefits of water-efficient landscaping. It includes several examples of successful projects and programs, as well as contacts, references, and a short bibliography. For specific information about how to best apply water-efficient landscaping principles to your geographical area, consult with your county



Xeriscape garden at Denver Water

extension service and local garden and nursery centers. Local governments and water utilities also possess a wealth of information and suggestions for using water more efficiently in all aspects of your life, including landscaping.

¹ W.B. Solley, R.R. Pierce, and H.A. Perlman. 1998. *Estimated Use of Water in the United States in 1995* (USGS Circular 1200). USGS. Reston, VA. p.27.

² Amy Vickers. 2001. *Handbook of Water Use and Conservation*. WaterPlow Press. Amherst, MA. p. 140.



Xeriscaped front yard in Colorado Springs

Many terms and schools of thought have been used to describe approaches to water-efficient landscaping. Some examples include “water-wise,” “water-smart,” “low-water,” and “natural landscaping.” While each of these terms varies in philosophy and approach, they are all based on the same principles and are commonly used interchangeably. One of the first conceptual approaches developed to formalize these principles is known as “Xeriscape” landscaping. Xeriscape landscaping is defined as “quality landscaping that conserves water and protects the environment.” The word “Xeriscape” was coined and copyrighted by

Denver Water Department in 1981 to help make water conserving landscaping an easily recognized concept. The word is a combination of the Greek word “xeros,” which means “dry,” and “landscape.”

The seven principles upon which Xeriscape landscaping is based are:

- Proper planning and design
- Soil analysis and improvement
- Appropriate plant selection
- Practical turf areas
- Efficient irrigation
- Use of mulches
- Appropriate maintenance

The eight fundamentals of water-wise landscaping, below, illustrate the similarities in the underlying concepts and principles of Xeriscape landscaping and other water-efficient approaches.

- Group plants according to their water needs.
- Use native and low-water-use plants.
- Limit turf areas to those needed for practical uses.
- Use efficient irrigation systems.
- Schedule irrigation wisely.
- Make sure soil is healthy.
- Remember to mulch.
- Provide regular maintenance.

In short, plan and maintain your landscape with these principles of water efficiency in mind and it will continue to conserve water and be attractive.

3 Denver Water welcomes the use of the term Xeriscape in books, articles, and speeches promoting water conserving landscape. EPA is using this term with permission from Denver Water. For permission to use “Xeriscape” in your publications, call Denver Water at 303 628-6330.

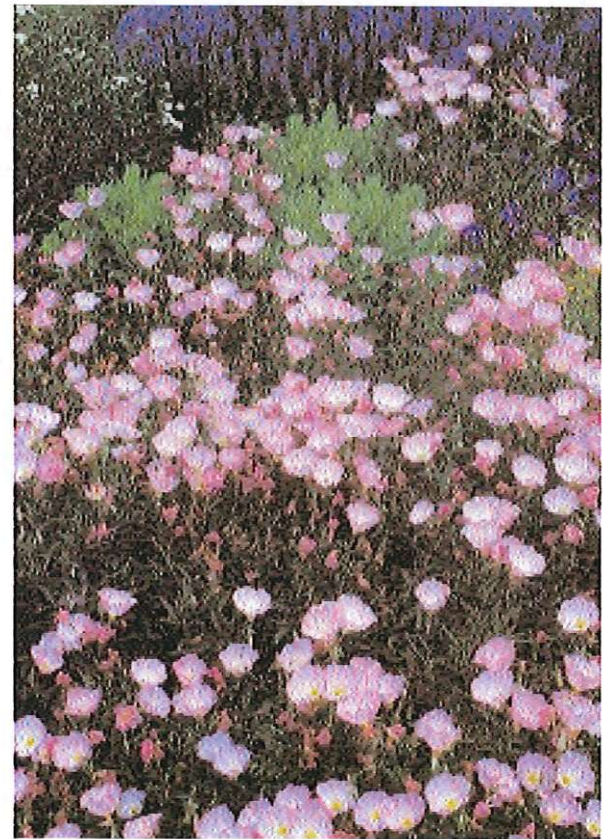
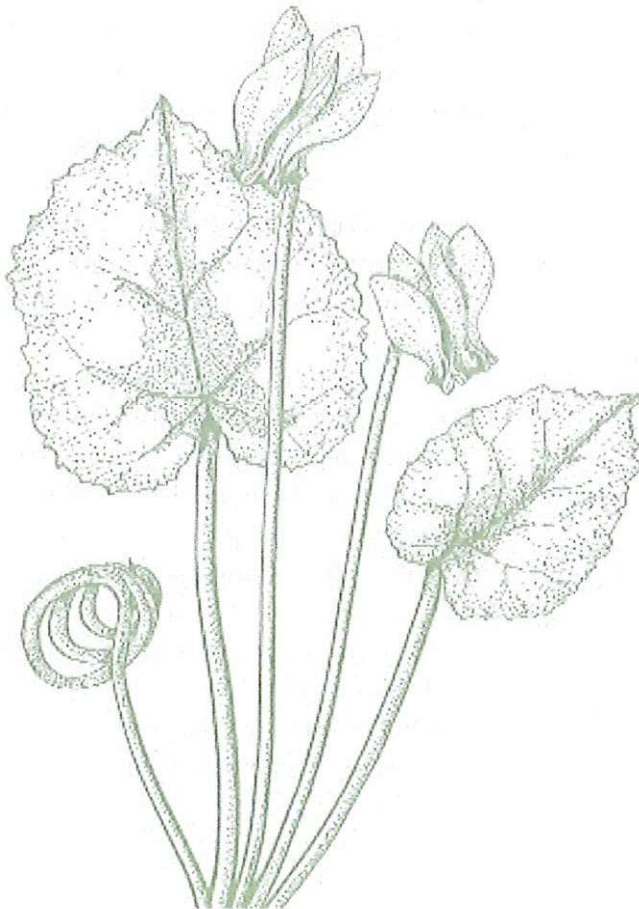
Why Use Water-efficient Landscaping?

Proper landscaping techniques not only create beautiful landscapes, but also benefit the environment and save water. In addition, attractive, water-efficient, low-maintenance landscapes can increase home values.

Water-efficient landscaping offers many economic and environmental benefits, including:

- Lower water bills from reduced water use.
- Conservation of natural resources and preservation of habitat for plants and wildlife such as fish and waterfowl.
- Decreased energy use (and air pollution associated with its generation) because less pumping and treatment of water is required.
- Reduced home or office heating and cooling costs through the careful placement of trees and plants.

- Reduced runoff of stormwater and irrigation water that carries top soils, fertilizers, and pesticides into lakes, rivers, and streams.
- Fewer yard trimmings to be managed or landfilled.
- Reduced landscaping labor and maintenance costs.
- Extended life for water resources infrastructure (e.g., reservoirs, treatment plants, groundwater aquifers), thus reduced taxpayer costs.



Meadow Sage (Salvia pratensis) is the background for New Mexico Evening Primrose (Oenothera berlandieri 'siskiyou')

How is Water-efficient Landscaping Applied?

Landscaping that conserves water and protects the environment is not limited to arid landscapes with only rocks and cacti.

Through careful planning, landscapes can be designed to be both pleasing to the senses and kind to the environment. One simple approach to achieving this is applying and adopting the basic principles of water-efficient landscaping to suit your climatic region. The seven principles of Xeriscape landscaping are used below to describe these basic concepts in greater detail.

Proper planning and design

Developing a landscape plan is the first and most important step in creating a water-efficient landscape. Your plan

should take into account the regional and micro-climatic conditions of the site, existing vegetation, topography, intended uses of the property, and most importantly, the grouping of plants by their water needs. Also consider the plants' sun or shade requirements and preferred soil conditions. A well-thought-out landscape plan can serve as your roadmap in creating beautiful,

water-efficient landscapes and allow you to continually improve your landscape over time.

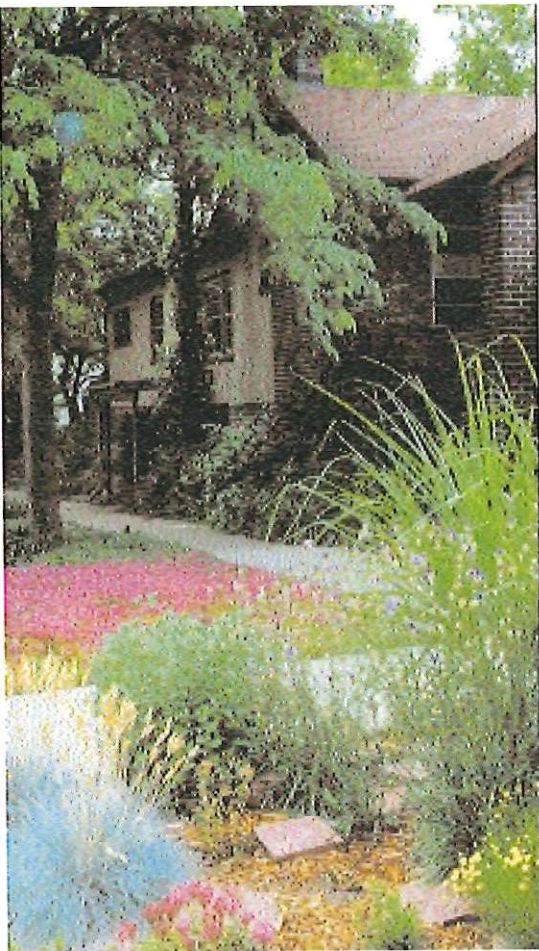
Soil analysis and improvements

Because soils vary from site to site, test your soil before beginning your landscape improvements. Your county extension service can analyze the pH levels; nutrient levels (e.g., nitrogen, phosphorus, potassium); and the sand, silt, clay, and organic matter content of your soil. It can also suggest ways to improve your soil's ability to support plants and retain water (e.g., through aeration or the addition of soil amendments or fertilizers).

Appropriate plant selection

Your landscape design should take into account your local climate as well as soil conditions. Focus on preserving as many existing trees and shrubs as possible because established plants usually require less water and maintenance. Choose plants native to your region. Native plants, once established, require very little to no additional water beyond normal rainfall. Also, because they are adapted to local soils and climatic conditions, native plants commonly do not require the addition of fertilizers and are more resistant to pests and disease.

When selecting plants, avoid those labeled "hard to establish," "susceptible to disease," or "needs frequent attention," as these types of plants frequently require large amounts of supplemental water, fertilizers, and pesticides. Be careful when selecting non-indigenous species as some of them may become invasive. An invasive plant might be a water guzzler and will surely choke out native species. Your state or county extension service or local nursery can help you select appropriate plants for your area.



Dragon's Blood Sedum
(*Sedum spurium*) under
Honeylocust Trees (*Gleditsia*
triacanthos)

The key to successful planting and transplanting is getting the roots to grow into the surrounding soil as quickly as possible. Knowing when and where to plant is crucial to speeding the establishment of new plants. The best time to plant will vary from species to species. Some plants will thrive when planted in a dormant or inactive state. Others succeed when planted during the season when root generation is highest and sufficient moisture is available to support new growth (generally, spring is the best season, but check plant tags or consult with your local nursery for specific species).

Practical turf areas

How and where turf is placed in the landscape can significantly reduce the amount of irrigation water needed to support the landscape. Lawns require a large amount of supplemental water and generally greater maintenance than other vegetation. Use turf where it aesthetically highlights the house or buildings and where it has practical function, such as in play or recreation areas. Grouping turf areas can increase watering efficiency and significantly reduce evaporative and runoff losses. Select a type of grass that can withstand drought periods and become dormant during hot, dry seasons. Reducing or eliminating turf areas altogether further reduces water use.

Efficient irrigation

Efficient irrigation is a very important part of using water efficiently outdoors, and applies in any landscape—whether Xeriscape or conventional. For this reason, an entire section of this booklet addresses efficient irrigation; it can be found on page 6.

Use of mulches

Mulches aid in greater retention of water by minimizing evaporation, reducing weed growth, moderating soil temperatures, and preventing erosion. Organic mulches also improve the condition of your soil as they decompose. Mulches are typically composed of wood bark chips, wood grindings, pine straws, nut shells, small



Wine Cup (Callirhoe involucrata) and Sunset Hyssop (Agastache rupestris) in the Denver Water Xeriscape Garden

gravel, or shredded landscape clippings. Avoid using rock mulches in sunny areas or around non-arid climate plants, as they radiate large amounts of heat and promote water loss that can lead to scorching. Too much mulch can restrict water flow to plant roots and should be avoided.

Appropriate maintenance

Water and fertilize plants only as needed. Too much water promotes weak growth and increases pruning and mowing requirements. Like any landscape, a water-efficient yard will require regular pruning, weeding, fertilization, pest control, and irrigation. As your water-efficient landscape matures, however, it will require less maintenance and less water. Cutting turf grass only when it reaches two to three inches promotes deeper root growth and a more drought-resistant lawn. As a rule of thumb, mow your turf grass before it requires more than one inch to be removed. The proper cutting height varies, however, with the type of grass, so you should contact your county extension service or local nursery to find out the ideal cutting height for your lawn. Avoid shearing plants or giving them high nitrogen fertilizers during dry periods because these practices encourage water-demanding new growth.

Water-efficient Landscape Irrigation Methods

With common watering practices, a large portion of the water applied to lawns and gardens is not absorbed by the plants. It is lost through evaporation, runoff, or being pushed beyond the root zone because it is applied too quickly or in excess of the plants' needs. The goal of efficient irrigation is to reduce these losses by applying only as much water as is needed to keep your plants healthy. This goal is applicable whether you have a Xeriscape or a conventional landscape.

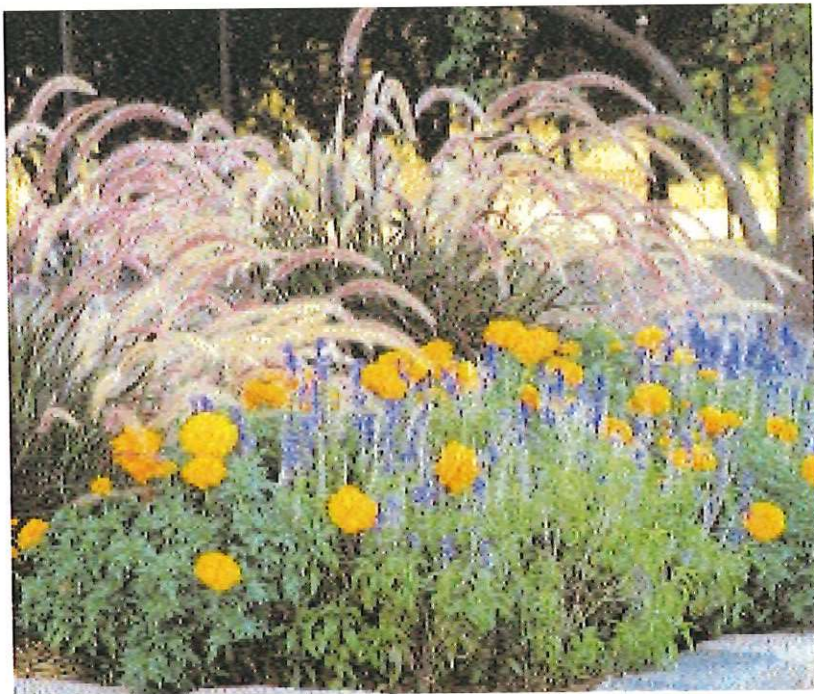
To promote the strong root growth that supports a plant during drought, water deeply and only when the plant needs water. For clay soils, watering less deeply and more often is recommended. Irrigating with consideration to soil

type, the condition of your plants, the season, and weather conditions—rather than on a fixed schedule—significantly increases your watering efficiency. Grouping plants according to similar water needs also makes watering easier and more efficient.

Irrigating lawns, gardens, and landscapes can be accomplished either manually or with an automatic irrigation system. Manual watering with a hand-held hose tends to be the most water-efficient method. According to the AWWA Research Foundation's outdoor end use study, households that manually water with a hose typically use 33 percent less water outdoors than the average household. The study also showed that households with in-ground sprinkler systems used 35 percent more water, those with automatic timers used 47 percent more water, and those with drip irrigation systems used 16 percent more water than households without these types of systems. These results show that in-ground sprinkler and drip irrigation systems must be operated properly to be water-efficient.

You can use a hand-held hose or a sprinkler for manual irrigation. To reduce water losses from evaporation and wind, avoid sprinklers that produce a fine mist or spray high into the air. Soaker hoses can also be very efficient and effective when used properly. Use a hand-held soil moisture probe to determine when irrigation is needed.

To make automatic irrigation systems more efficient, install system controllers such as rain sensors that prevent sprinkler systems from turning on during and immediately after rainfall, or soil moisture sensors that activate sprinklers only when soil moisture levels drop below pre-programmed levels. You can also use a weather-



Purple Fountain Grass (Pennisetum setaceum "Rubrum") and Marigolds (Calendula officinalis) in planter bed

driven programming system. Drip-type irrigation systems are considered the most efficient of the automated irrigation methods because they deliver water directly to the plants' roots. It is also important to revise your watering schedule as the seasons change. Over-watering is most common during the fall when summer irrigation schedules have not been adjusted to the cooler temperatures.

To further reduce your water consumption, consider using alternative sources of irrigation water, such as gray water, reclaimed water, and collected rainwater. According to the AWWA Research Foundation, homes with access to alternative sources of irrigation reduce their water bills by as much as 25 percent.⁴ Graywater is untreated household waste water from bathroom sinks, showers, bathtubs, and clothes washing machines. Graywater systems pipe this used water to a storage tank for later outdoor watering use. State and local graywater laws and policies vary, so you should investigate what qualifies as gray water and if any limitations or restrictions apply. Reclaimed water is waste water that has been treated to levels suitable for nonpotable uses. Check with local water officials to determine if it is available in your area. Collected rainwater is rainwater collected in cisterns, barrels, or storage tanks. Commercial rooftop collection systems are available, but simply diverting your downspout into a covered

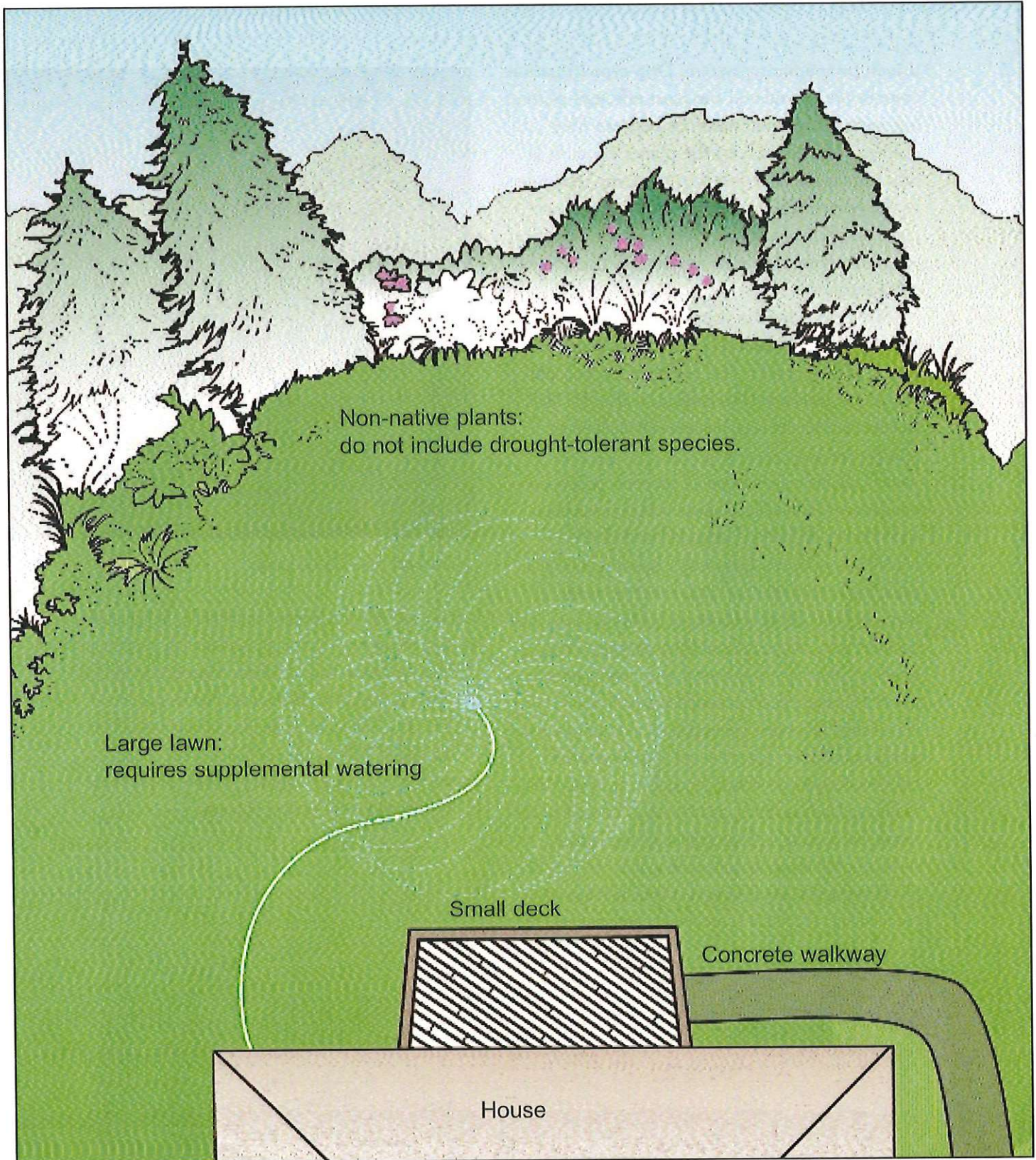


Red Valerian (Centranthus ruber)

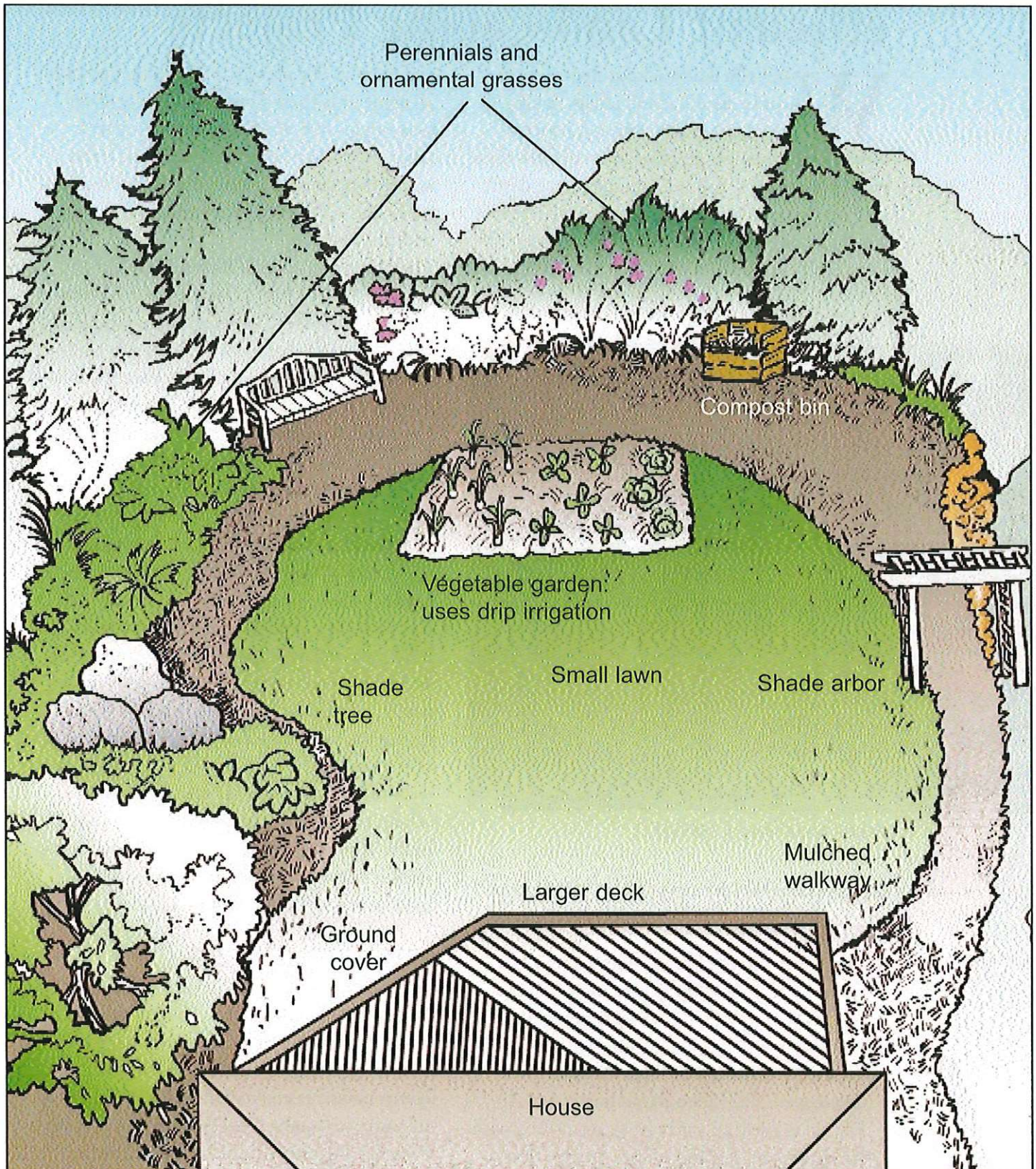
barrel is an easy, low-cost approach. When collecting rainwater, cover all collection vessels to prevent animals and children from entering and to prevent mosquito breeding. Some states might have laws which do not allow collection of rainwater, so be sure to check with your state's water resource agency before implementing a rainwater collection system.

⁴ AWWA Research Foundation. 1999. *Residential End Uses of Water*. <www.waterwisecr.org>

Non-xeriscaping



Xeriscaping



Examples of Successful Water-efficient Landscaping Projects

Water-efficient landscaping techniques can be used by individuals, companies, state, tribal, and local governments, and businesses to physically enhance their properties, reduce long-term maintenance costs, and create environmentally conscious landscapes. The following examples illustrate how water-efficient landscapes can be used in various situations.



Oriental Poppies (Papaver orientale)

Homeowner–public/private partnership

- The South Florida Water Management District, the Florida Nurserymen and Growers Association, the Florida Irrigation Society, and local businesses worked together to produce a television video called “Plant It Smart with Xeriscape.” The video shows how a typical Florida residential yard can be retrofitted with Xeriscape landscaping to save energy, time,

and money. The showcase yard (selected from 70 applicants) had a history of heavy water use—more than 90,000 gallons per month. After the retrofit, the yard’s aesthetic value was enhanced; plus it now uses 75 percent less water and relies on yard trimmings for mulch and compost.

- The Southwest Florida Water Management District (SWFWMD), the City of St. Petersburg, and Pinellas County, Florida, produced a video called “Xeriscape It!” It shows a landscape being installed using the seven Xeriscape principles. The SWFWMD also funded several Xeriscape demonstration sites and maintains a Xeriscape demonstration garden at its Brooksville, Florida, headquarters. The garden features a variety of native and non-native plants and is available for public viewing, along with a landscape plant identification guide.
- Residents of Glendale, Arizona, can receive a \$100 cash rebate for installing or converting more than half of their landscapable area to non-grass vegetation. The Glendale Water Conservation Office conducts an inspection of the converted lawn to ensure compliance with rebate requirements and then issues a rebate check to the homeowner. The purpose of the Landscape Rebate Program is to permanently reduce the amount of water used to irrigate grass throughout Glendale.

State government

- Although perceived as a water-rich state, Florida became the first to enact a statewide Xeriscape law. Florida’s legislature recognized that its growing population and vulnerable environment necessitated legal safeguards for its water resources. The Xeriscape law requires Florida’s Departments of Management Ser-

vices and Transportation to use Xeriscape landscaping on all new public properties and to develop a 5-year program to phase in Xeriscape on properties constructed before July 1992. All local governments must also consider requiring the use of Xeriscape and offering incentives to install Xeriscaping.

- Texas also developed legislation requiring Xeriscape landscaping on new construction projects on state property beginning on or after January 1994. Additional legislation, enacted in 1995, requires the Department of Transportation to use Xeriscape practices in the construction and maintenance of roadside parks. All municipalities may consider enacting ordinances requiring Xeriscape to conserve water.

City government

In Las Vegas, Nevada, homeowners can receive up to \$1,000 for converting their lawn to Xeriscape, while commercial landowners can receive up to a \$50,000 credit on their water bill. The city and several other surrounding communities hope these eye-catching figures will help Las Vegas meet its goal of saving 25 percent of the water it would otherwise have used by the year 2010; to date, it has saved 17 percent. Local officials plan to reach the target with the assistance of incentive programs encouraging Xeriscape, a city ordinance limiting turf to no more than 50 percent of new landscapes, grassroots information programs, and a landscape awards program specifically for Xeriscaped properties. Preliminary results of a five-year study show that residents who converted a portion of their lawns to Xeriscape reduced total water consumption by an average of 33 percent. The xeric vegetation required less than a quarter of the water typically used and one-third the maintenance (both in labor and expenditures) compared to traditional turf.



Yellow Ice Plant (Delosperma nubigenum) close-up

Developers

Howard Hughes Properties (HHP), a developer and manager of more than 25,000 acres of residential, commercial, and office development property, has enthusiastically used drought tolerant landscaping on all of its properties since 1990. Most of the company's properties are located in Las Vegas, one of the country's fastest growing metropolitan areas. To conserve resources, the city and county have implemented regulations requiring developers to employ certain Xeriscape principles in new projects. Specifically, a limited percentage of grass can be used on projects, and it must be kept away from streets. As the area's first large-scale developer to recognize the need and value in incorporating drought tolerant landscaping in parks, streetscapes, and open spaces, HHP uses native and desert-adaptive plants that survive and thrive in the Las Vegas climate with minimal to moderate amounts of water.

Drip system irrigation controllers are linked to weather stations that monitor the evapotranspiration rate. This allows HHP to determine the correct amount of water to be applied to plants at any given time. HHP tests the irrigation systems regularly and adds appropriate soil amendments to promote healthy plant growth. The maintenance program also includes pest management, the use of mulching mowers, and the use of rock mulch top dressing on all non-turf planting areas. These measures combine to ensure a beautiful, healthy, and responsible landscape.

Public/private partnerships

Even the most water-conscious homeowners in Southern California are over-watering by 50 to

70 gallons per day. The excess water washes away fertilizers and pesticides, which pollute natural waterways. The quantity of water wasted (and the dollars that pay for it) are even more substantial for large-scale commercial properties and developments.

An innovative partnership in Orange County links landscape water management, green mate-

rial management, and non-point source pollution prevention goals into one program—the Landscape Performance Certification Program. This program emphasizes efficient landscape irrigation and features a “landscape irrigation budget” based on a property’s landscape area, type, and the daily weather. The Municipal Water District monitors actual water use through a system of 12,000 dedicated water meters installed by participating landscape managers.

Participants, including landscapers, property managers, and homeowner associations, can compare the actual cost of water used on their property with the calculated budget. Those staying within budget are awarded certification, a proven marketing tool. This new voluntary program is implemented by the Municipal Water District with input from the California Landscape Contractors’ Association, the Orange County Integrated Management Department, the Metropolitan Water District of Southern California, and local nurseries and has the support of 32 retailing water suppliers. The program is already credited with increasing the use of arid-climate shrubs and landscaping to accommodate drip irrigation, and has resulted in cost savings to water customers.



Miscanthus sinensis
(Miscanthus grass, also called Maiden grass) variety with leaves turning yellow for fall.



For More Information

The following list of organizations can provide more information on water-efficient landscaping. This is not meant to be an exhaustive list, rather it is intended to help you locate local information sources and possible technical assistance.

Water Management Districts or Utilities

Your local water management district often can provide information on water conservation, including water efficient landscaping practices. Your city, town, or county water management district can be found in the Blue Pages section of your local phone book or through your city, town, or county's Web site if it has one. If you do not know your city, town, or county's Web site, check for a link on your state's Web site. URLs for state Web sites typically follow this format: <www.state.(two letter state abbreviation).us>.

State/County Extension Services

Your state or county extension service is also an excellent source of information. Many extension services provide free publications and advice on home landscaping issues including tips on plant selection and soil improvement. Some also offer a soil analysis service for a nominal fee. Your county extension service can be found in the Blue Pages section of your local phone book under the county government section or through your county's Web site if it has one. The U.S. Department of Agriculture's Cooperative State Research, Education, and Extension Service (www.ree.usda.gov/statepartners/usa.htm) provides an online directory of land-grant universities which can help you locate your state extension service. Government Guide (www.governmentguide.com) is yet another online resource that might prove helpful in locating state or local agencies.

Organizations

The following is a partial list of organizations located across the United States that provide helpful information on water-efficient landscaping.

American Water Works Association (AWWA)

6666 West Quincy Avenue
Denver, CO 80235
Telephone: 303 794-7711
and

1401 New York Avenue, NW, Suite 640
Washington, DC 20005
Telephone: 202 628-8303
Web: <www.awwa.org>

Arizona Municipal Water Users Association (AMWUA)

Web: <www.amwua.org/program-xeriscape.htm>

BASIN

City of Boulder Environmental Affairs
P.O. Box 791
Boulder, CO 80306
Phone: 303 441-1964
E-mail: basin@bcn.boulder.co.us
Web: <bcn.boulder.co.us/basin/local/seven.html>

Denver Water

1600 West 12th Avenue
Denver, CO 80204
Phone: 303 628-6000
Fax: 303 628-6199
TDDY: 303 534-4116
Office of Water Conservation hotline:
303 628-6343

E-mail: jane.earle@denverwater.org
Web: <www.water.denver.co.gov/conservation/conservframe.html>

New Mexico Water Conservation Program/Water Conservation Clearinghouse

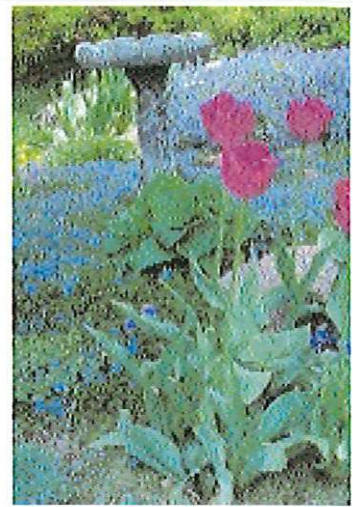
P. O. Box 25102
Santa Fe, NM 87504
Phone: 800 WATER-NM
E-mail: waternm@ose.state.nm.us
Fax: 505 827-3813
Web: <www.ose.state.nm.us/water-info/conservation/index.html>

Project WET - Water Education for Teachers

201 Culbertson Hall
Montana State University
Bozeman, MT 59717
Phone: 406 994-5392
Web: <www.montana.edu/wwwwet>

Rocky Mountain Institute

1739 Snowmass Creek Road
Snowmass, CO 81654-9199
Phone: 970 927-3851
Web: <www.rmi.org>



Turkish Speedwell (Veronica liwanensis) in background and tulips in foreground.

Southern Nevada Water Authority
1001 S. Valley View Boulevard, Mailstop #440
Las Vegas, NV 89153
Phone: 702 258-3930
Web: <www.snwa.com>

Southwest Florida Water Management District
2379 Broad Street
Brooksville, FL 34604-6899
Phone: 352 796-7211 or 800 423-1476 (Florida only)
Web: <www.swfwmd.state.fl.us/watercon/xeris/swfxeris.html>

Sustainable Sources Green Building Program: Sustainable Building Source Book
E-mail: info@greenbuilder.com
Web: <www.greenbuilder.com/sourcebook/xeriscape.html>

Water Conservation Garden – San Diego County
12122 Cuyamaca College Drive West
El Cajon, CA 92019
Phone: 619 660-0614
Fax: 619 660-1687

E-mail: info@thegarden.org
Web: <www.thegarden.org/garden/xeriscape/index.html> and <www.sdcwa.org/manage/conservation-xeriscape.phtml>

WaterWiser: The Water Efficiency Clearing House
(Operated by AWWA in cooperation with the U.S. Bureau of Reclamation)
6666 West Quincy Avenue
Denver, CO 80235
Phone: 800 559-9855
Fax: 303 794-6303
E-mail: bewiser@waterwiser.org
Web: <www.waterwiser.org>

Xeriscape Colorado!, Inc.
P.O. Box 40202
Denver, CO 80204-0202
Web: <www.xeriscape.org>

Resources

The following is a partial list of publications on resource efficient landscaping. For even more information, particularly on plants suited to your locale, consult your local library, county extension service, nursery, garden clubs, or water utility.

Ball, Ken and American Water Works Association Water Conservation Committee. *Xeriscape Programs for Water Utilities*. Denver: American Water Works Association, 1990.

Bennett, Jennifer. *Dry-Land Gardening: A Xeriscaping Guide for Dry-Summer, Cold-Winter Climates*. Buffalo: Firefly, 1998.

Bennett, Richard E. and Michael S. Hazinski. *Water-Efficient Landscape Guidelines*. Denver: American Water Works Association, 1993.

Brenzel, Kathleen N., ed. *Western Garden Book*, 2001 Edition. Menlo Park: Sunset Publishing Corporation, 2001.

City of Aurora, Colorado Utilities Department. *Landscaping for Water Conservation: Xeriscape!* Aurora: Colorado Utilities Department, 1989.

Johnson, Eric and Scott Millard. *The Low-Water Flower Gardener: 270 Unthirsty Plants for Color, Including Perennials, Ground Covers, Grasses & Shrubs*. Tucson: Ironwood Press, 1993.

Knopf, James M. *The Xeriscape Flower Gardener*. Boulder: Johnson Books, 1991.

Knopf, James M., ed. *Waterwise Landscaping with Trees, Shrubs, and Vines: A Xeriscape Guide for the Rocky Mountain Region, California, and the Desert Southwest*. Boulder: Chamisa Books, 1999.

Knox, Kim, ed. *Landscaping for Water Conservation: Xeriscape*. Denver: City of Aurora and Denver Water, 1989.

Nellis, David W. *Seashore Plants of South Florida and the Caribbean: A Guide to Identification and Propagation of Xeriscape Plants*. Sarasota: Pineapple Press, Inc., 1994.

Perry, Bob. *Landscape Plants for Western Regions: An Illustrated Guide to Plants for Water Conservation*. Claremont: Land Design Publishing, 1992.

Phillips, Judith. *Natural by Design: Beauty and Balance in Southwest Gardens*. Santa Fe: Museum of New Mexico Press, 1995.

- Phillips, Judith. *Plants for Natural Gardens: Southwestern Native & Adaptive Trees, Shrubs, Wildflowers & Grasses*. Santa Fe: Museum of New Mexico Press, 1995.
- Robinette, Gary O. *Water Conservation in Landscape Design and Maintenance*. New York: Nostrand Reinhold, 1984.
- Rumary, Mark. *The Dry Garden*. New York: Sterling Publishing Co., Inc., 1995.
- Springer, Lauren. *The Undaunted Garden: Planting for Weather-Resilient Beauty*. Golden: Fulcrum Publishing, 1994.
- Springer, Lauren. *Waterwise Gardening*. New York: Prentice Hall Gardening, 1994.
- Stephens, Tom, Doug Welsh, and Connie Ellefson. *Xeriscape Gardening, Water Conservation for the American Landscape*. New York: Macmillan Publishing, 1992.
- Sunset Books, eds. *Waterwise Gardening: Beautiful Gardens with Less Water*. Menlo Park: Lane Publishing Company, 1989.
- Vickers, Amy. *Handbook of Water Use and Conservation*. Amherst, MA: WaterPlow Press, 2001.
- Weinstein, Gayle. *Xeriscape Handbook: A How-To Guide to Natural, Resource-Wise Gardening*. Golden: Fulcrum Publishing, 1998.
- Williams, Sara. *Creating the Prairie Xeriscape*. Saskatchewan: University Extension Press, 1997.
- Winger, David, cd. *Xeriscape Plant Guide: 100 Water-Wise Plants for Gardens and Landscapes*. Golden: Fulcrum Publishing, 1998.
- Winger, David, ed. *Xeriscape Color Guide*. Golden: Fulcrum Publishing, 1998.
- Winger, David, ed. *Evidence of Care: The Xeriscape Maintenance Journal, 2002, Vol. 1*, Colorado WaterWise Council, 2001.

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Illustrations by Linda Cook.

For copies of this publication contact:

EPA Water Resources Center (RC-4100)
U.S. Environmental Protection Agency
Ariel Rios Building, 1200 Pennsylvania Avenue, NW.
Washington, DC 20460

For more information regarding water efficiency, please contact:

Water Efficiency Program (4204M)
U.S. Environmental Protection Agency
Ariel Rios Building, 1200 Pennsylvania Avenue, NW.
Washington, DC 20460
<www.epa.gov/OWM/water-efficiency/index.htm>



United States
Environmental Protection Agency (4204M)
Washington, DC 20460

Official Business
Penalty for Private Use \$300

Preventing Polluted Runoff

Everybody's Business



**pet waste, fertilizer,
chemicals, auto fluids**

Homeowners can prevent polluted runoff by using fertilizers and chemicals sparingly, maintaining septic systems, and picking up pet waste.



**nutrients, pesticides,
sediment**

Farmers can prevent polluted runoff by managing soil and animal feeding operations and buffering streams with native trees and plants.



**oil, heat, road salts,
sediment, chemicals**

Developers and planners can prevent polluted runoff by using low impact development and providing structural and nonstructural controls.



EPA 841-H-03-001

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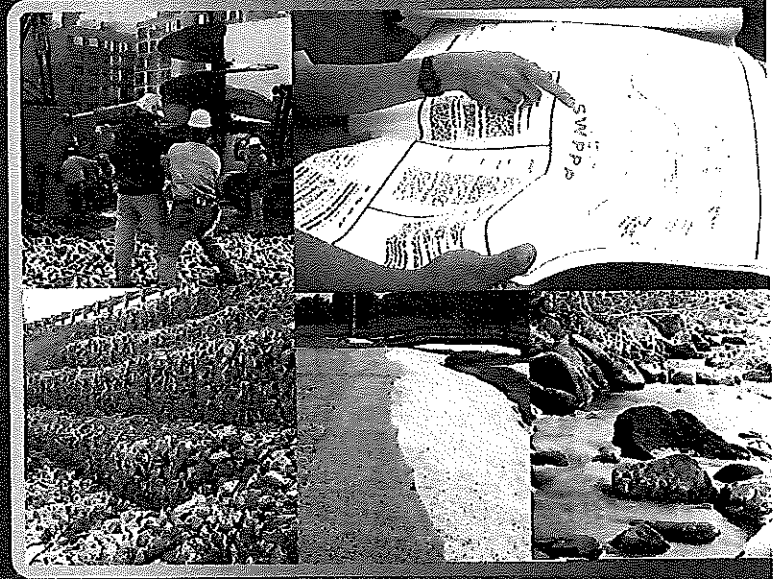
For more information, visit www.epa.gov/nps

After the Storm

*A Citizen's Guide to
Understanding Stormwater*



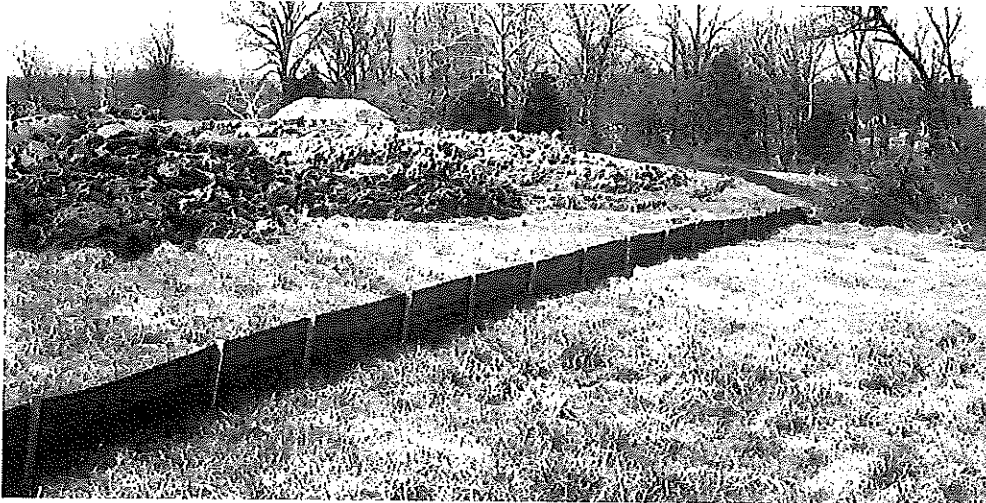
Getting the Word Out... **The Role of Local Governments In Implementing the NPDES Stormwater Program for Construction Sites**





How Do I Get Stormwater Permit Coverage for My Construction Site?

A Construction Site Operator's Guide to EPA's Stormwater Permit Program

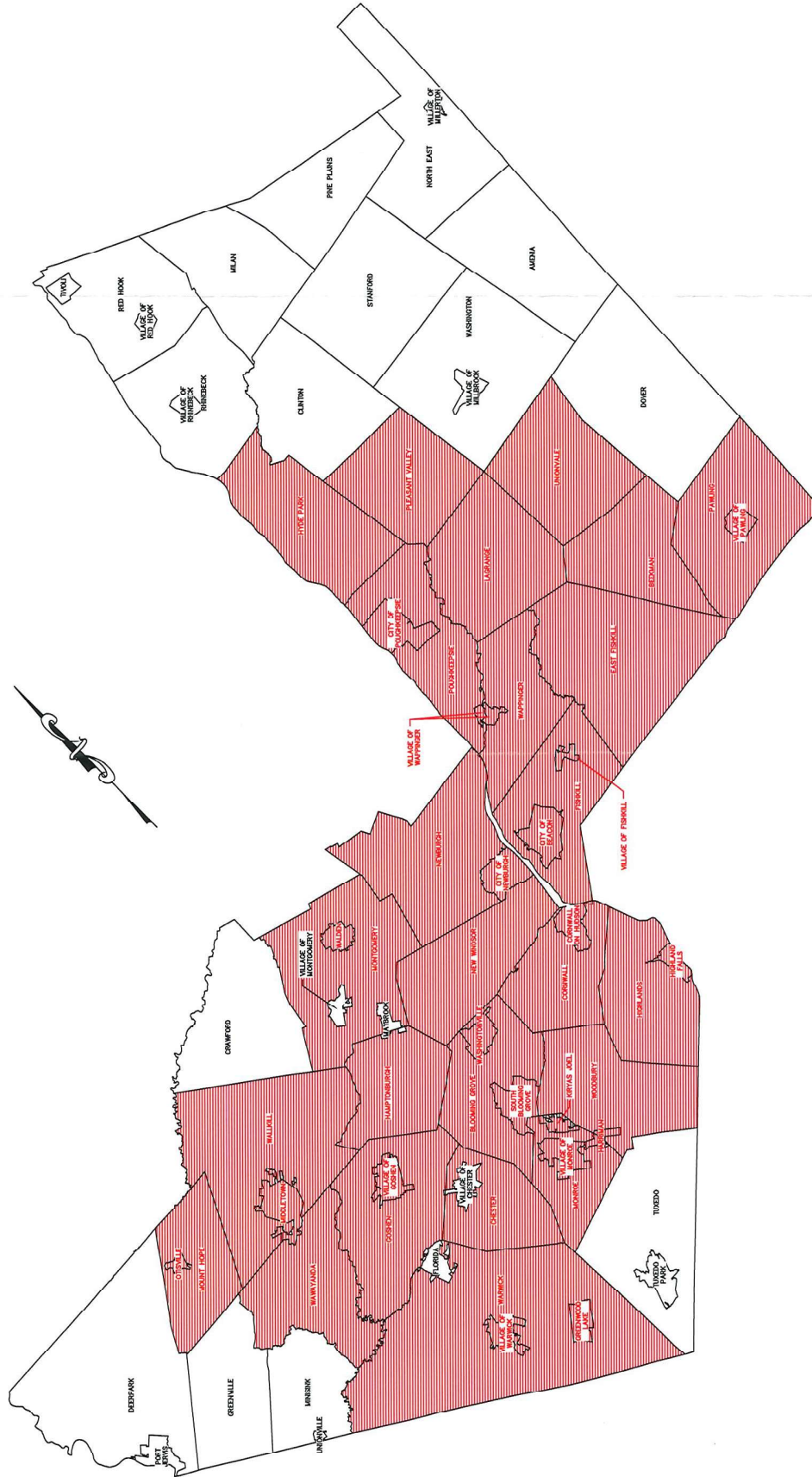


How to get a stormwater permit



Appendix F

Outfall Sewershed Map and MS4 Area Map



COPYRIGHT 2014, LANC & TULLY, P.C.

Date: AUGUST 8, 2014
 Scale: 1"=30,000'
 Dwg. No. MS4-MAPPING
 Layout: WALDEN MS4-MAP

ORANGE AND DUTCHESS COUNTY MS4 AREAS

VILLAGE OF WALDEN MS4

ORANGE COUNTY, NEW YORK
 VILLAGE OF WALDEN

P.O. Box 887, Rt. 207
 Goshen, N.Y. 10924
 (845) 294-8700

LANC & TULLY
 ENGINEERING AND SURVEYING, P.C.

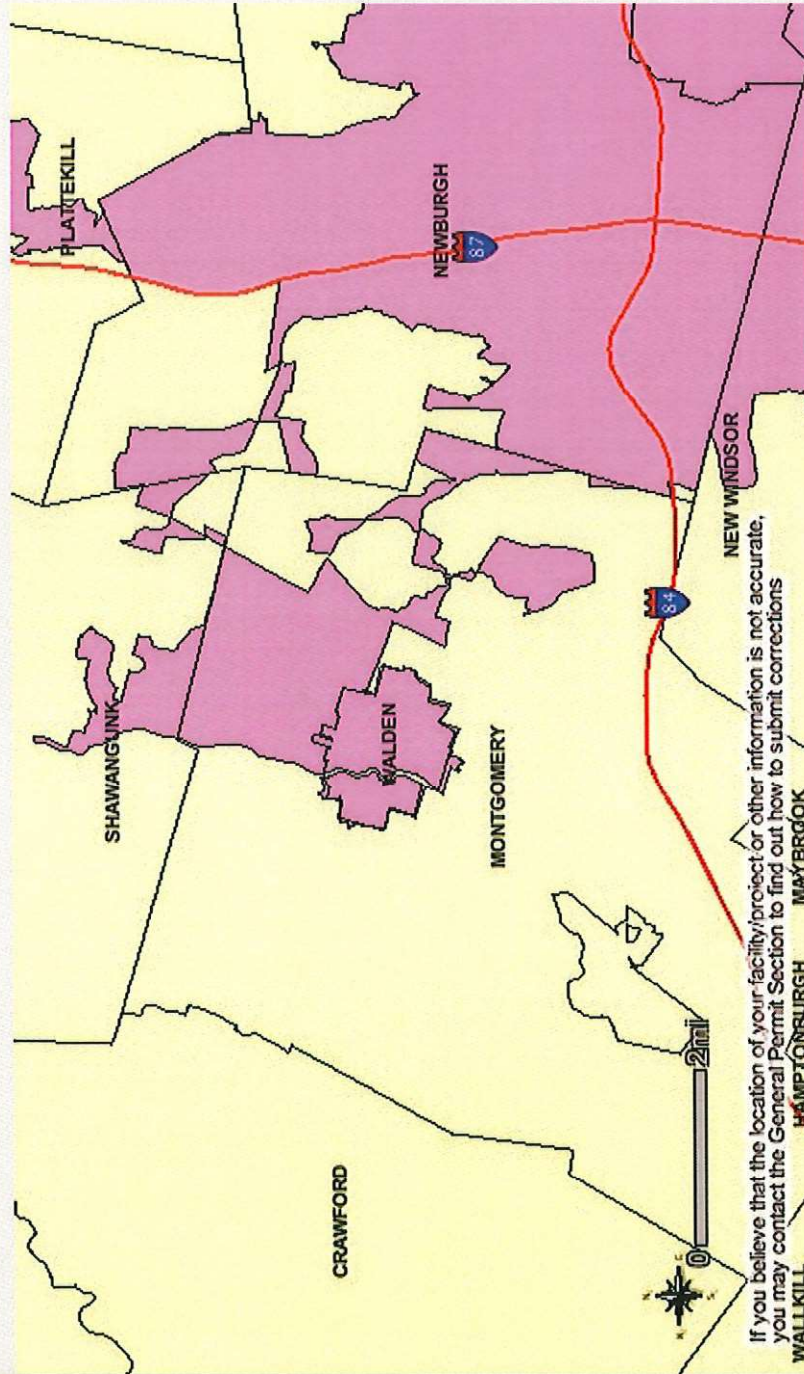
Please set your printer orientation to "Landscape".

Walden MS4 Area

Visible Layers

Regulated MS4s

- Automatic
- Desig_2008
- Designation
- 303D Streams Construction
- 303D Estuary Construction
- 303D Lake Construction
- Towns



If you believe that the location of your facility/project or other information is not accurate, you may contact the General Permit Section to find out how to submit corrections

WALLKILL HAMPDENBURGH MAYBROOK

MinX: 558097, MaxX: 579489, MinY: 4607997, MaxY: 4593510

Appendix G

Illicit Discharge Detection and Elimination Forms

- **Outfall Observation Form**
- **Illicit Discharge Incident Log**
- **Illicit Discharge Field Sheet**
- **Vehicle Inspection**
- **Building Connection/Drain Inspection**
- **Septic Tank/Manhole Observation**
- **Catch Basin Observation**
- **Illicit Discharge Incident Summary**

VILLAGE OF WALDEN
MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE AND ELIMINATION (IDDE)

OUTFALL OBSERVATION

| | | | |
|---|---|----------|--|
| Inspected by: | Date: | Time: | |
| Structure ID: | Temperature: | Weather: | |
| Address | Action Taken: <input type="checkbox"/> Observation <input type="checkbox"/> Clean <input type="checkbox"/> Repair | | |
| Nearest Intersection: | | | |
| Location: <input type="checkbox"/> Roadway <input type="checkbox"/> Curb <input type="checkbox"/> Gutter <input type="checkbox"/> Private Property <input type="checkbox"/> Easement <input type="checkbox"/> Other: | | | |
| Material <input type="checkbox"/> Brick <input type="checkbox"/> Concrete <input type="checkbox"/> Plastic | Bottom Depth: _____ in. | | |
| Size: <i>If circular</i> Diameter: _____ in. | | | |
| Size: <i>If square or rectangular</i> Length _____ in., Width _____ in. | | | |

Location Sketch (Indicate address, streets, nearest intersections, etc.)

| Structure | | | | | |
|-------------|--------------------------|--------------------------|--------------------------|--------------------------|--|
| | Satisfactory | Unsatisfactory | Not Applicable | Not Visible | If Unsatisfactory or Not Visible, Describe |
| End Section | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Rip-rap | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Swale | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Walls | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Bottom | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

| Channels/Connections | | |
|----------------------|--|---|
| A | <input type="checkbox"/> Inlet <input type="checkbox"/> Outlet Pipe Diameter: _____ in. | Material: <input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Other: _____ Connects to/from: _____ (structure ID) Invert depth _____ in. |
| B | <input type="checkbox"/> Inlet <input type="checkbox"/> Outlet Pipe Diameter: _____ in | Material: <input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Other: _____ Connects to/from: _____ (structure ID) Invert depth _____ in |
| C | <input type="checkbox"/> Inlet <input type="checkbox"/> Outlet Pipe Diameter: _____ in | Material: <input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Other: _____ Connects to/from: _____ (structure ID) Invert depth _____ in |
| D | <input type="checkbox"/> Inlet <input type="checkbox"/> Outlet Pipe Diameter: _____ in | Material: <input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Other: _____ Connects to/from: _____ (structure ID) Invert depth _____ in |

Draw channels/connections (A, B, C, D) and indicate direction of flow.

| | | | |
|--|---|--|--|
| Condition | <input type="checkbox"/> Clean/Dry <input type="checkbox"/> Standing Water <input type="checkbox"/> Flowing Water <input type="checkbox"/> Sediment <input type="checkbox"/> Organic Matter <input type="checkbox"/> Trash/Debris <input type="checkbox"/> Not Visible <input type="checkbox"/> Other: _____ | | |
| Flow | <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial <input type="checkbox"/> None-Standing Water <input type="checkbox"/> None-Dry | | |
| Rate | <input type="checkbox"/> Steady <input type="checkbox"/> Intermittent <input type="checkbox"/> Not Applicable | Sump Present | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Illicit Discharge Indications Present? (dry weather flow, odor, color, floatables, turbidity, viscosity) | | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Comments/Notes: | | | |

FORM COMPLETED BY:

| | |
|---------------|-------|
| Name (print): | Date: |
| Signature: | |

VILLAGE OF WALDEN
MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE AND ELIMINATION (IDDE)

ILLICIT DISCHARGE INCIDENT LOG

SECTION A: General Information

| | | | |
|-------------------------|---------------------|--------------|-------------|
| Incident ID: | | | |
| Information taken by: | Rainfall (inches) | Last 24 hrs: | Last 48hrs: |
| Notification date/time: | Incident date/time: | | |
| Notification made by: | Department: | | |
| Contact Information | | | |

SECTION B: Location

| | |
|--|---|
| Location/address: | Structure ID: |
| Nearby Landmark: | Outfall: |
| Primary Location | Secondary Location |
| <input type="checkbox"/> Upland Area (<i>Land not adjacent to stream</i>) | <input type="checkbox"/> Near Storm Drain <input type="checkbox"/> Near other water source water |
| <input type="checkbox"/> Stream Corridor (<i>in or adjacent to stream</i>) | <input type="checkbox"/> Outfall <input type="checkbox"/> In-stream flow <input type="checkbox"/> Along banks |
| Comments/Notes: | |

SECTION C: Description

| | |
|---|--|
| Upland Area | |
| <input type="checkbox"/> Dumping <input type="checkbox"/> Oils/solvents/chemicals <input type="checkbox"/> Sewage <input type="checkbox"/> Wash water, suds, etc. <input type="checkbox"/> Other: | |
| Stream Corridor | |
| Odor | <input type="checkbox"/> None <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide (rotten eggs) <input type="checkbox"/> Sewage <input type="checkbox"/> Other : |
| Color | <input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other: |
| Turbidity | <input type="checkbox"/> Slight cloudiness <input type="checkbox"/> Cloudy <input type="checkbox"/> Opaque |
| Floatables | <input type="checkbox"/> None <input type="checkbox"/> Sewage (toilet paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Algae <input type="checkbox"/> Dead Fish <input type="checkbox"/> Other |
| Possible/Suspected Source: (Name, description of person or vehicle, license plate #, address, etc.) | |

SECTION D : Investigation

| | | |
|--|--------------------|-----------------|
| Performed by: | Date began: | Date Completed: |
| Results | | |
| <input type="checkbox"/> No investigation made | Reason: | |
| <input type="checkbox"/> Referred | Department/Agency: | |
| <input type="checkbox"/> Investigated; no further action necessary | | |
| <input type="checkbox"/> Investigated; requires further action Description: | | |
| Comments/Notes: | | |

FORM COMPLETED BY:

| | |
|---------------|-------|
| Name (print): | Date: |
| Signature: | |

VILLAGE OF WALDEN
 MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE AND ELIMINATION (IDDE)

VEHICLE INSPECTION

| | | |
|---|-------|--------------------|
| Inspected by: | Date: | Time: |
| Location: | | |
| Description of vehicle: | | |
| License Plate Number: | | |
| DOT Placard Present: <input type="checkbox"/> Yes <input type="checkbox"/> No | | Placard ID Number: |
| Driver Information (Name, address, phone): | | |

| |
|---|
| Description of Leak |
| Rate <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial |
| Frequency: <input type="checkbox"/> Intermittent <input type="checkbox"/> Steady |
| Impacted Area(s): <i>Check all that apply</i> <input type="checkbox"/> Roadway Surface <input type="checkbox"/> Catch Basin <input type="checkbox"/> Stream <input type="checkbox"/> Earthen Material (Grass, Soil, Etc.) <input type="checkbox"/> Other: |
| Comments/Notes: |

Draw diagram of truck indicating leak and area impacted by leak including roadway, storm drains, etc.

| Action Taken | |
|---|---------|
| <input type="checkbox"/> Notified driver; truck stopped and leak attended to. | |
| <input type="checkbox"/> Notified driver; scheduled repair | Date: |
| <input type="checkbox"/> Repair Completed | Date: |
| <input type="checkbox"/> Action Taken | Reason: |
| <input type="checkbox"/> Other: | |
| Comments/Notes: | |

FORM COMPLETED BY:

| | |
|---------------|-------|
| Name (print): | Date: |
| Signature: | |

VILLAGE OF WALDEN
MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE AND ELIMINATION (IDDE)

BUILDING CONNECTION/DRAIN INSPECTION

| | | |
|--|-------|-------|
| Inspected By: | Date: | Time: |
| Address: | | |
| Property Type: <input type="checkbox"/> Single-family Residence <input type="checkbox"/> Multi-family Residence <input type="checkbox"/> Apartment Building <input type="checkbox"/> Industrial/Commercial <input type="checkbox"/> School <input type="checkbox"/> Municipal <input type="checkbox"/> Other: | | |
| Property Owner: (Name/Address/phone) | | |
| Occupant: (Name/Phone) | | |
| On-Site Representative: (Name/Address/Phone) | | |

| Building Information | |
|---|--|
| Basement Present: <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Does Water Enter Basement? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Basement Floor Type: <input type="checkbox"/> Concrete <input type="checkbox"/> Hardwood Flooring <input type="checkbox"/> Dirt/Unfinished <input type="checkbox"/> Carpet <input type="checkbox"/> Other: | |
| External Inspection | |
| Type | Present |
| Roof Downspouts Entering Ground | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Driveway Drain | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Yard Drain | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Window Well Drain | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Describe any other connections/drains, areas of concern, etc.: | |

Draw diagram of building indicating location of observed connections, drains, sumps, etc. (Include streets and nearest intersection)

| Internal Inspection | | |
|--|--|---|
| Type | Present | If Present, Description: |
| Floor Drains | <input type="checkbox"/> Yes <input type="checkbox"/> No | Number: _____ Frequency of use: _____ Discharge location: <input type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Storm Sewer <input type="checkbox"/> Unknown |
| Internal Foundation Drains | <input type="checkbox"/> Yes <input type="checkbox"/> No | Frequency of Use: _____ Discharge location: <input type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Storm Sewer <input type="checkbox"/> Unknown |
| Sewer Connection Cleanout | <input type="checkbox"/> Yes <input type="checkbox"/> No | Relationship to Basement Floor: <input type="checkbox"/> Above <input type="checkbox"/> Below Cleanout Sealed: <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Sump Pump | <input type="checkbox"/> Yes <input type="checkbox"/> No | Horsepower of pump: _____ Frequency of pump cycle: _____ Pump Capacity: _____ (gpm) Pump always adequate: <input type="checkbox"/> Yes <input type="checkbox"/> No Pump hard piped: <input type="checkbox"/> Yes <input type="checkbox"/> No Discharge location: <input type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Storm Sewer <input type="checkbox"/> Unknown |
| Describe any other connections/drains, areas of concern, etc.: | | |

FORM COMPLETED BY:

| | |
|---------------|-------|
| Name (print): | Date: |
| Signature: | |

VILLAGE OF WALDEN
MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE AND ELIMINATION (IDDE)

SEPTIC TANK/MANHOLE OBSERVATION

| | | |
|---|---|----------|
| Inspected by: | Date: | Time: |
| Structure ID: | Temperature: | Weather: |
| Address | Action Taken: <input type="checkbox"/> Observation <input type="checkbox"/> Clean <input type="checkbox"/> Repair | |
| Nearest Intersection: | | |
| Location: <input type="checkbox"/> Roadway <input type="checkbox"/> Gutter <input type="checkbox"/> Private Property <input type="checkbox"/> Easement <input type="checkbox"/> Other: | | |
| Sewer Type: <input type="checkbox"/> Sanitary <input type="checkbox"/> Storm | | |
| Material <input type="checkbox"/> Brick <input type="checkbox"/> Concrete <input type="checkbox"/> Plastic | | |
| Cover Size: <input type="checkbox"/> 24-in. <input type="checkbox"/> 30-in | Invert Depth: _____ in. | |

Location Sketch (Indicate address, streets, nearest intersections, etc.)

| Structure | | | | | |
|------------------|--------------------------|--------------------------|--------------------------|--------------------------|---|
| | Satisfactory | Unsatisfactory | Not Applicable | Not Visible | If Unsatisfactory or not visible, described |
| Cover | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Ring/frame | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Rungs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Cone | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Riser | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Shelf | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Channel | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

| Channels/Connections | | |
|-----------------------------|--|---|
| A | <input type="checkbox"/> Inlet <input type="checkbox"/> Outlet Pipe Diameter: _____ in. | Material: <input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Other: _____ Connects to/from: _____ (structure ID) Invert depth _____ in. |
| B | <input type="checkbox"/> Inlet <input type="checkbox"/> Outlet Pipe Diameter: _____ in | Material: <input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Other: _____ Connects to/from: _____ (structure ID) Invert depth _____ in |
| C | <input type="checkbox"/> Inlet <input type="checkbox"/> Outlet Pipe Diameter: _____ in | Material: <input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Other: _____ Connects to/from: _____ (structure ID) Invert depth _____ in |
| D | <input type="checkbox"/> Inlet <input type="checkbox"/> Outlet Pipe Diameter: _____ in | Material: <input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Other: _____ Connects to/from: _____ (structure ID) Invert depth _____ in |

Draw channels/connections (A, B, C, D) and indicate direction of flow.

| | | | |
|-------------------------------------|---|---|--|
| Inflow/Surcharge Indications | | Debris/Grease on: <input type="checkbox"/> Sides <input type="checkbox"/> Rungs <input type="checkbox"/> Shelf <input type="checkbox"/> Not Applicable <input type="checkbox"/> Not Visible | |
| Flow | <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial <input type="checkbox"/> None | Appearance/Clarity | <input type="checkbox"/> Clear Water <input type="checkbox"/> Turbid Sewage <input type="checkbox"/> Not Applicable |
| Rate | <input type="checkbox"/> Steady <input type="checkbox"/> Intermittent <input type="checkbox"/> Not Applicable | Flow depth compared to Adjacent Manholes | <input type="checkbox"/> Same <input type="checkbox"/> Lower <input type="checkbox"/> Higher |

Comments/Notes:

FORM COMPLETED BY:

| | |
|---------------|-------|
| Name (print): | Date: |
| Signature: | |

VILLAGE OF WALDEN
MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE AND ELIMINATION (IDDE)

CATCH BASIN OBSERVATION

| | | | |
|---|---|----------|--|
| Inspected by: | Date: | Time: | |
| Structure ID: | Temperature: | Weather: | |
| Address | Action Taken: <input type="checkbox"/> Observation <input type="checkbox"/> Clean <input type="checkbox"/> Repair | | |
| Nearest Intersection: | | | |
| Location: <input type="checkbox"/> Roadway <input type="checkbox"/> Curb <input type="checkbox"/> Gutter <input type="checkbox"/> Private Property <input type="checkbox"/> Easement <input type="checkbox"/> Other: | | | |
| Material <input type="checkbox"/> Brick <input type="checkbox"/> Concrete <input type="checkbox"/> Plastic | Bottom Depth: _____ in. | | |
| Size: <i>If circular</i> Diameter: _____ in. | | | |
| Size: <i>If square or rectangular</i> Length _____ in., Width _____ in. | | | |

Location Sketch (Indicate address, streets, nearest intersections, etc.)

| Structure | | | | | |
|------------|--------------------------|--------------------------|--------------------------|--------------------------|--|
| | Satisfactory | Unsatisfactory | Not Applicable | Not Visible | If Unsatisfactory or Not Visible, Describe |
| Cover | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Ring/Frame | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Rungs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Walls | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Bottom | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

| Channels/Connections | | |
|----------------------|--|---|
| A | <input type="checkbox"/> Inlet <input type="checkbox"/> Outlet Pipe Diameter: _____ in. | Material: <input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Other: _____ Connects to/from: _____ (structure ID) Invert depth _____ in. |
| B | <input type="checkbox"/> Inlet <input type="checkbox"/> Outlet Pipe Diameter: _____ in. | Material: <input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Other: _____ Connects to/from: _____ (structure ID) Invert depth _____ in. |
| C | <input type="checkbox"/> Inlet <input type="checkbox"/> Outlet Pipe Diameter: _____ in. | Material: <input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Other: _____ Connects to/from: _____ (structure ID) Invert depth _____ in. |
| D | <input type="checkbox"/> Inlet <input type="checkbox"/> Outlet Pipe Diameter: _____ in. | Material: <input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Other: _____ Connects to/from: _____ (structure ID) Invert depth _____ in. |

Draw channels/connections (A, B, C, D) and indicate direction of flow.

| | | | |
|--|---|--|--|
| Condition | <input type="checkbox"/> Clean/Dry <input type="checkbox"/> Standing Water <input type="checkbox"/> Flowing Water <input type="checkbox"/> Sediment <input type="checkbox"/> Organic Matter <input type="checkbox"/> Trash/Debris <input type="checkbox"/> Not Visible <input type="checkbox"/> Other: _____ | | |
| Flow | <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial <input type="checkbox"/> None-Standing Water <input type="checkbox"/> None-Dry | | |
| Rate | <input type="checkbox"/> Steady <input type="checkbox"/> Intermittent <input type="checkbox"/> Not Applicable | Sump Present | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Illicit Discharge Indications Present? (dry weather flow, odor, color, floatables, turbidity, viscosity) | | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Comments/Notes: | | | |

FORM COMPLETED BY:

| | |
|---------------|-------|
| Name (print): | Date: |
| Signature: | |

Appendix H

Miscellaneous Village Forms

- **Village Standard SWPPP Review**
- **Construction Activity Log**
- **Village Owned Annual Vehicle Inspection**
- **Quarterly Municipal Facility Site Compliance Inspection Checklist**

STORMWATER POLLUTION PREVENTION PLAN REVIEW SHEET

| | | | |
|--|--|---|-------------------------------------|
| 1. Project Information | | | |
| Project Name: | | Plan Date: | |
| Reviewed by: | | Review Date: | |
| Municipality: | | Project Address: | |
| Site Area: | | Disturbance Area: | |
| Downstream Analysis: <input type="checkbox"/> | | Redevelopment: <input type="checkbox"/> | |
| Type of Development: | <input type="checkbox"/> Residential | <input type="checkbox"/> Commercial | <input type="checkbox"/> Industrial |
| MS4: | <input type="checkbox"/> Project located in MS4 area | <input type="checkbox"/> MS4 sign-off completed | |
| Nearest Cross Street or Landmark: | | | |
| Nearest Surface Water Body That May Be Impacted: | | | |

| |
|---|
| 2. Mapping |
| <ul style="list-style-type: none"> <input type="checkbox"/> Existing and proposed topography (minimum of 2-foot contours recommended) <input type="checkbox"/> Perennial and intermittent streams <input type="checkbox"/> Mapping of predominant soils from USDA soil surveys as well as location of any site specific borehole investigations that may have been performed <input type="checkbox"/> Boundaries of existing predominant vegetation and proposed limits of clearing <input type="checkbox"/> Location and boundaries of resource protection areas such as wetlands, lakes, ponds, and other setbacks (e.g., stream buffers, drinking water well setbacks, septic setbacks) <input type="checkbox"/> Location of existing and proposed roads, buildings, and other structures <input type="checkbox"/> Location of existing and proposed utilities (e.g., water, sewer, gas, electric) and easements <input type="checkbox"/> Location of existing and proposed conveyance systems such as grass channels, swales, and storm drains <input type="checkbox"/> Flow paths and watershed area boundaries <input type="checkbox"/> Location of floodplain/floodway limits and relationship of site to upstream and downstream properties and drainages <input type="checkbox"/> Location and dimensions of proposed channel modifications, such as bridge or culvert crossings <input type="checkbox"/> Location, size, maintenance access, and limits of disturbance of proposed structural stormwater Management practices |

| |
|--|
| 3. Cross-Sections and Profile Drawings |
| <ul style="list-style-type: none"> <input type="checkbox"/> Existing and proposed structural elevations (e.g., invert of pipes, manholes, etc.) <input type="checkbox"/> Design water surface elevations <input type="checkbox"/> Structural details of outlet structures, embankments, spillways, stilling basins, grade control structures, conveyance channels, etc. <input type="checkbox"/> Logs of borehole/soil testing investigations that may have been performed along with supporting geotechnical report |

| |
|---|
| 4. Hydrologic and Hydraulic Analysis |
| <ul style="list-style-type: none"> <input type="checkbox"/> Existing condition analysis for time of concentrations, runoff rates, volumes, velocities, and water surface elevations showing methodologies used and supporting calculations <input type="checkbox"/> Proposed condition analysis for time of concentrations, runoff rates, volumes, velocities, water surface elevations, and routing showing the methodologies used and supporting calculations <input type="checkbox"/> Final sizing calculations for structural stormwater Management practices including, |

STORMWATER POLLUTION PREVENTION PLAN REVIEW SHEET

- contributing drainage area, storage, and outlet configuration
- Stage-discharge or outlet rating curves and inflow and outflow hydrographs for storage facilities (e.g., stormwater ponds and wetlands)
 - Final analysis of potential downstream impact/effects of project, where necessary
 - Dam breach analysis, where necessary
 - Is adequate freeboard, minimum of 1-foot, provided in all applicable stormwater practices?
 - Is permanent pool a minimum of 4-feet deep?

5. Water Quality and Runoff Reduction Volumes

- Has the minimum runoff reduction volume been calculated and met?
- Maximum amount practical of water quality volume treated by green practices
- Remaining water quality volume treated through standard management practices

6. Landscaping Plan

- Proposed landscaping shown for all practices which require specific plantings

8. Erosion and Sediment Control Plan

- Outlet protection shown for all outfalls and sizing calculations provided
- Calculations provided for sizing of temporary sediment basins, if applicable
- Silt fence installed parallel to slopes

9. Construction Sequence

- Phasing of construction shown if total site disturbance is over 5 acres
- Erosion and sediment control measures implemented on a per phase basis

9. Maintenance Plan

- Name, address, and phone number of responsible parties for maintenance
- Description of annual maintenance tasks
- Description of applicable easements
- Description of funding source
- Minimum vegetative cover requirements
- Access and safety issues
- Testing and disposal of sediments that will likely be necessary
- Maintenance requirements shown on plans

10. SWPPP Report

- Pre- and post-development runoff flowrate comparison
- Tabulation/summarization of required and provided water quality, runoff reduction volume, and channel protection volumes
- Draft completed NOI
- Time of concentration calculations
- Velocities in channels calculated, erosion control considered
- Reach Routing in stormwater model
- Runoff Reduction Volume feasibility discussed

VILLAGE OF WALDEN
 STORMWATER OBSERVATION OF
 CONSTRUCTION ACTIVITIES WITHIN MS4* AREAS

| CONSTRUCTION SITE LOCATION | DATE | WEATHER CONDITIONS | CONSTRUCTION ACTIVITY | TOWN ENGINEER | BLDG. DEPT. SMO | NOI | SWPPP REPORTS | SWPPP PRACTICES PRESENT | GENERAL S SITE CONDITIONS |
|-------------------------------|------|-----------------------|--------------------------|------------------|--------------------|-----|------------------|-------------------------------|---------------------------------|
| | | | | | | | | | |

* NOT TO REPLACE ANY REQUIRED OBSERVATION FROM OWNER – SUPPLEMENTAL ONLY FOR GENERAL TOWN PURPOSES

Maintaining Water Quality

Yes No NA

- Is there an increase in turbidity causing a substantial visible contrast to natural conditions?
- Is there residue from oil and floating substances, visible oil film, or globules or grease?
- All disturbance is within the limits of the approved plans.
- Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

Housekeeping

1. General Site Conditions

Yes No NA

- Is construction site litter and debris appropriately managed?
- Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
- Is construction impacting the adjacent property?
- Is dust adequately controlled?

2. Temporary Stream Crossing

Yes No NA

- Maximum diameter pipes necessary to span creek without dredging are installed.
- Installed non-woven geotextile fabric beneath approaches.
- Is fill composed of aggregate (no earth or soil)?
- Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

Runoff Control Practices

1. Excavation Dewatering

Yes No NA

- Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.
- Clean water from upstream pool is being pumped to the downstream pool.
- Sediment laden water from work area is being discharged to a silt-trapping device.
- Constructed upstream berm with one-foot minimum freeboard.

2. Level Spreader

Yes No NA

- Installed per plan.
- Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
- Flow sheets out of level spreader without erosion on downstream edge.

3. Interceptor Dikes and Swales

Yes No NA

- Installed per plan with minimum side slopes 2H:1V or flatter.
- Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
- Sediment-laden runoff directed to sediment trapping structure

CONSTRUCTION DURATION INSPECTIONS
Runoff Control Practices (continued)

Page 3 of _____

4. Stone Check Dam

Yes No NA

- Is channel stable? (flow is not eroding soil underneath or around the structure).
 Check is in good condition (rocks in place and no permanent pools behind the structure).
 Has accumulated sediment been removed?.

5. Rock Outlet Protection

Yes No NA

- Installed per plan.
 Installed concurrently with pipe installation.

Soil Stabilization

1. Topsoil and Spoil Stockpiles

Yes No NA

- Stockpiles are stabilized with vegetation and/or mulch.
 Sediment control is installed at the toe of the slope.

2. Revegetation

Yes No NA

- Temporary seedings and mulch have been applied to idle areas.
 4 inches minimum of topsoil has been applied under permanent seedings

Sediment Control

1. Stabilized Construction Entrance

Yes No NA

- Stone is clean enough to effectively remove mud from vehicles.
 Installed per standards and specifications?
 Does all traffic use the stabilized entrance to enter and leave site?
 Is adequate drainage provided to prevent ponding at entrance?

2. Silt Fence

Yes No NA

- Installed on Contour, 10 feet from toe of slope (not across conveyance channels).
 Joints constructed by wrapping the two ends together for continuous support.
 Fabric buried 6 inches minimum.
 Posts are stable, fabric is tight and without rips or frayed areas.
Sediment accumulation is ___% of design capacity.

Sediment Control (continued)

3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated practices)

Yes No NA

- Installed concrete blocks lengthwise so open ends face outward, not upward.
 - Placed wire screen between No. 3 crushed stone and concrete blocks.
 - Drainage area is 1acre or less.
 - Excavated area is 900 cubic feet.
 - Excavated side slopes should be 2:1.
 - 2" x 4" frame is constructed and structurally sound.
 - Posts 3-foot maximum spacing between posts.
 - Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing
 - Posts are stable, fabric is tight and without rips or frayed areas.
- Sediment accumulation ___% of design capacity.

4. Temporary Sediment Trap

Yes No NA

- Outlet structure is constructed per the approved plan or drawing.
 - Geotextile fabric has been placed beneath rock fill.
- Sediment accumulation is ___% of design capacity.

5. Temporary Sediment Basin

Yes No NA

- Basin and outlet structure constructed per the approved plan.
 - Basin side slopes are stabilized with seed/mulch.
 - Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
- Sediment accumulation is ___% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design. Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

VILLAGE OF WALDEN
**VILLAGE OWNED ANNUAL
VEHICLE INSPECTION**

| | | |
|---|-------|--------------------|
| Inspected by: | Date: | Time: |
| Location: | | |
| Description of vehicle: | | |
| License Plate Number: | | |
| DOT Placard Present: <input type="checkbox"/> Yes <input type="checkbox"/> No | | Placard ID Number: |

| |
|---|
| General Description |
| Manufacturer & Year: |
| Body: |
| Engine: |
| Paint: |
| Tires: |
| Misc: |
| |
| Description of Any Leaks |
| Rate <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial |
| Frequency: <input type="checkbox"/> Intermittent <input type="checkbox"/> Steady |
| Impacted Area(s): <i>Check all that apply</i> <input type="checkbox"/> Roadway Surface <input type="checkbox"/> Catch Basin <input type="checkbox"/> Stream <input type="checkbox"/> Earthen Material (Grass, Soil, Etc.) <input type="checkbox"/> Other: |
| Comments/Notes: |

| |
|--|
| Action Taken |
| <input type="checkbox"/> Notified Town Highway Superintendent; truck stopped and leak attended to. |
| <input type="checkbox"/> Scheduled repair Date: |
| <input type="checkbox"/> Repair Completed Date: |
| <input type="checkbox"/> Action Taken Reason: |
| <input type="checkbox"/> Other: |
| Comments/Notes: |

FORM COMPLETED BY:

| | |
|---------------|-------|
| Name (print): | Date: |
| Signature: | |

Lanc & Tully Engineering & Surveying, P.C.

Village of Walden Department of Public Works- Bradley Lane
Quarterly Municipal Facility Site Compliance Inspection Checklist

Department: _____ Phone Number: _____
Inspector: _____ Date: _____

| Question | | Y | N | N/A | (If "No")Resolution |
|--------------------------|--|---|---|-----|----------------------|
| General | | | | | |
| 1. | Has the employee performing this inspection had activity-specific stormwater BMP training this year? | | | | |
| 2. | Are activity-specific BMPs in place? | | | | |
| 3. | Is your facility reasonably clean and free of litter and debris? | | | | |
| 4. | Are parking lots reasonably clean and free of debris? If sweeping the lot, note estimated substance and weight of debris in tons. | | | | |
| 5. | Is landscaped area irrigation contained within the landscaped area? | | | | |
| 6. | Are pesticides/herbicides/fertilizers minimized where feasible? | | | | |
| 7. | Are storm drain inlets clean and free of debris? | | | | |
| 8. | If cleaning of the storm drain was needed, note estimated substance and weight of debris (in tons) since last inspection. | | | | |
| 9. | Is area absent of any evidence of a discharge, spill, and or leak? | | | | |
| 10. | If a minor spill is observed entering the storm drain system during the inspection, have you reported it to the Town Stormwater Management Office and the NYSDEC | | | | |
| Smoke Detectors | | | | | |
| 11. | Is there a working smoke detector on each level? | | | | |
| Fire Extinguisher | | | | | |
| 12. | Is there a working fire extinguisher on each level? Date of required inspection? | | | | |
| Safety Equipment | | | | | |
| 13. | Is the safety equipment current and accessible? | | | | |

Question

Y N N/A (If "No") Resolution

| | | | | | |
|---|--|--|--|--|--|
| 14. | Is the first aid kit current and accessible? | | | | |
| 15. | Is the MSDS up to date? | | | | |
| Trash storage areas | | | | | |
| 16. | Is area reasonably clean and uncluttered? | | | | |
| 17. | Are trash cans and garbage bins kept covered? | | | | |
| 18. | Is the number and placement of the trash cans sufficient for your facility? | | | | |
| Fueling Areas | | | | | |
| 19. | Is a stocked spill kit available at fuel island? | | | | |
| 20. | Is area clean and free of spills? If spill is observed, clean using dry methods. | | | | |
| Vehicle/Equipment Maintenance Area | | | | | |
| 21. | Is work area reasonably clean? | | | | |
| 22. | Are drip pans readily available for leaking vehicles? | | | | |
| 23. | Are spill containment materials and stocked cleanup kits readily available? | | | | |
| 24. | Are maintenance activities contained within the designated area? | | | | |
| 25. | Are bulk hazardous materials/liquids stored outside in secondary containment? | | | | |
| Bathroom | | | | | |
| 26. | Is there a bathroom present? | | | | |
| 27. | Is there are least one permanently installed light fixture? | | | | |
| 28. | Is the bathroom free from electrical hazards? | | | | |
| 29. | Are all windows and doors that are accessible from the outside lockable? | | | | |

Question

Y N N/A (If "No") Resolution

| | | | | | |
|--|--|--|--|--|--|
| 30. | Are all windows free of signs of deterioration or missing or broken out panes? | | | | |
| 31. | Is the ceiling sound and free from hazardous defects? | | | | |
| 32. | Are the walls sound and free from hazardous defects? | | | | |
| 33. | Is the floor sound and free from hazardous defects? | | | | |
| Materials Loading/Unloading and Storage Areas | | | | | |
| 34. | Is the area reasonably clean and free of litter, debris and loose material? | | | | |
| 35. | Is materials storage area covered? | | | | |
| 36. | Are materials and stocked cleanup kits readily available? | | | | |
| 37. | If outdoors, is water from surrounding areas prevented from reaching material storage areas? | | | | |
| 38. | Are bulk hazardous materials/liquids stored outside in secondary containment? | | | | |
| Salt Storage Area | | | | | |
| 39. | Is the area reasonably clean and free of litter, debris and loose material? | | | | |
| 40. | Is materials storage area covered? | | | | |
| 41. | Are materials and stocked cleanup kits readily available? | | | | |
| 42. | If outdoors, is water from surrounding areas prevented from reaching material storage areas? | | | | |

Question

Y N N/A (If "No") Resolution

| | | | | | |
|---|--|--|--|--|--|
| 43. | Are bulk hazardous materials/liquids stored outside in secondary containment? | | | | |
| Building Exterior | | | | | |
| 44. | Is the foundation sound and free from hazards? | | | | |
| 45. | Are all the exterior stairs, rails, and porches sound and free from hazards? | | | | |
| 46. | Are the roof, gutters and downspouts sound and free from hazards? | | | | |
| 47. | Are exterior surfaces sound and free from hazards? | | | | |
| 48. | Is the chimney sound and free from hazards? | | | | |
| Other Important Areas For Inspection | | | | | |
| 49. | Are the BMP's installed properly? | | | | |
| 50. | Are BMP's in good working condition? If no, they need to be replaced. | | | | |
| 51. | For any ineffective BMP's (i.e., the wrong BMP is used), describe an effective replacement BMP and update your URMP section. | | | | |

Appendix I

Certificates of Attendance for Training of Village Employees

VILLAGE OF WALDEN
TRAINING LOG

| DATE | DEPARTMENT | PERSONNEL | SEMINAR TITLE | LOCATION | CREDIT HOURS | GENERAL COMMENTS |
|------|------------|-----------|---------------|----------|--------------|------------------|
| | | | | | | |

Appendix J

Latest MS4 Annual Report

MS4 Annual Report Cover Page

MCC form for period ending March 9,

| | | | |
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|---|---|---|---|

Provide SPDES ID of each permitted MS4 included in this report.

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MS4 Municipal Compliance Certification(MCC) Form

MCC form for period ending March 9, 2023

Name of MS4 VILLAGE OF WALDEN

SPDES ID
N Y R 2 0 A 2 9 8

Section 2 - Contact Information

Important Instructions - Please Read

Contact information must be provided for each of the following positions as indicated below:

1. Principal Executive Officer, Chief Elected Official or other qualified individual (per GP-0-08-002 Part VI.J).
2. Duly Authorized Representative (Information for this contact must only be submitted if a Duly Authorized Representative is signing this form)
3. The Local Stormwater Public Contact (required per GP-0-08-002 Part VII.A.2.c & Part VIII.A.2.c).
4. The Stormwater Management Program (SWMP) Coordinator (Individual responsible for coordination/implementation of SWMP).
5. Report Preparer (Consultants may provide company name in the space provided).

A separate sheet must be submitted for each position listed above unless more than one position is filled by the same individual. If one individual fills multiple roles, provide the contact information once and check all positions that apply to that individual.

If a new Duly Authorized Representative is signing this report, their contact information must be provided and a signature authorization form, signed by the Principal Executive Officer or Chief Elected Official must be attached.

For each contact, select all that apply:

- Principal Executive Officer/Chief Elected Official
- Duly Authorized Representative
- Local Stormwater Public Contact
- Stormwater Management Program (SWMP) Coordinator
- Report Preparer

First Name J O H N MI Last Name R A M O S

Title M A Y O R

Address O N E M U N I C I P A L S Q U A R E

City W A L D E N State N Y Zip 1 2 5 8 6 -

eMail N / A

Phone (8 4 5) 7 7 8 - 2 1 7 7 County O R A N G E

MS4 Municipal Compliance Certification(MCC) Form

MCC form for period ending March 9, 2023

Name of MS4 VILLAGE OF WALDEN

SPDES ID
N Y R 2 0 A 2 9 8

Section 2 - Contact Information

Important Instructions - Please Read

Contact information must be provided for *each* of the following positions as indicated below:

- 1. Principal Executive Officer, Chief Elected Official or other qualified individual (per GP-0-08-002 Part VI.J).
- 2. Duly Authorized Representative (Information for this contact must only be submitted if a Duly Authorized Representative is signing this form)
- 3. The Local Stormwater Public Contact (required per GP-0-08-002 Part VII.A.2.c & Part VIII.A.2.c).
- 4. The Stormwater Management Program (SWMP) Coordinator (Individual responsible for coordination/implementation of SWMP).
- 5. Report Preparer (Consultants may provide company name in the space provided).

A separate sheet must be submitted for each position listed above unless more than one position is filled by the same individual. If one individual fills multiple roles, provide the contact information once and check all positions that apply to that individual.

If a new Duly Authorized Representative is signing this report, their contact information must be provided and a signature authorization form, signed by the Principal Executive Officer or Chief Elected Official must be attached.

For each contact, select all that apply:

- Principal Executive Officer/Chief Elected Official
- Duly Authorized Representative
- Local Stormwater Public Contact
- Stormwater Management Program (SWMP) Coordinator
- Report Preparer

First Name J O H N MI Last Name R E V E L L A

Title V I L L A G E M A N A G E R

Address O N E M U N I C I P A L S Q U A R E

City W A L D E N State N Y Zip 1 2 5 8 6 -

eMail M A N A G E R @ V I L L A G E O F W A L D E N . O R G

Phone (8 4 5) 7 7 8 - 2 1 7 7 County O R A N G E

MS4 Municipal Compliance Certification(MCC) Form

MCC form for period ending March 9, 2023

Name of MS4

SPDES ID
N Y R 2 0 A 2 9 8

Section 2 - Contact Information

Important Instructions - Please Read

Contact information must be provided for *each* of the following positions as indicated below:

1. Principal Executive Officer, Chief Elected Official or other qualified individual (per GP-0-08-002 Part VI.J).
2. Duly Authorized Representative (Information for this contact must only be submitted if a Duly Authorized Representative is signing this form)
3. The Local Stormwater Public Contact (required per GP-0-08-002 Part VII.A.2.c & Part VIII.A.2.c).
4. The Stormwater Management Program (SWMP) Coordinator (Individual responsible for coordination/implementation of SWMP).
5. Report Preparer (Consultants may provide company name in the space provided).

A separate sheet must be submitted for each position listed above unless more than one position is filled by the same individual. If one individual fills multiple roles, provide the contact information once and check all positions that apply to that individual.

If a new Duly Authorized Representative is signing this report, their contact information must be provided and a signature authorization form, signed by the Principal Executive Officer or Chief Elected Official must be attached.

For each contact, select all that apply:

- Principal Executive Officer/Chief Elected Official
- Duly Authorized Representative
- Local Stormwater Public Contact
- Stormwater Management Program (SWMP) Coordinator
- Report Preparer

First Name MI Last Name

Title

Address

City State Zip

eMail

Phone County

MS4 Municipal Compliance Certification(MCC) Form

MCC form for period ending March 9, 2023

Name of MS4

SPDES ID
N Y R 2 0 A 2 9 8

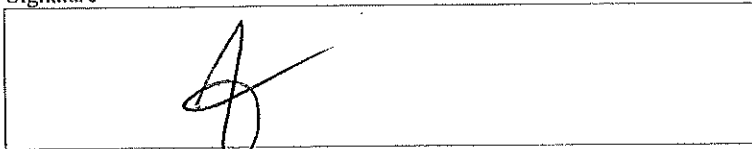
Section 4 - Certification Statement

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

This form must be signed by either a principal executive officer or ranking elected official, or duly authorized representative of that person as described in GP-0-08-002 Part VI.J.

First Name MI Last Name

Title (Clearly print title of individual signing report)

Signature 

Date

The annual report form and any attachments can be sent to the DEC Central Office clicking the Submit Form link below, or by sending it directly to: MS4compliance@dec.ny.gov. All submissions must include the SPDES ID in the title and must be complete before hitting the Submit Form link below:

Submit Form

If unable to submit electronically, hardcopy submissions can be sent to:

Bureau of Water Compliance
Division of Water
4th Floor
625 Broadway
Albany, New York 12233-3505

MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9,

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If submitting this form as part of a joint report on behalf of a coalition leave SPDES ID blank.

Name of MS4/Coalition

VILLAGE OF WALDEN

SPDES ID

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4. Evaluating Progress Toward Measurable Goals MCM 1

Use this page to report on your progress and project plans toward achieving measurable goals identified in your Stormwater Management Program Plan (SWMPP), including requirements in Part III.C.1. Submit additional pages as needed.

A. Briefly summarize the Measurable Goal identified in the SWMPP in this reporting period.

Public participation at Village Board and Village Planning Board meetings

B. Briefly summarize the observations that indicated the overall effectiveness of this Measurable Goal.

Record is kept of all stormwater related comments at public meetings. Concerns raised during site plan and SEQR review are addressed by the Planning Board. 24 public meetings were held by the Village Board and 8 Planning Board meetings this reporting period.

C. How many times was this observation measured or evaluated in this reporting period?

| | | | |
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(ex.: samples/participants/events)

D. Has your MS4 made progress toward this Measurable Goal during this reporting period?

Yes No

E. Is your MS4 on schedule to meet the deadline set forth in the SWMPP?

Yes No

F. Briefly summarize the stormwater activities planned to meet the goals of this MCM during the next reporting cycle (including an implementation schedule).

Comments on stormwater management should continue to be recorded and monitored at all public board meetings.

MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9, 2023

If submitting this form as part of a joint report on behalf of a coalition leave SPDES ID blank.

Name of MS4/Coalition: VILLAGE OF WALDEN

SPDES ID: NYR20A298

2. URL(s) con't.:

Please provide specific address(es) where notice(s) can be accessed - not home page.

URL

VILLAGE OF WALDEN .ORG / government /
village-boards / board-of-trustees
and-mayor / meeting-agenda-minutes

URL

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MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9, 2023

If submitting this form as part of a joint report on behalf of a coalition leave SPDES ID blank.

Name of MS4/Coalition: VILLAGE OF WALDEN

SPDES ID: NYR20A298

3. Where can the public access copies of this annual report, Stormwater Management Program SWMP) Plan and submit comments on those documents?

Enter address/contact info and select radio button to indicate which document is available and whether comments may be submitted at that location. Submit additional pages as needed.

MS4/Coalition Office Annual Report SWMP Plan Comments

Department: V I L L A G E C L E R K ' S O F F I C E

Address: O N E M U N I C I P A L S Q U A R E

City: W A L D E N N Y Zip: 1 2 5 8 6 -

Phone: () -

Library Annual Report SWMP Plan Comments

Address:

City: Zip: -

Phone: () -

Other Annual Report SWMP Plan Comments

Address: 3 3 S C O F I E L D S T R E E T

City: W A L D E N N Y Zip: 1 2 5 8 6 -

Phone: () -

Web Page URL: Annual Report SWMP Plan Comments

W W W . V I L L A G E O F W A L D E N . O R G /
D E A R T M E N T S / P U B L I C - W O R K S

Please provide specific address of page where report can be accessed - not home page.

eMail Comments

I N F O @ V I L L A G E O F W A L D E N . O R G

MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9,

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If submitting this form as part of a joint report on behalf of a coalition leave SPDES ID blank.

Name of MS4/Coalition

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4.a. If this report was made available on the internet, what date was it posted?

Leave blank if this report was not posted on the internet.

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4.b. For how many days was/will this report be posted?

| | | |
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If submitting a report for single MS4, answer 5.a.. If submitting a joint report, answer 5.b..

5.a. Was an Annual Report public meeting held in this reporting period?

Yes No

If Yes, what was the date of the meeting?

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If No, is one planned?

Yes No

5.b. Was an Annual Report public meeting held for all MS4s contributing to this report during this reporting period?

Yes No

If No, is one planned for each?

Yes No

6. Were comments received during this reporting period?

Yes No

If Yes, attach comments, responses and changes made to SWMP in response to comments to this report.

MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9,

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If submitting this form as part of a joint report on behalf of a coalition leave SPDES ID blank.

Name of MS4/Coalition

VILLAGE OF WALDEN

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7. Evaluating Progress Toward Measurable Goals MCM 2

Use this page to report on your progress and project plans toward achieving measurable goals identified in your Stormwater Management Program Plan (SWMPP), including requirements in Part III.C.1. Submit additional pages as needed.

A. Briefly summarize the Measurable Goal identified in the SWMPP in this reporting period.

Attendance and comments recorded at Village Planning Board meetings.

B. Briefly summarize the observations that indicated the overall effectiveness of this Measurable Goal.

Comments, questions and suggestions on individual SWPPPs and the Village's Annual Report or practices are documented, evaluated by the Village Engineer and incorporated into plans where appropriate. One SWPPP was reviewed by the planning board this reporting period.

C. How many times was this observation measured or evaluated in this reporting period?

| | | | |
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| | | | 1 |
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(ex.: samples/participants/events)

D. Has your MS4 made progress toward this measurable goal during this reporting period?

Yes No

E. Is your MS4 on schedule to meet the deadline set forth in the SWMPP?

Yes No

F. Briefly summarize the stormwater activities planned to meet the goals of this MCM during the next reporting cycle (including an implementation schedule).

The Village will continue to monitor attendance and comments at public meetings.

MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9,

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If submitting this form as part of a joint report on behalf of a coalition leave SPDES ID blank.

Name of MS4/Coalition

VILLAGE OF WALDEN

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12. Evaluating Progress Toward Measurable Goals MCM 3

Use this page to report on your progress and project plans toward achieving measurable goals identified in your Stormwater Management Program Plan (SWMPP), including requirements in Part III.C.1. Submit additional pages as needed.

A. Briefly summarize the Measurable Goal identified in the SWMPP in this reporting period.

Dry weather reconnaissance of all stormwater outfalls and continue to implement illicit discharge program.

B. Briefly summarize the observations that indicated the overall effectiveness of this Measurable Goal.

Village Building Inspector requires correction of any illicit discharges identified. None were identified this period.

C. How many times was this observation measured or evaluated in this reporting period?

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(ex.: samples/participants/events)

D. Has your MS4 made progress toward this measurable goal during this reporting period?

Yes No

E. Is your MS4 on schedule to meet the deadline set forth in the SWMPP?

Yes No

F. Briefly summarize the stormwater activities planned to meet the goals of this MCM during the next reporting cycle (including an implementation schedule).

illicit discharges are corrected as identified by the Village Building Inspector or DPW. Dry weather screening will continue.

MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9,

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If submitting this form as part of a joint report on behalf of a coalition leave SPDES ID blank.

Name of MS4/Coalition

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Minimum Control Measures 4 and 5.
Construction Site and Post-Construction Control

The information in this section is being reported (check one):

- On behalf of an individual MS4
- On behalf of a coalition

How many MS4s contributed to this report?

| | | |
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1a. Has each MS4 contributing to this report adopted a law, ordinance or other regulatory mechanism that provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities? Yes No

1b. Has each Town, City and/or Village contributing to this report documented that the law is equivalent to a NYSDEC Sample Local Law for Stormwater Management and Erosion and Sediment Control through either an attorney certification or using the NYSDEC Gap Analysis Workbook? Yes No NT

If Yes, Towns, Cities and Villages provide date of equivalent NYS Sample Local Law.
 09/2004 03/2006 NT

2. Does your MS4/Coalition have a SWPPP review procedure in place? Yes No

3. How many Construction Stormwater Pollution Prevention Plans (SWPPPs) have been reviewed in this reporting period?

| | | |
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4. Does your MS4/Coalition have a mechanism for receipt and consideration of public comments related to construction SWPPPs? Yes No NT

If Yes, how many public comments were received during this reporting period?

| | | |
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5. Does your MS4/Coalition provide education and training for contractors about the local SWPPP process? Yes No

6. Identify which of the following types of enforcement actions you used during the reporting period for construction activities, indicate the number of actions, or note those for which you do not have authority:

- | | | | | | | | | | |
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| | | | | | | | | | |
| <input checked="" type="radio"/> Stop Work Orders | # | <table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> | | | | | | 1 | <input type="radio"/> No Authority |
| | | | | | | | | | |
| <input type="radio"/> Criminal Actions | # | <table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> | | | | | | 0 | <input type="radio"/> No Authority |
| | | | | | | | | | |
| <input type="radio"/> Termination of Contracts | # | <table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> | | | | | | | <input checked="" type="radio"/> No Authority |
| | | | | | | | | | |
| <input type="radio"/> Administrative Fines | # | <table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> | | | | | | 0 | <input type="radio"/> No Authority |
| | | | | | | | | | |
| <input type="radio"/> Civil Penalties | # | <table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> | | | | | | 0 | <input type="radio"/> No Authority |
| | | | | | | | | | |
| <input type="radio"/> Administrative Orders | # | <table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> | | | | | | 0 | <input type="radio"/> No Authority |
| | | | | | | | | | |
| <input type="radio"/> Enforcement Actions or Sanctions | # | <table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> | | | | | | 0 | |
| | | | | | | | | | |
| <input type="radio"/> Other | # | <table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table> | | | | | | | <input type="radio"/> No Authority |
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MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9,

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If submitting this form as part of a joint report on behalf of a coalition leave SPDES ID blank.

Name of MS4/Coalition

VILLAGE OF WALDEN

SPDES ID

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Minimum Control Measure 4. Construction Site Stormwater Runoff Control

The information in this section is being reported (check one):

- On behalf of an individual MS4
 On behalf of a coalition

How many MS4s contributed to this report?

| | | |
|--|--|--|
| | | |
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1. How many construction projects have been authorized for disturbances of one acre or more during this reporting period?

| | | |
|--|--|---|
| | | 1 |
|--|--|---|

 2. How many construction projects disturbing at least one acre were active in your jurisdiction during this reporting period?

| | | |
|--|--|---|
| | | 2 |
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 3. What percent of active construction sites were inspected during this reporting period? NT

| | | |
|---|---|---|
| 1 | 0 | 0 |
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 %

 4. What percent of active construction sites were inspected more than once? NT

| | | |
|---|---|---|
| 1 | 0 | 0 |
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 %

 5. Do all inspectors working on behalf of the MS4s contributing to this report use the NYS Construction Stormwater Inspection Manual? Yes No NT

 6. Does your MS4/Coalition provide public access to Stormwater Pollution Prevention Plans (SWPPPs) of construction projects that are subject to MS4 review and approval? Yes No NT
- If your MS4 is Non-Traditional, are SWPPPs of construction projects made available for public review? Yes No

If Yes, use the following page to identify location(s) where SWPPPs can be accessed.

MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9,

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If submitting this form as part of a joint report on behalf of a coalition leave SPDES ID blank.

Name of MS4/Coalition

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SPDES ID

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7. Evaluating Progress Toward Measurable Goals MCM 4

Use this page to report on your progress and project plans toward achieving measurable goals identified in your Stormwater Management Program Plan (SWMPP), including requirements in Part III.C.1. Submit additional pages as needed.

A. Briefly summarize the Measurable Goal identified in the SWMPP in this reporting period.

SWPPPs reviewed by Village Engineer as part of Planning Board review. Village Engineer and Building Inspector conduct weekly inspections of active construction sites.

B. Briefly summarize the observations that indicated the overall effectiveness of this Measurable Goal.

All active construction sites with over 1 acre of disturbance are inspected regularly. Reports are prepared after each weekly inspection and are on file with the Village. There were 2 such sites this reporting period.

C. How many times was this observation measured or evaluated in this reporting period?

| | | | |
|--|--|--|---|
| | | | 2 |
|--|--|--|---|

(ex.: samples/participants/events)

D. Has your MS4 made progress toward this measurable goal during this reporting period?

Yes No

E. Is your MS4 on schedule to meet the deadline set forth in the SWMPP?

Yes No

F. Briefly summarize the stormwater activities planned to meet the goals of this MCM during the next reporting cycle (including an implementation schedule).

SWPPP reviews and inspection of active construction sites will continue

MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9,

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If submitting this form as part of a joint report on behalf of a coalition leave SPDES ID blank.

Name of MS4/Coalition

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| VILLAGE OF WALDEN |
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Minimum Control Measure 5. Post-Construction Stormwater Management

The information in this section is being reported (check one):

- On behalf of an individual MS4
- On behalf of a coalition

How many MS4s contributed to this report?

| | | |
|--|--|--|
| | | |
|--|--|--|

1. How many and what type of post-construction stormwater management practices has your MS4/Coalition inventoried, inspected and maintained in this reporting period?

| | # Inventoried | # Inspections | # Times Maintained | | | | | | | | | |
|---|---|------------------|-----------------------|---|---|--|--|---|---|--|--|---|
| <input type="radio"/> Alternative Practices | <table border="1"><tr><td> </td><td> </td><td> </td></tr></table> | | | | <table border="1"><tr><td> </td><td> </td><td> </td></tr></table> | | | | <table border="1"><tr><td> </td><td> </td><td> </td></tr></table> | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| <input checked="" type="radio"/> Filter Systems | <table border="1"><tr><td> </td><td> </td><td>1</td></tr></table> | | | 1 | <table border="1"><tr><td> </td><td> </td><td>1</td></tr></table> | | | 1 | <table border="1"><tr><td> </td><td> </td><td>1</td></tr></table> | | | 1 |
| | | 1 | | | | | | | | | | |
| | | 1 | | | | | | | | | | |
| | | 1 | | | | | | | | | | |
| <input type="radio"/> Infiltration Basins | <table border="1"><tr><td> </td><td> </td><td> </td></tr></table> | | | | <table border="1"><tr><td> </td><td> </td><td> </td></tr></table> | | | | <table border="1"><tr><td> </td><td> </td><td> </td></tr></table> | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| <input type="radio"/> Open Channels | <table border="1"><tr><td> </td><td> </td><td> </td></tr></table> | | | | <table border="1"><tr><td> </td><td> </td><td> </td></tr></table> | | | | <table border="1"><tr><td> </td><td> </td><td> </td></tr></table> | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| <input checked="" type="radio"/> Ponds | <table border="1"><tr><td> </td><td> </td><td>1</td></tr></table> | | | 1 | <table border="1"><tr><td> </td><td> </td><td>1</td></tr></table> | | | 1 | <table border="1"><tr><td> </td><td> </td><td>1</td></tr></table> | | | 1 |
| | | 1 | | | | | | | | | | |
| | | 1 | | | | | | | | | | |
| | | 1 | | | | | | | | | | |
| <input type="radio"/> Wetlands | <table border="1"><tr><td> </td><td> </td><td> </td></tr></table> | | | | <table border="1"><tr><td> </td><td> </td><td> </td></tr></table> | | | | <table border="1"><tr><td> </td><td> </td><td> </td></tr></table> | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| <input type="radio"/> Other | <table border="1"><tr><td> </td><td> </td><td> </td></tr></table> | | | | <table border="1"><tr><td> </td><td> </td><td> </td></tr></table> | | | | <table border="1"><tr><td> </td><td> </td><td> </td></tr></table> | | | |
| | | | | | | | | | | | | |
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| | | | | | | | | | | | | |

2. Do you use an electronic tool (e.g. GIS, database, spreadsheet) to track post-construction BMPs, inspections and maintenance? Yes No

3. What types of non-structural practices have been used to implement Low Impact Development/Better Site Design/Green Infrastructure principles?

- Building Codes Municipal Comprehensive Plans
- Overlay Districts Open Space Preservation Program
- Zoning Local Law or Ordinance
- None Land Use Regulation/Zoning
- Watershed Plans Other Comprehensive Plan

Other:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|--|---|---|---|---|---|--|---|---|---|---|---|---|--|---|---|---|---|---|---|---|--|
| P | L | A | N | N | I | N | G | | B | O | A | R | D | | R | E | V | I | E | W | | P | R | O | C | E | S | S | |
|---|---|---|---|---|---|---|---|--|---|---|---|---|---|--|---|---|---|---|---|---|--|---|---|---|---|---|---|---|--|

MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9,

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Name of MS4/Coalition

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| VILLAGE OF WALDEN |
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SPDES ID

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4a. Are the MS4s contributing to this report involved in a regional/watershed wide planning effort?
 Yes No

4b. Does the MS4 have a banking and credit system for stormwater management practices?
 Yes No

4c. Do the SWMP Plans for each MS4 contributing to this report include a protocol for evaluation and approval of banking and credit of alternative siting of a stormwater management practice?
 Yes No

4d. How many stormwater management practices have been implemented as part of this system in this reporting period?

| | | |
|--|--|---|
| | | 0 |
|--|--|---|

5. What percent of municipal officials/MS4 staff responsible for program implementation attended training on Low Impace Development (LID), Better Site Design (BSD) and other Green Infrastructure principles in this reporting period?

| | | |
|--|---|---|
| | 2 | 5 |
|--|---|---|

 %

MS4 Annual Report Form

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Name of MS4/Coalition

VILLAGE OF WALDEN

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6. Evaluating Progress Toward Measurable Goals MCM 5

Use this page to report on your progress and project plans toward achieving measurable goals identified in your Stormwater Management Program Plan (SWMPP), including requirements in Part III.C.1. Submit additional pages as needed.

A. Briefly summarize the Measurable Goal identified in the SWMPP in this reporting period.

Regular maintenace of stormwater facilities

B. Briefly summarize the observations that indicated the overall effectiveness of this Measurable Goal.

Maintenance of all stormwater facilities and conveyance system are being conducted on a regular basis. No issues were reported this period.

C. How many times was this observation measured or evaluated in this reporting period?

| | | | |
|--|--|--|---|
| | | | 2 |
|--|--|--|---|

(ex.: samples/participants/events)

D. Has your MS4 made progress toward this measurable goal during this reporting period?

Yes No

E. Is your MS4 on schedule to meet the deadline set forth in the SWMPP?

Yes No

F. Briefly summarize the stormwater activities planned to meet the goals of this MCM during the next reporting cycle (including an implementation schedule).

Continue inspections and maintenance, repair or clean out where necessary

MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9,

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Name of MS4/Coalition

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Minimum Control Measure 6. Stormwater Management for Municipal Operations

The information in this section is being reported (check one):

- On behalf of an individual MS4
- On behalf of a coalition

How many MS4s contributed to this report?

| | | |
|--|--|--|
| | | |
|--|--|--|

1. Choose/list each municipal operation/facility that contributes or may potentially contribute Pollutants of Concern to the MS4 system. For each operation/facility indicate whether the operation/facility has been addressed in the MS4's/Coalition's Stormwater Management Program(SWMP) Plan and whether a self-assessment has been performed during the reporting period. A self-assessment is performed to: 1) determine the sources of pollutants potentially generated by the permittee's operations and facilities; 2) evaluate the effectiveness of existing programs and 3) identify the municipal operations and facilities that will be addressed by the pollution prevention and good housekeeping program, if it's not done already.

| <u>Operation/Activity/Facility</u> | <u>Addressed in SWMP?</u> | | <u>Self-Assessment Operation/Activity/Facility performed within the past 3 years?</u> | |
|---|--------------------------------------|-------------------------------------|---|-------------------------------------|
| | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> Yes | <input type="radio"/> No |
| Street Maintenance..... | <input checked="" type="radio"/> Yes | <input type="radio"/> No | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Bridge Maintenance..... | <input type="radio"/> Yes | <input checked="" type="radio"/> No | <input type="radio"/> Yes | <input checked="" type="radio"/> No |
| Winter Road Maintenance..... | <input checked="" type="radio"/> Yes | <input type="radio"/> No | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Salt Storage..... | <input checked="" type="radio"/> Yes | <input type="radio"/> No | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Solid Waste Management..... | <input checked="" type="radio"/> Yes | <input type="radio"/> No | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| New Municipal Construction and Land Disturbance.. | <input type="radio"/> Yes | <input checked="" type="radio"/> No | <input type="radio"/> Yes | <input checked="" type="radio"/> No |
| Right of Way Maintenance..... | <input checked="" type="radio"/> Yes | <input type="radio"/> No | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Marine Operations..... | <input type="radio"/> Yes | <input checked="" type="radio"/> No | <input type="radio"/> Yes | <input checked="" type="radio"/> No |
| Hydrologic Habitat Modification..... | <input type="radio"/> Yes | <input checked="" type="radio"/> No | <input type="radio"/> Yes | <input checked="" type="radio"/> No |
| Parks and Open Space..... | <input checked="" type="radio"/> Yes | <input type="radio"/> No | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Municipal Building..... | <input checked="" type="radio"/> Yes | <input type="radio"/> No | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Stormwater System Maintenance..... | <input checked="" type="radio"/> Yes | <input type="radio"/> No | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Vehicle and Fleet Maintenance..... | <input checked="" type="radio"/> Yes | <input type="radio"/> No | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Other..... | <input type="radio"/> Yes | <input checked="" type="radio"/> No | <input type="radio"/> Yes | <input checked="" type="radio"/> No |

MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9,

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Name of MS4/Coalition

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| VILLAGE OF WALDEN |
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SPDES ID

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2. Provide the following information about municipal operations good housekeeping programs:

- Parking Lots Swept (Number of acres X Number of times swept) # Acres

| | | | | |
|--|--|--|--|---|
| | | | | 2 |
|--|--|--|--|---|
- Streets Swept (Number of miles X Number of times swept) # Miles

| | | | | |
|--|--|---|---|---|
| | | 8 | 3 | 6 |
|--|--|---|---|---|
- Catch Basins Inspected and Cleaned Where Necessary #

| | | | | |
|--|--|---|---|---|
| | | 6 | 0 | 0 |
|--|--|---|---|---|
- Post Construction Control Stormwater Management Practices Inspected and Cleaned Where Necessary #

| | | | | |
|--|--|--|--|---|
| | | | | 3 |
|--|--|--|--|---|
- Phosphorus Applied In Chemical Fertilizer # Lbs.

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
|--|--|--|--|--|--|
- Nitrogen Applied In Chemical Fertilizer # Lbs.

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
|--|--|--|--|--|--|
- Pesticide/Herbicide Applied # Acres

| | | | | | | | |
|--|--|--|--|--|--|---|--|
| | | | | | | . | |
|--|--|--|--|--|--|---|--|

(Number of acres to which pesticide/herbicide was applied X Number of times applied to the nearest tenth.)

3. How many stormwater management trainings have been provided to municipal employees during this reporting period?

| | | | | |
|--|--|--|--|---|
| | | | | 1 |
|--|--|--|--|---|

4. What was the date of the last training?

| | |
|---|---|
| 0 | 7 |
|---|---|

 /

| | |
|---|---|
| 1 | 4 |
|---|---|

 /

| | | | |
|---|---|---|---|
| 2 | 0 | 2 | 2 |
|---|---|---|---|

5. How many municipal employees have been trained in this reporting period?

| | | |
|--|--|---|
| | | 1 |
|--|--|---|

6. What percent of municipal employees in relevant positions and departments receive stormwater management training?

| | | |
|--|---|---|
| | 2 | 5 |
|--|---|---|

 %

MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9,

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If submitting this form as part of a joint report on behalf of a coalition leave SPDES ID blank.

Name of MS4/Coalition

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| VILLAGE OF WALDEN |
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SPDES ID

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7. Evaluating Progress Toward Measurable Goals MCM 6

Use this page to report on your progress and project plans toward achieving measurable goals identified in your Stormwater Management Program Plan (SWMPP), including requirements in Part III.C.1. Submit additional pages as needed.

A. Briefly summarize the Measurable Goal identified in the SWMPP in this reporting period.

Cleaning of catch basins and stormwater pipe

B. Briefly summarize the observations that indicated the overall effectiveness of this Measurable Goal.

Catch basins and storm sewer piping are cleaned and repaired where necessary.

C. How many times was this observation measured or evaluated in this reporting period?

| | | | |
|--|---|---|---|
| | 6 | 0 | 0 |
|--|---|---|---|

(ex.: samples/participants/events)

D. Has your MS4 made progress toward this measurable goal during this reporting period?

Yes No

E. Is your MS4 on schedule to meet the deadline set forth in the SWMPP?

Yes No

F. Briefly summarize the stormwater activities planned to meet the goals of this MCM during the next reporting cycle (including an implementation schedule).

The Village will continue regular inspections and maintenance of catch basins and storm sewer piping.

MS4 Annual Report Form

This report is being submitted for the reporting period ending March 9, 2 0 2 3

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Name of MS4/Coalition VILLAGE OF WALDEN

SPDES ID
N Y R 2 0 A 2 9 8

Additional Watershed Improvement Strategy Best Management Practices

The information in this section is being reported (check one):

- On behalf of an individual MS4
- On behalf of a coalition

How many MS4s contributed to this report?

MS4s must answer the questions or check NA as indicated in the table below.

| MS4 Description | Answer | Check NA | (POC) |
|---------------------------------|--------------------------|------------------------|------------------------|
| NYC EOH Watershed | | | |
| Traditional Land Use | 1,2,3,4,5,6,7a-d,8a,8b,9 | 10,11,12 | Phosphorus |
| Traditional Non-Land Use | 1,2,3,4,7a-d,8a,8b,9 | 5,10,11,12 | Phosphorus |
| Non-Traditional | 1,2,77a-d,8a,8b,9 | 3,4,5,10,11,12 | Phosphorus |
| Onondaga Lake Watershed | | | |
| Traditional Land Use | 1,6,7a-d,8a,9 | 2,3,4,5,8b,10,11,12 | Phosphorus |
| Traditional Non-Land Use | 1,6,7a-d,8a,9 | 2,3,4,5,8b,10,11,12 | Phosphorus |
| Non-Traditional | 1,6,7a-d,8a,9 | 2,3,4,5,8b,10,11,12 | Phosphorus |
| Greenwood Lake Watershed | | | |
| Traditional Land Use | 1,4,6,7a-d,8a,9 | 2,3,5,8b,10,11,12 | Phosphorus |
| Traditional Non-Land Use | 1,4,6,7a-d,8a,9 | 2,3,5,8b,10,11,12 | Phosphorus |
| Non-Traditional | 1,4,6,7a-d,8a,9 | 2,3,5,8b,10,11,12 | Phosphorus |
| Oyster Bay | | | |
| Traditional Land Use | 1,4,7a-d,9,10,11,12 | 2,3,5,6,8a,8b | Pathogens |
| Traditional Non-Land Use | 1,4,7a-d,9,10,11,12 | 2,3,5,6,8a,8b | Pathogens |
| Non-Traditional | 1,4,7a-d,9 | 2,3,4,5,8a,8b,10,11,12 | Pathogens |
| Peconic Estuary | | | |
| Traditional Land Use | 1,4,7a-d,8a,9,10,11,12 | 2,3,5,6,8b | Pathogens and Nitrogen |
| Traditional Non-Land Use | 1,4,7a-d,8a,9,10,11,12 | 2,3,5,6,8b | Pathogens and Nitrogen |
| Non-Traditional | 1,4,7a-d,8a,9 | 2,3,4,5,8b,10,11,12 | Pathogens and Nitrogen |
| Oscawana Lake Watershed | | | |
| Traditional Land Use | 1,4,6,7a-d,8a,9 | 2,3,5,8b,10,11,12 | Phosphorus |
| Traditional Non-Land Use | 1,4,6,7a-d,8a,9 | 2,3,5,8b,10,11,12 | Phosphorus |
| Non-Traditional | 1,4,6,7a-d,8a,9 | 2,3,5,8b,10,11,12 | Phosphorus |
| LI 27 Embayments | | | |
| Traditional Land Use | 1,2,3,4,7a-d,9,10,11,12 | 5,6,8a,8b | Pathogens |
| Traditional Non-Land Use | 1,2,3,4,7a-d,9,10,11,12 | 5,6,8a,8b | Pathogens |
| Non-Traditional | 1,2,3,4,7a-d,9 | 5,6,8a,8b,10,11,12 | Pathogens |

1. Does your MS4/Coalition have an education program addressing impacts of phosphorus/nitrogen/pathogens on waterbodies? Yes No N/A

2. Has 100% of the MS4/Coalition conveyance system been mapped in GIS? Yes No N/A

If N/A, go to question 3.

If No, estimate what percentage of the conveyance system has been mapped so far. %

Estimate what percentage was mapped in this reporting period. %

MS4 Annual Report Form

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Name of MS4/Coalition

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SPDES ID

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3. Does your MS4/Coalition have a Stormwater Conveyance System (infrastructure) Inspection and Maintenance Plan Program? Yes No N/A

4. Estimate the percentage of on-site wastewater treatment systems that have been inspected and maintained or rehabilitated as necessary in this reporting period?

| | | |
|--|---|---|
| | 5 | 0 |
|--|---|---|

 %

5. Has your MS4/Coalition developed a program that provides protection equivalent to the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-08-001) to reduce pollutants in stormwater runoff from construction activities that disturb five thousand square feet or more? Yes No N/A

6. Has your MS4/Coalition developed a program to address post-construction stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre that provides equivalent protection to the NYS DEC SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-08-001), including the New York State Stormwater Design Manual Enhanced Phosphorus Removal Standards? Yes No N/A

7a. Does your MS4/Coalition have a retrofitting program to reduce erosion or phosphorus/nitrogen/pathogen loading? Yes No N/A

7b. How many projects have been sited in this reporting period?

| | | |
|--|--|--|
| | | |
|--|--|--|

7c. What percent of the projects included in 7b have been completed in this reporting period?

| | | |
|--|--|--|
| | | |
|--|--|--|

 %

7d. What percent of projects planned in previous years have been completed?

| | | |
|--|--|--|
| | | |
|--|--|--|

 %

No Projects Planned

8a. Has your MS4/Coalition developed and implemented a turf management practices and procedures policy that addresses proper fertilizer application on municipally owned lands? Yes No N/A

8b. Has your MS4/Coalition developed and implemented a turf management practices and procedures policy that addresses proper disposal of grass clippings and leaves from municipally owned lands? Yes No N/A

MS4 Annual Report Form

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Name of MS4/Coalition

VILLAGE OF WALDEN

SPDES ID

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- 9. Has your MS4/Coalition developed and implemented a program of native planting?
 Yes No N/A

- 10. Has your MS4/Coalition enacted a local law prohibiting pet waste on municipal properties and prohibiting goose feeding?
 Yes No N/A

- 11. Does your MS4/Coalition have a pet waste bag program?
 Yes No N/A

- 12. Does your MS4/Coalition have a program to manage goose populations?
 Yes No N/A

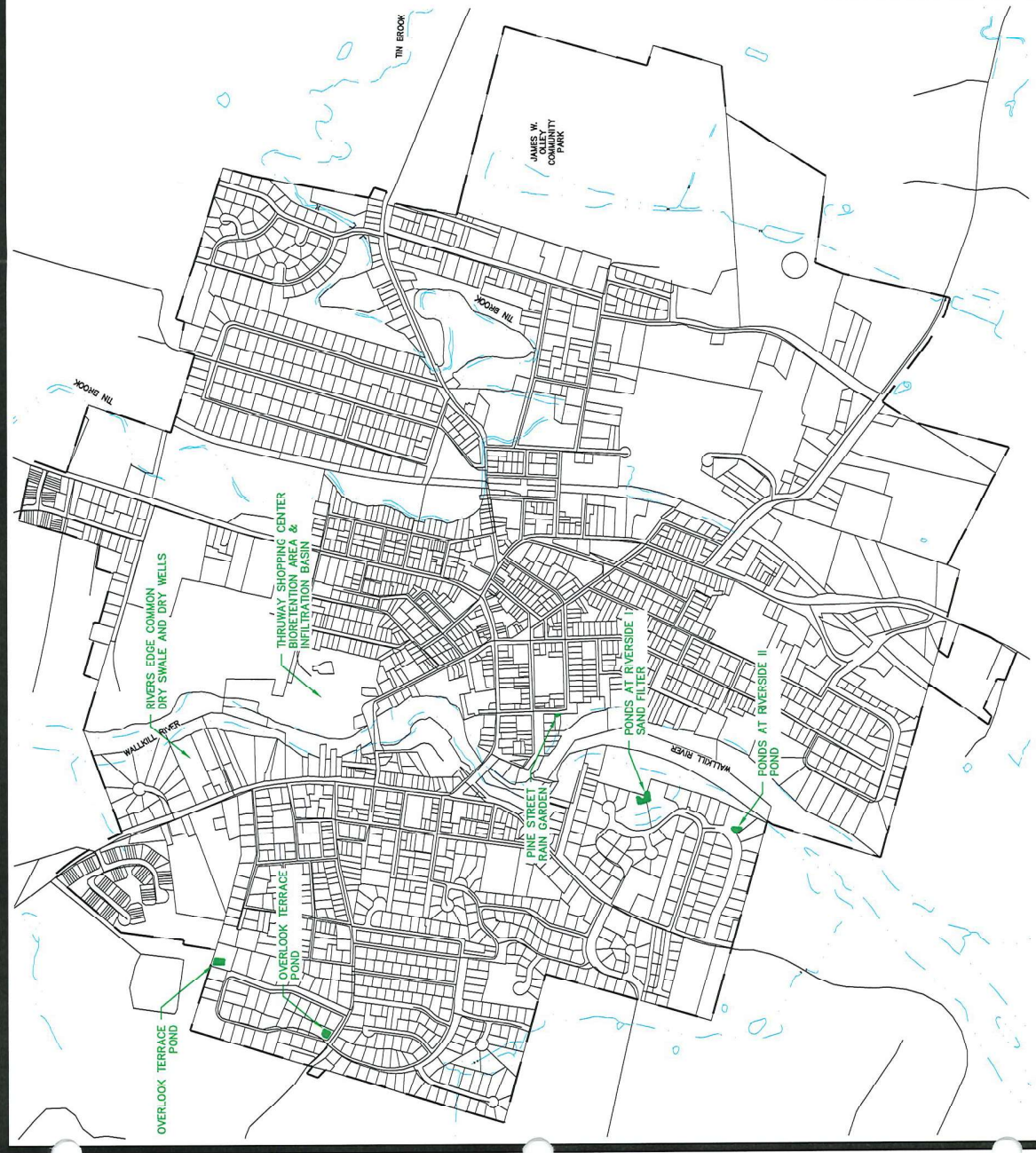
Appendix K

Inventory of Post-Construction Stormwater Practices Stormwater Practice Maintenance Procedures

VILLAGE OF WALDEN
 MINIMUM CONTROL MEASURE 5: POST-CONSTRUCTION STORMWATER MANAGEMENT

POST-CONSTRUCTION STORMWATER PRACTICE INVENTORY

| <u>SITE</u> | <u>ADDRESS</u> | <u>PRACTICE TYPE</u> | <u>REQUIRED MAINTENANCE</u> | <u>DATE OF LAST MAINTENANCE</u> |
|-------------------------|-----------------------------|---|---|---------------------------------|
| Pine Street Rain Garden | Pine Street | Rain Garden | 1. Mowing berm. 2. Vegetation pruning. | |
| Ponds at Riverside I | 2 Spruce Court | Sand Filter (F-1) | 1. Mowing. 2. Sediment removal. | |
| Ponds at Riverside II | Galloway Lane | Stormwater Pond (P-5) | 1. Mowing. 2. Sediment removal. | |
| Overlook Terrace | 21 & 44 Overlook Terrace | Stormwater Pond x 2 | 1. Mowing. 2. Sediment removal. | |
| Rivers Edge Common | 101 North Montgomery Street | Dry Wells Dry Swale | Private | |
| Thruway Shopping Center | 78 Oak Street | Bioretention Area Infiltration Basin | Private | |
| | | | | |



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(646) 244-8700

STORMWATER PRACTICE AREAS MAP

**VILLAGE OF WALDEN
MS4**

VILLAGE OF WALDEN
ORANGE COUNTY, NEW YORK

| | | | |
|-------------------|--------------|--------------------|--------------------|
| Drawn By: ESR | Checked By: | Scale: 1" = 1,000' | Proj. Map No.: N/A |
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DATE: MARCH 30, 2015

WALDEN SEWERAGE DISTRICT
STORMWATER PRACTICES

STORMWATER PRACTICE MAINTENANCE PROCEDURES

I. STORMWATER INSPECTIONS

Inspections of the stormwater management areas shall be made by a qualified inspector as defined by the NYSDEC. A qualified inspector may be one of the following:

- Licensed Professional Engineer (PE)
- Certified Professional in Erosion and Sediment Control (CPESC)
- Registered Landscape Architect (LA)
- Any individual working under the direct supervision of a Licensed Professional Engineer or Registered Landscaping AND has 4 hours of NYSDEC approved training in erosion and sediment control

Inspections of the stormwater retention ponds, bio-retention areas, swales, and vegetation will be performed monthly during the first growing season or until vegetation is established and annually thereafter. Forms to be used during inspections can be found in this Appendix. Completed inspection forms should be kept with this report.

II. LONG-TERM MAINTENANCE REQUIREMENTS

Maintenance shall be carried out in accordance with the following:

A. Stormwater Retention Ponds: The following tasks shall be performed:

1. Removal of accumulated sediment and cleaning and/or restoration of the sediment forebays every 5 years or whenever accumulated sediment reaches a volume of 50% of the available capacity.
2. Restoration of any disturbed plant material and any eroded embankments as needed.
3. Removal of accumulated debris within the basin and at all inlet and outfall structures as needed.
4. Annual inspection of the outlet structure to ensure structural stability and removal of any accumulated trash within the structure.
5. Mowing of the berm and surrounding area of the basins twice a year or as necessary. Removal of any fallen trees or limbs.

B. Bio-Retention Areas: The following tasks shall be performed:

1. Removal of accumulated sediment and cleaning and/or restoration of the filter bed areas whenever accumulated sediment reaches an overall depth of 1 inch.
2. Restoration of any disturbed plant material and any eroded embankments as needed. Replacement of proposed plants shall occur if more than 50% of the coverage of the facility is not achieved within the first two years.
3. Removal of accumulated debris within the filter bed areas and at all inlet and outfall structures as needed.

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4. Mowing of the berm and surrounding area of the basins twice a year or as necessary. Vegetation within the bio-retention areas will be limited to a height of 18 inches. Removal of any fallen trees or limbs.
5. When the filtering capacity of the filter diminishes substantially (i.e., when water ponds on the surface of the filter bed for more than 48 hours), the top few inches of discolored material shall be removed and shall be replaced with fresh material. The removed sediments shall be disposed in an acceptable manner (i.e., landfill).

C. Surface Sand Filtration Areas: The following tasks shall be performed as needed:

1. Removal of accumulated sediment and cleaning and/or restoration of the filter bed areas whenever accumulated sediment reaches a depth of 1 inch.
2. Restoration of any disturbed plant material and any eroded embankments. Replacement of proposed plants shall occur if more than 50% of the coverage of the facility is not achieved.
3. Removal of accumulated debris within the filter bed areas and at all inlet and outfall structures.
4. Annual mowing of the berm and surrounding area of the basins. Removal of any fallen trees and limbs.
5. Vegetation within the sand filtration area will be limited to a height of 18 inches.
6. When the filtering capacity of the filter diminishes substantially (i.e., when water ponds on the surface of the filter bed for more than 48 hours), the top few inches of discolored material shall be removed and shall be replaced with fresh material. The removed sediments shall be disposed in an acceptable manner (i.e., landfill).

Stormwater Wetland Area: The following tasks shall be performed as needed:

1. Removal of accumulated sediment and cleaning and/or restoration of the sediment forebays every 5 or 6 years or whenever accumulated sediment reaches a volume of 50% of the available capacity.
2. Restoration of any disturbed plant material and any eroded embankments.
3. Removal of accumulated debris within the basin and at all inlet and outfall structures.
4. Inspection of the outlet structure to ensure structural stability and removal of any accumulated trash within the structure.
5. Annual mowing of the berm and surrounding area of the basins. Removal of any fallen trees or limbs.

D. Infiltration Basins and Trenches: The following tasks shall be performed as needed:

1. Removal of accumulated sediment and cleaning and/or restoration of the filter bed areas whenever accumulated sediment reaches a volume of 50% of the available capacity.
2. Restoration of any disturbed plant material and any eroded embankments.
3. Removal of accumulated debris within the filter bed areas and at all inlet and outfall structures.

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4. Annual mowing of the berm and surrounding area of the basins. Removal of any fallen trees or limbs. Seeding of the basin shall occur if more than 50% of the coverage of the facility is not achieved.
- E. Swales (Dry, Wet, and Conveyance): The following tasks shall be performed:
1. Removal of accumulated sediment and cleaning and/or restoration whenever accumulated sediment reaches a volume of 50% of the available capacity.
 2. Restoration of any eroded embankments as needed. Infrequent reshaping of the swale line should be completed as needed.
 3. Removal of accumulated debris/trash within the swale and at all inlet and outfall structures as needed.
 4. Mowing of the swale bottom and surrounding side slopes twice a year or as necessary. Removal of any fallen trees or limbs. Replacement and/or restoration of proposed grasses shall occur if more than 50% of the coverage of the facility is not achieved. Grasses should be kept at a maximum height of 6" – 8".
- F. Rain Gardens : The following tasks shall be performed:
1. Removal of accumulated sediment and cleaning and/or restoration whenever accumulated sediment reaches a volume of 50% of the available capacity.
 2. Restoration of any eroded embankments as needed. Infrequent reshaping of the swale line should be completed as needed.
 3. Removal of accumulated debris/trash within the swale and at all inlet and outfall structures as needed.
 4. Regular weeding and watering as needed.
- G. Roadway Pavements: Roadway pavements shall be swept on a regular basis to remove accumulated sediment. Collected sediment shall be removed from the site, which will not allow the re-entrance of silt into the stormwater drainage system.
- H. Catch Basins: Catch basins shall be flushed and cleaned of any collected sediment within the bottom of the basin every 5 years or earlier as needed. Collected sediment shall be removed, which will not allow the reentrance of silt into the stormwater drainage system.
- I. Vegetative Stabilization:
1. All vegetative planting on areas that have been disturbed and are finish graded shall be inspected monthly during the first growing season and annually thereafter. Planting (or seeding) shall be maintained in viable conditions to stabilize the soil and to prevent soil erosion. Restore all site planting and/or seeding which has been damaged to a viable condition.
 2. If vegetative stabilization has been damaged from stormwater erosion, correct upstream conditions that caused the erosion. Check dams may be required in drainage ways and stone outfall aprons may be required to be repaired on stormwater outfall sites.

Appendix L

Inventory of Active Construction Sites

VILLAGE OF WALDEN
 MINIMUM CONTROL MEASURE 5: POST-CONSTRUCTION STORMWATER MANAGEMENT
 ACTIVE CONSTRUCTION SITES

| <u>SITE NAME</u> | <u>ADDRESS</u> | <u>COMPLETED</u> | <u>STORMWATER INSPECTIONS NECESSARY</u> | <u>CONSTRUCTION INSPECTIONS NECESSARY</u> |
|-----------------------------|----------------------------------|------------------|---|---|
| Thruway Market/ Hainford | 78 Oak St. | yes 2013 | yes | yes |
| Agotaras Sub. | So. Montgomery St. | yes 2013 | NO | NO |
| Walden Glen | North Montgomery St. | | Yes | |
| Overlook @ kid Farm | Coldenham Road NY's Route 208 | | yes | yes |
| Falcons Rest | North Montgomery St. | | yes | yes |
| | | | | |
| | | | | |

VILLAGE OF WALDEN
MINIMUM CONTROL MEASURE 5: POST-CONSTRUCTION STORMWATER MANAGEMENT
ACTIVE CONSTRUCTION SITES

| <u>SITE NAME</u> | <u>ADDRESS</u> | <u>COMPLETED</u> | <u>STORMWATER INSPECTIONS NECESSARY</u> | <u>CONSTRUCTION INSPECTIONS NECESSARY</u> |
|------------------|----------------|------------------|---|---|
| | | | | |
| | | | | |
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Appendix M

Completed MS4 SWPPP Review Forms
MS4 SWPPP Acceptance Forms

VILLAGE OF WALDEN
MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE AND ELIMINATION (IDDE)

ILLICIT DISCHARGE INCIDENT LOG

SECTION A: General Information

| | | | |
|-------------------------|---------------------|--------------|-------------|
| Incident ID: | | | |
| Information taken by: | Rainfall (inches) | Last 24 hrs: | Last 48hrs: |
| Notification date/time: | Incident date/time: | | |
| Notification made by: | Department: | | |
| Contact Information | | | |

SECTION B: Location

| | |
|--|---|
| Location/address: | Structure ID: |
| Nearby Landmark: | Outfall: |
| Primary Location | Secondary Location |
| <input type="checkbox"/> Upland Area (<i>Land not adjacent to stream</i>) | <input type="checkbox"/> Near Storm Drain <input type="checkbox"/> Near other water source water |
| <input type="checkbox"/> Stream Corridor (<i>in or adjacent to stream</i>) | <input type="checkbox"/> Outfall <input type="checkbox"/> In-stream flow <input type="checkbox"/> Along banks |
| Comments/Notes: | |

SECTION C: Description

| | |
|---|--|
| Upland Area | |
| <input type="checkbox"/> Dumping <input type="checkbox"/> Oils/solvents/chemicals <input type="checkbox"/> Sewage <input type="checkbox"/> Wash water, suds, etc. <input type="checkbox"/> Other: _____ | |
| Stream Corridor | |
| Odor | <input type="checkbox"/> None <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide (rotten eggs) <input type="checkbox"/> Sewage <input type="checkbox"/> Other : _____ |
| Color | <input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other: _____ |
| Turbidity | <input type="checkbox"/> Slight cloudiness <input type="checkbox"/> Cloudy <input type="checkbox"/> Opaque |
| Floatables | <input type="checkbox"/> None <input type="checkbox"/> Sewage (toilet paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Algae <input type="checkbox"/> Dead Fish <input type="checkbox"/> Other |
| Possible/Suspected Source: (Name, description of person or vehicle, license plate #, address, etc.) | |

SECTION D : Investigation

| | | |
|---|--------------------|-----------------|
| Performed by: | Date began: | Date Completed: |
| Results | | |
| <input type="checkbox"/> No investigation made | Reason: | |
| <input type="checkbox"/> Referred | Department/Agency: | |
| <input type="checkbox"/> Investigated; no further action necessary | | |
| <input type="checkbox"/> Investigated; requires further action Description: | | |
| Comments/Notes: | | |

FORM COMPLETED BY:

| | |
|---------------|-------|
| Name (print): | Date: |
| Signature: | |