

TOWN OF SOUTHAMPTON
STORMWATER MANAGEMENT PROGRAM
Municipal Separate Storm Sewer Systems (MS4s)
Permit No. GP-0-10-002



January 2012
Town of Southampton
Engineering Division

TOWN OF SOUTHAMPTON
PHASE II STORMWATER MANAGEMENT PROGRAM
NEW YORK STATE'S SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES
PERMIT NO. GP-0-10-002
FOR
MUNICIPAL SEPARATE STORMWATER SEWER SYSTEMS (MS4s)

January 2012

Prepared for

TOWN OF SOUTHAMPTON
OWNED AND OPERATED SEPARATE STORMWATER SEWER SYSTEM

Prepared by

TOWN OF SOUTHAMPTON
ENGINEERING DIVISION

TOWN OF SOUTHAMPTON STORMWATER MANAGEMENT PROGRAM

1. INTRODUCTION
 - 1.1. PROGRAM DEVELOPMENT
 - 1.2. BEST MANAGEMENT PRACTICE SELECTION
 - 1.3. TOWN OF SOUTHAMPTON MUNICIPALITY BACKGROUND
 - 1.3.1. COMMUNITY RESOURCES
 - 1.3.1.1.PARKS
 - 1.3.1.2.LIBRARIES
 - 1.3.1.3.SCHOOLS
 - 1.4. NATURAL RESOURCES
 - 1.4.1. TOPOGRAPHY AND SOILS
 - 1.4.2. WATER BODIES
 - 1.4.3. LAND USE
2. EXISTING MUNICIPAL STORM SEWER
 - 2.1. HIGHWAY DEPARTMENT
 - 2.2. BEST MANAGEMENT PLAN COMMITTEE
 - 2.3. POLLUTANTS OF CONCERN
 - 2.3.1. BACTERIA IN STORMWATER
 - 2.3.2. NUTRIENTS (NITROGEN)
 - 2.3.3. SEDIMENTS AND OTHER DEBRIS
 - 2.4. TYPICAL FLOWS TO STORM SEWERS
 - 2.4.1. WET WEATHER SOURCES
 - 2.4.2. DRY WEATHER SOURCES
 - 2.5. CHARACTERISTICS OF STORM SEWER DISCHARGES
 - 2.6. DIMINISHING GROUNDWATER RECHARGE AND QUALITY
 - 2.7. REDUCING IMPACTS OF STORMWATER
3. MINIMUM CONTROL MEASURE 1 – PUBLIC EDUCATION AND OUTREACH
 - 3.1. DISTRIBUTED INFORMATION
 - 3.2. TOWN FACILITY INFORMATION
 - 3.3. TOWN OF SOUTHAMPTON WEBSITE
 - 3.4. RAIN GARDEN PLANTING
 - 3.5. ANNUAL REPORTING
4. MINIMUM CONTROL MEASURE 2 – PUBLIC INVOLVEMENT/PARTICIPATION
 - 4.1. LOCAL STORMWATER PUBLIC CONTACT
 - 4.2. COMMUNITY PRESERVATION
 - 4.3. LITTER PICK UP EVENTS
 - 4.4. STOP DAY
 - 4.5. RAIN GARDENS
 - 4.6. SCHOOL DISTRICT
 - 4.7. WATER CONSERVATION
 - 4.8. MEASURABLE GOALS
 - 4.9. ANNUAL REPORTING
 - 4.9.1. COMMENTS
 - 4.9.2. EFFECTIVENESS

5. MINIMUM CONTROL MEASURE 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)
 - 5.1. INTRODUCTION
 - 5.2. PROGRAM
 - 5.3. OUTFALL MAPPING
 - 5.4. WATERSHED MAPPING
 - 5.5. TOWN CODE AMENDMENTS
 - 5.6. POTENTIAL DETECTORS OF ILLICIT DISCHARGE
 - 5.6.1. HIGHWAY DEPARTMENT
 - 5.6.1.1. STREET SWEEPING
 - 5.6.1.2. DRAINAGE STRUCTURE CLEANING
 - 5.6.2. BUILDINGS AND GROUNDS DIVISION
 - 5.6.3. EMERGENCY SERVICES
 - 5.8 ANNUAL REPORTING

6. MINIMUM CONTROL MEASURE 4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL
 - 6.1. INTRODUCTION
 - 6.2. TOWN CODE AMENDMENTS
 - 6.3. EDUCATION
 - 6.4. PROGRAM
 - 6.4.1. BEST MANAGEMENT PRACTICES – DURING SITE DESIGN
 - 6.4.2. BEST MANAGEMENT PRACTICES – DURING CONSTRUCTION
 - 6.4.3. BEST MANAGEMENT PRACTICES – POST CONSTRUCTION
 - 6.5 ANNUAL REPORTING

7. MINIMUM CONTROL MEASURE 5 – POST-CONSTRUCTION STORMWATER MANAGEMENT
 - 7.1. INTRODUCTION
 - 7.2. NON STRUCTURAL BEST MANAGEMENT PRACTICES
 - 7.2.1. LAND PRESERVATION IN IMPAIRED WATERSHEDS
 - 7.2.2. TOWN CODE AMENDMENTS
 - 7.2.3. ZONING
 - 7.2.4. PUBLIC EDUCATION
 - 7.3. STRUCTURAL BEST MANAGEMENT PRACTICES
 - 7.3.1. WET PONDS AND EXTENDED WET DETENTION PONDS
 - 7.3.1.1. OPERATION AND MAINTENANCE
 - 7.3.2. FILTRATION PRACTICES
 - 7.3.2.1. GRASSED SWALES
 - 7.3.2.2. SAND FILTERS
 - 7.3.2.3. INFILTRATION PLANTER
 - 7.3.3. DRY DETENTION POND DESCRIPTION
 - 7.3.3.1. OPERATION AND MAINTENANCE
 - 7.4. STORMWATER RETROFITTING
 - 7.4.1. RETROFITTING PROTOCOLS
 - 7.4.2. MUNICIPAL RETROFIT PROGRAM
 - 7.5. ANNUAL REPORTING

8. MINIMUM CONTROL MEASURE 6 – POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

- 8.1. INTRODUCTION
- 8.2. OBJECTIVES
- 8.3. TOWN FACILITIES AND OPERATIONS
- 8.4. BUILDING MAINTENANCE
- 8.5. TOWN PARKS
 - 8.5.1. GRASS MOWING
 - 8.5.2. TURF MANAGEMENT
 - 8.5.3. OPEN SPACE OPERATIONS
- 8.6. ROADWAY MAINTENANCE
 - 8.6.1. GRASS MOWING
 - 8.6.2. WINTER ROAD MAINTENANCE
 - 8.6.2.1. DE-ICING ACTIVITIES
 - 8.6.3. STREET SWEEPING
 - 8.6.4. STORMWATER SYSTEM MAINTENANCE

Appendix A NYSDEC SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4)s – Permit No. GP-0-10-002

Appendix B NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities – Permit No. GP-0-10-001.

Appendix C Town Educational Pamphlets and Posters Appendix D

Appendix E Construction Activity Code Adoption and Procedures for SWPPP Review and Inspections

Appendix F Illicit Discharge Detection and Elimination Code Adoption and Procedures, Tracking

Appendix G Post Construction Management

Appendix H Best Management Plans
 Municipal Garage
 Highway Facility
 Buildings and Grounds and Electrical
 Inventory and Description of Town Owned Facilities

Appendix I Good Housekeeping Municipal Operations Analysis
 Department Operations Spreadsheet
 Department Motor Vehicle Inventory

1. INTRODUCTION

The Town of Southampton has developed a stormwater management program (TOS SWMPP) as required for coverage under the New York State Pollution Discharge Elimination System (SPDES) general permit No. GP-0-10-002, specific permit NYR-20A020.

The aim of this program is to control stormwater runoff discharges from the Town facilities, and developed land within the Town to the waters of the United States in accordance with the requirements of federal Phase II stormwater regulations under the Clean Water Act. The aim of the Clean Water Act, the federal Phase II stormwater regulations and the program proposed in this document is to reduce to the “maximum extent practicable” pollutants in stormwater discharges. The concern for controlling stormwater discharges can be traced to the 1972 Clean Water Act’s Section 208 provisions for evaluating the impacts of and recommending controls for point and nonpoint source discharges in conjunction with the development of hundreds of area-wide water quality management plans known as “208 plans”. Some of the stormwater pollutants identified in these studies include suspended solids, sediments, bacteria, nutrients, pesticides, herbicides, toxics, floatables, oil, grease, heavy metals, synthetic organics, petroleum hydrocarbons and oxygen demanding substances. The adverse impact of these pollutants in stormwater discharges include closed beaches, closed shellfish areas and toxic contamination causing fish consumption bans, beach and shoreline litter, and floatables, siltation of marina and shipping channels, habitat/wetland degradation, and stream bank erosion.

The TOSSMWP includes a listing of Best Management Practices (BMP’s) that will be implemented by the Town in order to achieve the regulatory standard of reducing pollutants in the Town’s stormwater to maximum extent practicable. Existing Town stormwater programs and activities designed to protect the Town’s water quality will be supplemented with new BMP activities. Initial measurable goals and an implementation schedule were developed for each of the BMP’s in the TOS SWMP.

1.1. PROGRAM DEVELOPMENT

The Town of Southampton has developed a stormwater management program plan (TOS SWMPP) in accordance with the New York State Discharge Elimination System (SPDES) requirements for obtaining authorization for stormwater discharges and certain non-stormwater discharges. This TOS SWMPP has been developed in accordance with guidelines published by the New York State Department of Environmental Conservation (NYSDEC) for coverage under SPDES General Permit No. GP-0-10-002. The TOS SWMPP has been developed to facilitate the Town’s efforts in reducing stormwater pollutants from the Town’s municipal separate storm sewer system (MS4) to the maximum extent practicable as required by the SPDES General Permit.

The TOS SWMPP describes specific actions that will be taken over a five-year period to reduce pollutants and protect the Town’s surface waters. The specific activities to be implemented are referred to as “Best Management Practices” (BMP’s). Various BMP’s have been developed for each of the six “Minimum Control Measures” (MCM’s) required by the General Permit. The TORSWMP also sets measurable goals and provides a schedule for the implementation of the BMP’s. Implementation of the selected BMP’s is expected to result in reductions of pollutants discharged into the Town’s streams, ponds, tidal estuaries, embayments and the Atlantic Ocean.

1.2. BEST MANAGEMENT PRACTICE SELECTION

The Town of Southampton has historically implemented various stormwater related BMP's intended to specifically protect the Town's stormwater quality. An important aspect of developing an effective, compliant and cost effective SPDES Phase II SWMP is to take credit for these on-going programs. Details of the Town's stormwater related programs have been collected, summarized and categorized into each of the six MCM's required by the General Permit. Some of these existing programs meet specific General Permit requirements, while others contribute toward fulfilling the General Permit mandate of reducing pollution to the Maximum Extent Practicable (MEP). Alternative BMP's will be evaluated on a yearly basis as the TOS SWMP is reviewed and modified.

MINIMUM CONTROL MEASURES

In accordance with SPDES General Permit requirements, the TOS SWMP includes an implementation plan for BMP's in each of six Minimum Control Measures. The six minimum control measures are:

1. Public Participation and Outreach on Stormwater Impacts
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post Construction Runoff Control and,
6. Pollution Prevention and Good Housekeeping.

Specific requirements of each MCM are provided in the following sections.

1.3. TOWN OF SOUTHAMPTON MUNICIPALITY BACKGROUND

The Town of Southampton, located in the eastern end of Long Island in Suffolk County, encompasses an area 8.3 miles wide at the widest and extends approximately 25 miles from west to east, and covers approximately 139 square miles (88,960 acres). Located 85 miles from NYC, Southampton lies between the Peconic River, Great Peconic Bay and Noyac Bay on the north, and Shinnecock Bay East and the Atlantic Ocean to the south as shown in Figures 1-1 and 1-2.

Figure 1-1 Regional Plan

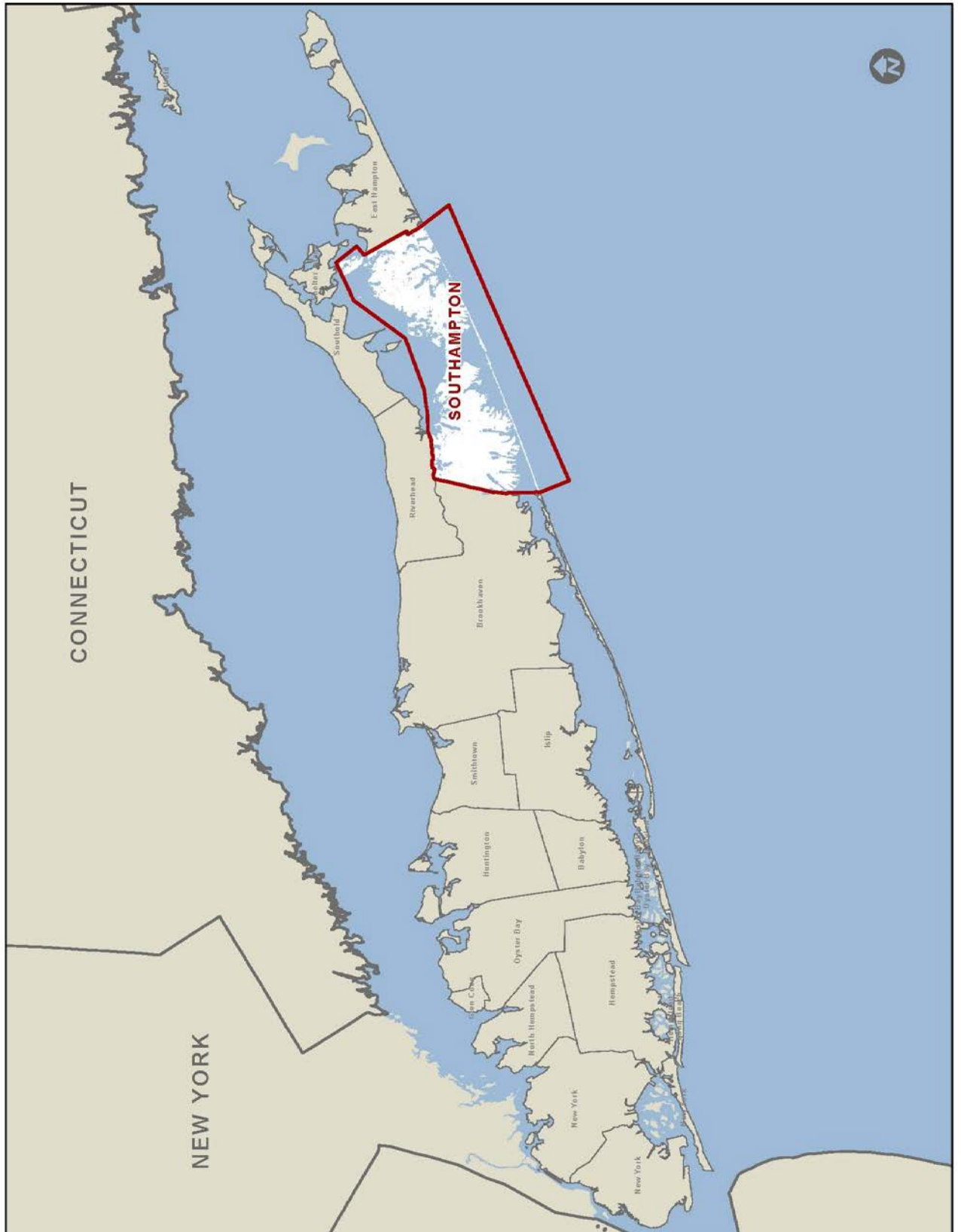
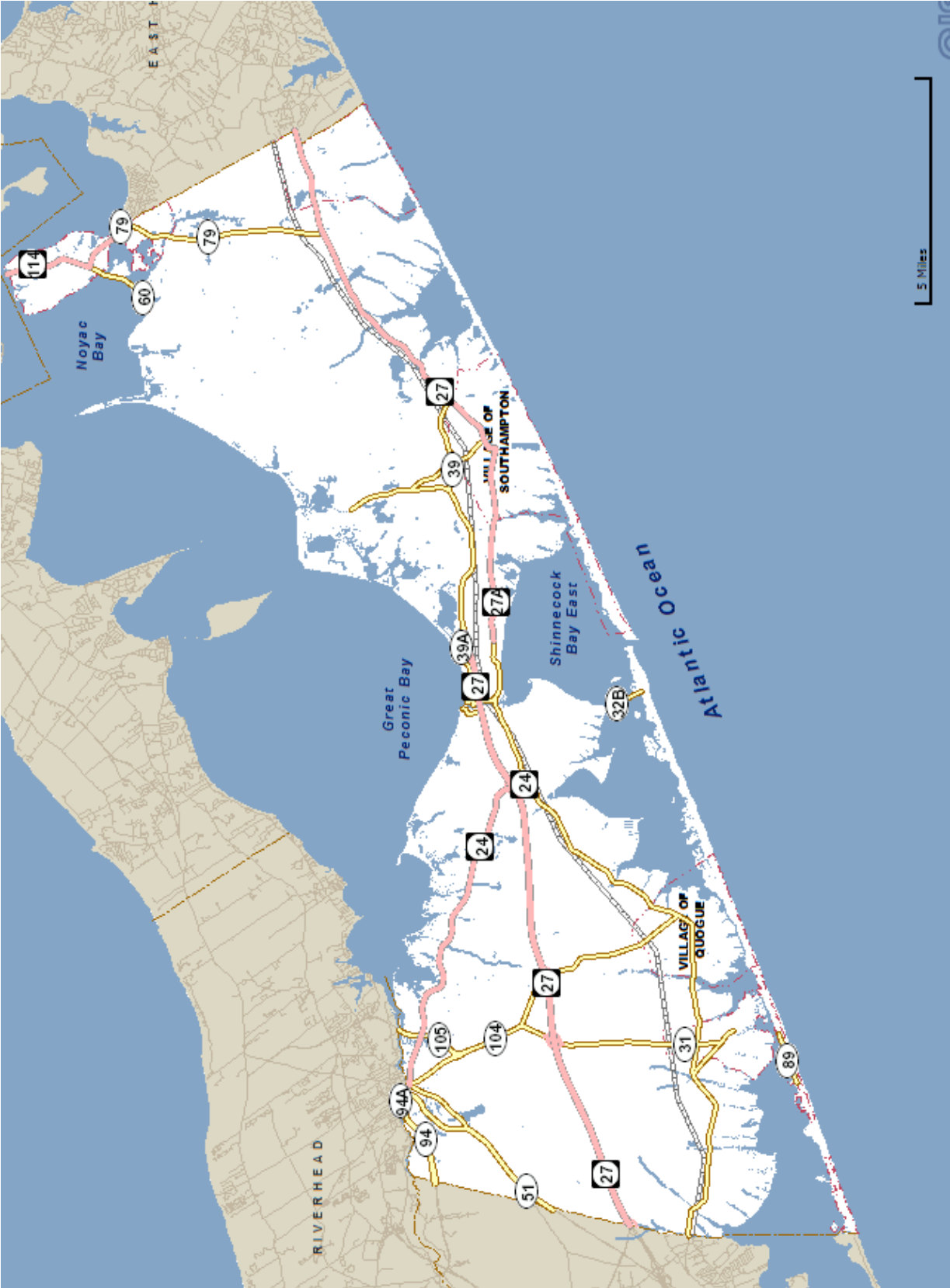


Figure 1-2 Town of Southampton



According to the 2005 - 2009 U.S. Census Bureau, the full time population of the Town is 60,567, with a seasonal increase to 180,000 in the summer months. The Town of Southampton includes the following incorporated Villages which are not considered as part of this TOS SWMP.

- Village of Westhampton Beach
- Village of Quogue
- Village of Southampton
- Village of Sag Harbor
- Village of Sagaponack
- Village of North Haven
- Village of Westhampton Dunes

The Town of Southampton is governed by the Town Supervisor and four Town Council People. There are several different departments tasked with running the different public service offices of the Town included but not limited to:

Assessor's Office	Town Attorney	Finance (Comptroller)
Municipal Works	Business Management	Community Prsve. Fund
Hampton Bays Water District	Parks & Recreation	Highway/Public Works
Police Dept.	Human Services	Fire Prevention
Housing Authority	Town Clerk	Information Technology
Justice Court	Land Management	

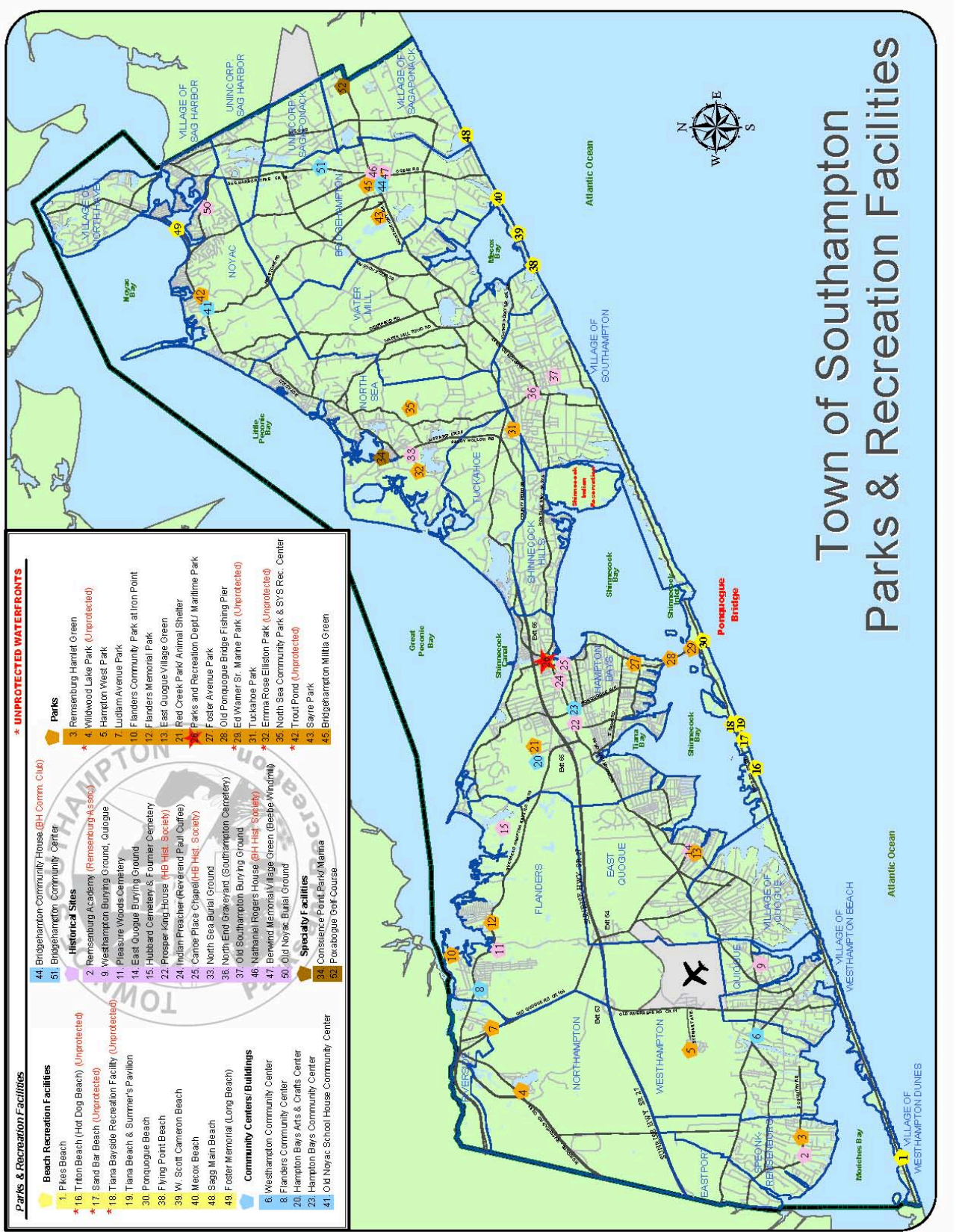
1.3.1. COMMUNITY RESOURCES

For purpose of stormwater management and planning, key community resources within the planning area consist of parks, schools and libraries. These facilities are important elements in the public education, outreach and participation aspects of the stormwater management plan.

1.3.1.1.PARKS

Parks and recreation resources in the Town include State, County and Town parks; State conservation areas; private camps and clubs; public golf courses; public school sites; and the Pine Barrens Core Preservation Area (see Fig. 1-3).

Figure 1-3 Town Directory of Recreational Locations and Facilities



1.4. NATURAL RESOURCES

The east end of Long Island has many natural resources which make it optimum for farming, living, and recreating. These natural resources are a precious commodity and must be protected through preservation, conservation and smart land development planning.

1.4.1. TOPOGRAPHY AND SOILS

The topography of the Town ranges from flat along the coasts to rolling hills in the interior portions.

Based on the General Soils Map in the U.S. Department of Agriculture Soil Conservation Service Soil Survey of Suffolk County, NY, the predominant soil associations in the Town are as follows:

55.1% of the soils in the Town of Southampton are excessively drained

76.2% of the soils in the Peconic Estuary are excessively drained

43.4% of the soils in the South Shore/Atlantic Watersheds are excessively drained

1.4.2. WATER BODIES

Key surface water resources in the Town include the Atlantic Ocean and the Peconic Estuary. Other important water bodies include named and unnamed streams, creeks and small lakes/ponds. Surface water bodies in the Town are listed below and shown on Figure 1-4.

Tidal Wetlands

East River/East Pond	Beaver Dam Creek	Middle Pond	Old Fort Pond
Seatuck Creek	Oneck Creek	Shinnecock Bay East	Heady Creek
West Pond	Robinson Canal	Taylor Creek	Burnett Creek
Fish Creek	Moriches Bay	Meyers Creek	Mill Creek
Speonk River	Moneybogue Bay	Hayground Cove	Calf Creek
Quantuck Bay/Creek	Aspatuck Creek	Swan Creek	Sams Creek
Ogdens Pond	Quogue Canal	Sagaponack Lake	Morris Cove
Penniman Creek/Cove	Effee Hole Cove	Ligonee Creek	Fresh Pond
Strong Creek	Phillips Creek	Lower Sag Harbor	Noyac Creek
Weesuck Creek	Tiana Bay	Upper Sag Harbor	Genets Creek
Hidden Cove	Smith Creek	Great Pond Creek	Wooley Pond
Wells Creek	Penny Pond	Shelter Island Sound	Fish Cove
Cormorant Cove	Shinnecock Canal	North Sea Harbor	Scallop Pond
Canoe Place Creek	Far Pond	Little Peconic Bay	Sebonic Creek
Bullhead Bay	Cold Spring Pond	Squires Pond	Birch Creek
Red Creek Pond	Hubbard Creek	Reeve's Bay	Flander's Bay

Freshwater Wetlands

Wildwood Lake	Peconic River	Halsey Neck Pond	Agawam Lake
Coopers Neck Pond	Old Town Pond	Wickapogue Pond	Phillips Pond
Jule Pond	Channel Pond	Seven Pond	Channel Pond
Mill Pond/Creek	Fairfield Pond	Poxague Pond	Crooke's Pond
Deer Drink	Long Pond	Little Long Pond	Lily Pond
Round Pond	Otter Pond	Little/Bid Fresh Pond	Bellows Pond

In 1978, the Long Island Regional Planning Board (LIRPB) published the Long Island Comprehensive Waste Treatment Management Plan (commonly known as the 208 Plan). The plan introduced the concept of hydrogeologic zones based on differences in underlying groundwater flow patterns and water quality. There are two types of zones. The first are land areas that contribute recharge to the deep aquifers; the second are land areas that contribute recharge to the shallow aquifers and are considered discharge zones. The plan identified eight hydrogeologic zones. Zones I, II and III are the major deep recharge zones. Zones IV through VIII are the shallow discharge zones.

Most of the area in the Town is in Zone III or IV. Zone III contains groundwater of excellent quality in the upper glacial, Magothy and Lloyd aquifers. Zone IV is characterized by shallow flow systems that discharge to streams and marine waters. There has been some contamination from agricultural activities in parts of Zone IV.

Special Groundwater Protection Areas (SGPAs) were identified in the Groundwater Management Program for Long Island, NYSDEC, 1983, and in the 208 Nonpoint Source Management Handbook, LIRPB, 1984. These areas are defined as significant, largely undeveloped or sparsely developed geographic areas of Long Island that provide recharge to portions of the deep flow aquifer system. The southwestern portion of the Town is partially within the Central Suffolk Pine Barrens SGPA. This area, like all other SGPAs, requires sound management in order to be maintained as a source of good quality recharge to the aquifer system. Figure 1-5 shows the hydrogeologic zones and the SGPA in the Town.

1.4.3. LAND USE

The Town of Southampton has been developed with three main roadways, County Road 80 (CR 80), New York State Rt. 27 (NYS 27), CR 39. There are distinguished urbanized downtown areas along CR 80 within Eastport, Quogue, Hampton Bays, East Quogue, Westhampton. There are distinguished urbanized downtown areas along NYS27 along Bridgehampton, and Watermill in the Town of Southampton. Between Noyack Road and CR 39 and NYS 27, there are many rural areas developed with residential subdivisions and agricultural lands. See the Figure 1-4 for Land Use within the Town.

2. EXISTING MUNICIPAL STORM SEWER

During the developing years of Southampton in the 1600s through to the 1970s, engineers believed one of the best resources that we had were water bodies to discharge stormwater, sanitary wastes, and other pollutants into. “The solution to pollution is dilution”. Although there are no known sewage outfalls remaining, there are still many stormwater outfalls that discharge to water bodies, such as streams, ponds, rivers and the Ocean. The Town’s highway infrastructure currently contains isolated drainage systems that discharge stormwater to recharge basins or infiltration basins (leaching pools), direct discharges to surface water bodies, and infiltration into adjacent areas. The onsite storage of stormwater was typically achieved by the installation of drywells, recharge basins, or drainage reserve areas. In many cases, these facilities also included overflow structures that directed stormwater resulting from extreme rainfall events to either other recharge basins or to drainage facilities that ultimately discharged to the surface waters of the United States.

The current inventory of stormwater facilities within the Town is provided on the Town’s GIS system.

2.1. HIGHWAY DEPARTMENT

The Southampton Highway Department is charged with maintaining municipal roads, and stormwater systems which include the MS4 system of swales, catch basins, leaching pools, recharge basins, and all interconnecting pipes within public roadway systems.

2.2. BEST MANAGEMENT PLAN COMMITTEE

The Town of Southampton recognizes that Stormwater Management within the Town conveyance system and within Town owned and operated facilities as an important task. To that end, the success of the program will be contingent on the input of many of the Town Departments as stakeholders. The Town has therefore adopted a committee of stakeholders for the purposes of revising and participating in the program plan and promotion of the six minimum control measures. The Stormwater Best Management Committee (SWBMC) is comprised of Departmental staff within the Town’s organization and Town Council liaisons. The committee represents the Town’s interests in all phases of the Stormwater Management Program plan development, implementation, oversight, and plan evaluation.

The SWBMC has been developed to assist the Town in managing all aspects of the SWMP plan. The committee functions to conduct activities and shoulder the responsibilities of all elements discussed in the SWMP.

The Engineering Division works directly with the Highway Department, Town Trustees, Building Facilities Division, Land Management Department, Parks and Recreation, Business Management, Community Preservation, Hampton Bays Water District, Police Department, Code

Enforcement, Fire Marshalls, GIS and the Town Attorney's Office. The Engineering Division oversees the implementation of the Stormwater Management Program in reviewing SWPPP's for new developments, developing programs and policies regarding IDDE, Good Housekeeping, Public Education and Participation and Capital Improvement Projects to improve stormwater quality discharging to impaired water bodies, and all other surface water bodies.

To be most effective, the committee must perform tasks efficiently and smoothly. In large part, the personnel selected to act as committee members will determine the committee's success. Some of the considerations for personnel selection include the following:

- A lead committee member must be determined –
 - The Engineering Division is charged with drafting policies based on documented BMPs for review by the SWBMC committee.
- Committee members must include persons knowledgeable of the areas involved with the Stormwater Processes.
 - Engineering Division – Receives and reviews new SWPPP applications. Works with Capital Improvement Projects, assists the Parks and Recreation Department and Buildings Facilities Management. Works to implement Town's Good Housekeeping Training, Public Awareness Programs.
 - Hwy Dept.- develops new recharge basins, drainage installations, cleans and rehabilitates Town's MS4 system. First line of detection of Illicit Discharges.
 - Land Management- receives new Site Plan applications for commercial developments, and subdivision applications.- Land disturbing activities. Building Dept. – receives applications for building permits, demolition and excavation permits – land disturbing activities.
 - Town Attorney's Office-Drafts code amendments to enhance the Town's enforcement of the Federal Clean Water Act and the SPDES General Permit for Stormwater Discharges. Interprets legal issues with the Engineering Division.
 - Town Trustees – Receives wetland applications for docks, beach driving permits, operates boater pumpouts and shellfishing.
 - Community Preservation – Directly involved in land preservation activities within the Town.
 - Parks and Recreation – the planning and maintenance of existing Town recreational facilities, and maintenance of the exterior areas of Town Facilities.
 - Facilities Management – maintenance of the interior of existing Facilities.
 - Town Board Representative- Provides constituent concerns to the committee members, acts as a liaison to the remaining board members and the Town Supervisor on Stormwater Issues.
 - Public Safety – Consisting of Police, Fire, Code, and Building Inspectors, the first line of detection for Illicit Discharges.
- Committee members should have the authority to make decisions effecting BMP plan development and implementation. Committee members can also act as liaisons to other active organizations such as farm land that can work cooperatively at problem solving as it pertains to stormwater issues.
- The size of the committee must be appropriate to the function
- The committee must represent affected areas Town infrastructure.

2.3. POLLUTANTS OF CONCERN

In stormwater management, it is important to identify any waters in the planning area that are on the New York State Section 303(d) list of impaired waters. The Federal Clean Water Act

requires states to periodically assess and report on the quality of water in their state. Section 303(d) of the Act also requires states to identify Impaired Waters, where specific designated uses are not fully supported. For these Impaired Waters, states must consider the development of a Total Maximum Daily Load (TMDL) or other strategies to reduce the input of the specific pollutant(s) that restrict the water body, in order restore and protect such uses. Additionally, states are required to provide an assessment and listing methodology that explains their approach to water quality monitoring, data evaluation and listing. Impaired stream segments and primary pollutants of concern listed in Appendix 2 of the Permit within the Town of Southampton include the following:

- | | |
|--|---------------------|
| 1. Flanders Bay, East/Center , and tribs | pathogens |
| 2. Flanders Bay, West/Lower Sawmill Crk | nitrogen/pathogens |
| 3. Peconic River, Lower, and tidal tribs | nitrogens/pathogens |
| 4. Scallop Pond | pathogens |
| 5. Phillips Creek | pathogens |
| 6. Quogue Canal | pathogens |
| 7. West Moriches Bay | nitrogen /pathogens |

2.3.1. BACTERIA IN STORMWATER

Pathogens – Pathogens are viruses, bacteria, algae and protozoans that cause diseases in humans, animals and/or plants. Pathogenic or disease-causing bacteria are ubiquitous in nature and are normally associated with human and animal wastes. In many cases where human pollution is suspected on the basis of coliform test results, the actual pollution source may, in fact, be caused by animal wastes generated in the watershed’s ponds, streams, streets, and yards. Stormwater discharges throughout the watershed typically contain these bacteria. Based on numerous studies throughout the country over the last 15 to 20 years, it is not uncommon to find total coliform, fecal coliform and fecal streptococci in stormwater runoff at very high concentrations, from hundreds of thousands to over a 100 million colonies per 100 ml (USEPA, 1992).

Bacteria levels in stormwater runoff routinely exceed public health standards for water contact recreation. Bacteria is a leading contaminant in many of New York’s waters, and has led to shellfish bed closures in many areas of Long Island.

Pathogens may cause gastroenteritis, salmonellosis, and hepatitis A. Pathogens can enter the waterways through untreated or partially treated human sewage and wild/domestic animal waste. Two protozoa of major concern as waterborne pathogens are Giardia lamblia and Cryptosporidium parvum. Sources of pathogens in surface waters can be attributed to failing Sanitary Septic Systems, animal waste that is conveyed through the stormwater sewer systems. Livestock wastes, recreational boaters that dump untreated sewage is also a likely contributor of pathogens to Southampton ’s waterbodies. High concentrations of pathogens can cause bathing beach closures, and shellfish closures.

2.3.2. NUTRIENTS (NITROGEN)

Nitrogen (Nutrients) – Although essential for sustaining marine ecosystems, excessive nutrient levels will result in eutrophication, an increase in plant growth and decay, that can be harmful to an estuary. Nitrogen, is considered a nutrient, and when the balance concentration is exceeded, it stimulates aquatic plant growth including algae and “seaweed”. Under certain conditions, these algal blooms are damaging to fish and other aquatic animals by consuming the dissolved oxygen (DO) in the water they need to

breath. This condition, referred to as hypoxia can cause fish death. Excessive algae growth can cloud water, blocking sunlight from eelgrass which provides a nursery and spawning habitat for juvenile finfish and shellfish.

Nitrogen sources include agricultural and residential fertilizers, on-site disposal systems (sanitary systems). The Town of Southampton has a large quantity of farm land.

Runoff from both developed land, and farmed land has elevated concentrations of both phosphorus and nitrogen, which can enrich streams, lakes, reservoirs and estuaries. Enrichment of waterbodies by nitrogen and phosphorus is known as eutrophication. Sources of these pollutants include fertilizer, atmospheric deposition, animal waste, organic matter, and stream bank erosion. Another source of nitrogen is fossil fuel combustion from automobiles, power plants and industry.

Nutrients are particular concern in estuaries and are a source of degradation in many of New York's Water. Nitrogen has contributed to hypoxia in the Long Island Sound, and is a key pollutant of concern in the Peconic Estuary.

2.3.3. SEDIMENTS AND OTHER DEBRIS

Sediments and other debris such as litter and floatables carried by stormwater typically originate from construction sites, eroding road banks where there are no curbs, farm fields, lawns and yards that are sloped, eroded stream banks, damaged or eroded driveways, parking lots, walks and sidewalks, and roadway sanding for ice and snow.

Because urban/rural runoff is really rainfall washing an urban/rural area, whatever materials or substances are on the impervious and pervious land, roof or parking surfaces, or which have been deposited into a street gutter or directly into a catch basin or drop inlet, will be carried to the storm sewer discharge. Examples of these items could include organic materials such as discarded food; crop cuttings, animal droppings; garbage from overfilled or toppled trash cans; the contents from discarded containers, bottles and cans; flyers and garage sale posters placed on utility poles; and eroded soils, leaves, branches and twigs.

Organic materials are trapped or retained in the catch basin sump, frequently causing standing water to develop in the bottom of the catch basin. These materials tend to discolor the standing water and decompose and, at times, produce odors. This is particularly noticeable when catch basin contents are disturbed or washed out during a storm, by dry-weather flows, or when the system is being cleaned. In some cases, the odors could be similar to sanitary waste odors, since the nature of the materials is similar.

Both suspended and deposited sediments can have adverse effects on aquatic life in streams, lakes and estuaries. Turbidity resulting from sediment can reduce light penetration for submerged aquatic vegetation critical to estuary health. Reflected energy from light reflecting off the suspended sediment can increase water temperatures (Kundell and Rasmussen, 1995). Sediment transports many other pollutants to the water resources be it surface waters and /or groundwater.

2.4. TYPICAL FLOWS TO STORM SEWERS

The majority of flow to storm sewers is stormwater runoff. Stormwater runoff is surface flow water from precipitation that accumulates in and flows through natural and/or manmade storage and conveyance systems during and immediately following a storm event. As stormwater travels through a conveyance system, it carries pollutants to rivers, wetlands, coastal waters and groundwater, impairing water quality. The quality of runoff is affected by a variety of factors and depends on the season, local meteorology, geography and upon activities which lie in the path of runoff.

As development occurs, impervious surfaces, such as streets, parking lots and buildings, replace natural ground cover, preventing infiltration of rainfall. This results in an increase in surface runoff. The runoff carries whatever pollutants are in its path to our water bodies.

The quality of stormwater is important because stormwater conveys to rivers, creeks, streams, estuaries, and bays. Stormwater can also seep into the aquifers which are utilized as sole source for the potable water supply for Long Island. These resources are inherently valuable, but they also provide many communities with sources of economic viability.

2.4.1. WET WEATHER SOURCES

The most common, and often the largest, source of wet-weather flow is runoff generated by rainfall and snowfall. The majority of this runoff is from impervious surfaces and is directed to catch basins by drains or laterals that receive runoff from roofs, parking lots, basements, exterior stairways, roadside channels and ditches, retaining walls, park lawns, patios, shopping and pedestrian plazas and sidewalks. The catch basins are connected to the storm sewer system for subsequent discharge to leaching structures, retention or detention structure, or directly to a receiving water body, such as a stream, a pond or large receiving waters.

2.4.2. DRY WEATHER SOURCES

Dry-weather flow occurs during dry weather in the form of delayed drainage that was started by the storm event. One common example of a dry-weather flow is basement drainage. This drainage occurs when sump pumps remove groundwater around building foundations. Frequently, the pumping of drainage of groundwater around a building or other structure may need to continue for a number of days or weeks after a rain event has stopped. Sometimes it is seasonal or continuous. In the Town of Southampton, there are many small communities that are at a low elevation, and in close proximity to a water body that requires the use of sump pumps to avoid basement flooding.

A second example of dry weather flow is groundwater seepage into structures below the groundwater level which are not perfectly tight. This could include storm sewers and manholes that are below the level of groundwater in the surrounding area.

Besides dry weather flow induced by previous precipitation, storm sewers receive a fourth type of dry weather flow. This includes non-stormwater discharges from:

- Water line flushing
- Diverted stream flows
- Rising groundwaters
- Groundwater infiltration
- Discharges from potable water sources
- Foundation drains

- Water from crawl space pumps
- Footing drains
- Lawn Watering
- Flows from riparian habitats and wetlands
- De-chlorinated swimming pool water discharges
- Street wash waters related to cleaning and maintenance.

Storm sewers could also receive dry-weather flow and other materials from illicit discharges. Some examples of illicit discharges to storm sewers are: radiator flushing on sidewalks, driveways or streets; improper motor oil disposal in street gutters or directly into catch basins; throwing litter and garbage in the gutter or a catch basin; roadway accidents that result in fuel spills or spills of truck contents; washing of ready-mix concrete trucks; overturned trash cans that spill their contents, including various household liquids, into the street; and disposal of household hazardous substances such as solvents, cleaning fluids, paints, empty or partially empty containers that still contain dangerous chemicals or liquids; and illicit connections to storm sewers from sanitary or industrial discharges.

2.5. CHARACTERISTICS OF STORM SEWER DISCHARGES

Storm sewer discharges in most urban areas have been found to contain a host of pollutants that are part of the precipitation itself (acid rain or snow), atmospheric deposition, or result from the rain or snow coming into contact with roofs, sidewalks, streets, parking lots and other areas. These pollutants and parameters can be part of runoff during wet-weather periods or dry – weather discharges after the precipitation event. In addition, some pollutants and parameters can also be found in the other dry-weather discharges described earlier and which are not related to precipitation.

Typical pollutants found in runoff in rural and urban areas originate on lawns, farm lands, golf courses, sidewalks, streets, parking lots, and park spaces and can include suspended solids, bacteria, nitrogen, pathogens, phosphorus, heavy metals, and a variety of organic compounds such as polychlorinated biphenyls, petroleum hydrocarbons and polyaromatic hydrocarbons. Based on historical and recent water quality assessment reports, NYSDEC has concluded that storm sewers cause impairments to many of the State’s rivers, lakes, bays, and estuaries. Table 3.3.1-1 presents a list of pollutants of concern from various sources in urban areas. Table 3.3.1-2 presents a summary of possible sources and potential effects of runoff.

**TABLE 3.3.1-1
SOURCES OF RURAL /URBAN RUNOFF POLLUTANTS**

Source	Pollutant of Concern
Erosion	Sediment and attached soil nutrients, organic matter and other adsorbed pollutants
Atmospheric Deposition	Hydrocarbons emitted from automobiles, dust, aromatic hydrocarbons, metals and other chemicals released from industrial and commercial activities
Construction Materials	Metals from flashing and shingles, gutters and downspouts galvanized pipes and metal plating, paint and wood preservatives.
Manufactured Products	Heavy metals, halogenated aliphatics, phthalate esters, PAHs, other volatiles, phenols and oil from automobile use, zinc and cadmium from tire wear, and pesticides and phenols from other uses including industrial.
Landscape	Fertilizer and pesticides. Generally as impervious area increases,

Maintenance	nutrients build up on surfaces and runoff transport capacities also rise resulting in high loads. Exceptions include intensively landscaped areas (e.g., golf courses, cemeteries).
Plants and Animals	Plant debris, animal excrement
Farmland	Fertilizer and pesticides
Septic Tanks	Coliform bacteria, nitrogen/NO ₃
Non-Stormwater Connections	Inadvertent or deliberate discharges of sanitary sewage and industrial wastewater to storm drainage systems, including illicit connections, leaking sanitary collection systems, spills, industrial and commercial activities, construction activities, infiltration or contaminated groundwater and improper disposal
Accidental Spills	Pollutants of concern depend on the nature of the spill.

TABLE 3.3.1-2
SUMMARY OF POSSIBLE SOURCES AND
POTENTIAL EFFECTS OF RUNOFF POLLUTANTS

Category	Parameters	Possible Sources	Effects
Sediments	Organic and Inorganic Total Suspended Solids (TSS) Turbidity Dissolved Solids	Construction sites Urban/agricultural runoff CSOs Landfills, septic fields	Turbidity Habitat alteration Recreational and aesthetic loss Contaminant transport Navigation/hydrology Bank erosion
Nutrients	Nitrate Nitrite Ammonia Organic Nitrogen Phosphate Total Phosphorus	Urban/agricultural runoff Landfill, septic fields Atmospheric deposition Erosion	Surface waters Algal blooms Ammonia toxicity Groundwater Nitrate toxicity
Pathogens	Total Coliforms Fecal Coliforms Fecal Streptococci Viruses E. Coli Enterococcus	Urban/agricultural runoff Septic systems Illicit sanitary connections CSOs Boat discharges Domestic/wild animals	Ear/intestinal infections Shellfish bed closure Recreational / aesthetic loss
Organic Enrichment	Biochemical Oxygen Demand (BOD) Chemical Oxygen Demand (COD) Total Organic Carbon (TOC) Dissolved Oxygen	Urban/agricultural runoff CSO's Landfills, septic systems	Dissolved oxygen depletion Odors Fish Kills
Toxic Pollutants	Toxic Trace Metals Toxic Organics	Urban/agricultural runoff Pesticides/herbicides Underground storage tanks Hazardous waste sites Landfills Illegal oil disposal Industrial discharges	Bioaccumulation in food chain organisms and potential toxicity to humans and other organisms
Salts	Sodium Chloride	Urban runoff Snowmelt	Vehicular corrosion Contamination of drinking water Harmful to salt-intolerant plants

2.6. DIMINISHING GROUNDWATER RECHARGE AND QUALITY

Suffolk County lies over a sole source aquifer system that provides potable water to the residents and businesses located within the County. The aquifer system is comprised of three separate aquifers, the Glacial is the shallowest aquifer, the Magothy Aquifer underlies the Glacial Aquifer, followed by the Lloyd Aquifer. In the more urbanized areas of Long Island, many of the municipal wells in western Suffolk and Nassau Counties that are within the Glacial Aquifer are no longer utilized due to high concentrations of pollutants.

The slow infiltration of rainfall throughout the soil is essential for replenishing groundwater. Both human health and aquatic systems are dependent on its steady discharge. Urbanization of an area results in the net decrease of pervious land, this coupled with the fact that increased population density increases potable well drawdown, natural recharge of stormwater is decreased or concentrated in certain areas. During prolonged periods of dry weather, stream flow sharply diminishes.

2.7. REDUCING IMPACTS OF STORMWATER

The Water Quality Volume (WQv), a measure of the volume of most polluted stormwater, the first flush, that washes the road of all pollutants, is based on an equation ($WQv = (P \cdot R_v \cdot A) / 12$). It is designed to improve the water quality sizing to capture and treat 90% of the average annual stormwater runoff volume. The WQv is directly related to the amount of impervious cover created at a site. The 90% rainfall event number is supplied in Fig. 4.1 of the New York State Stormwater Management Design Manual (NYSSMDM) (August 2003), for the Town of Southampton it is 1.2.

In accordance with the NYSSMDM, practices that are acceptable for water quality treatment are listed below

1. Stormwater Ponds – Practices that have either a permanent pool of water or a combination of permanent pool and extended detention capable of treating the Water Quality Volume (WQv).
2. Stormwater Wetlands – Practices that include significant shallow marsh areas, and may also incorporate small permanent pools and extended detention storage to achieve the full WQv.
3. Infiltration Practices – Practices that capture and temporarily store the WQv before allowing it to infiltrate into the soil.
4. Filtering Practices – Practices that capture and temporarily store the WQv and pass it through a filter bed of sand, organic matter, soil, or other acceptable treatment media.
5. Open Channel Practices – Practices explicitly designed to capture and treat the full WQv within dry or wet cells formed by check dams or other means.

3. MINIMUM CONTROL MEASURE 1 – PUBLIC EDUCATION AND OUTREACH

The Town of Southampton has impaired water bodies both tidal and freshwater wetlands. These water bodies include: Peconic River, Flanders Bay, Scallop Pond, Phillips Creek, Quogue Canal and West Moriches Bay. These surface waters are impaired by Nitrogen, and Pathogens. Generally land uses within a watershed can be prescriptive in determining pollutant loading. One BMP that the Town utilizes to improve water quality is to purchase land within impaired watersheds for preservation or passive recreation.

The Public Education and Outreach control measure is directed at educating the public, specific groups, i.e., construction trades, municipal officials, and homeowners to the impact stormwater runoff has on the environment. In addition, this education would involve teaching targeted groups steps that can be taken to reduce certain pollutants associated with runoff.

Important components of this plan include the continuation of forming partnerships with other government entities primarily through existing programs and resources; the utilization of educational materials to promote the program; and reaching diverse audiences such as target communities and children. Target communities include local academic/college groups, youth organizations, yacht clubs and marinas, conservation/environmental groups, and sportsman/fishing clubs.

3.1. DISTRIBUTED INFORMATION

The Town has been actively keeping informational stormwater brochures, and informational posters at Town Hall and in the future many more Town Facilities. The Town will continue this process in the next five years with modifications as the deadlines for various permit components arise. These pamphlets include the impaired water bodies, the pollutants of concern (POCs), sources of the POC's, and alternative methods of operations to reduce concentrations of POCs.

The Engineering Division is working to further Minimum Control Measure 1 (MCM 1) by implementing pollution prevention and education programs to reduce nonpoint source pollutants generated from the following activities:

- Improper disposal of pet wastes;
- Boater sanitary disposal activities;
- The improper storage, use, and disposal of household chemicals, including automobile fluids, pesticides, paints, solvents, etc.;
- Activities that generate trash;

Sediment and Erosion Control is a large component in reducing the pollutant loading to impaired water bodies. In this matter, the Engineering Division has developed code amendments. educational pamphlets geared to construction companies. There are pamphlets located at the Land Management Offices. The Town's hope is to have influence on the conceptual design of sites, to encourage the implementation of stormwater BMPs including but not limited to the siting of specific uses on the site. In addition, construction site operators must ensure they have received erosion and sediment control training before working in the Town of Southampton . The Engineering Division has been proactively faxing and emailing notices of classes for this education to contractors who work within the Town. The Town hopes to work with the local Peconic Estuary Program to participate in a training program for the east end townships.

The Town municipal operations, abide by the new legislation regarding the application of fertilizers to reduce potential overloading of nitrogen. The Department of Parks and Recreation do apply fertilizers to certain active facilities such as ball fields.

The Town offers free boater pump out services to recreational boaters in the Peconic Estuary and South Shore Estuaries. The Town Trustees maintain six pump out boats within a number of areas within the Town. Informational brochures for these services are provided at both the Town Hall and Recreation Department, the brochures include the radio frequency (Marine Ch. 73) the boaters must utilize to contact the pump-out boat to arrange disposal.

The Town of Southampton Highway Department and Office of Waste Management provides bagged leaf pick up and three locations for residential self haulers to bring yard waste to. Leaves are accepted year round at no cost, and there are two amnesty periods for brush disposal. The Town operates four Transfer Stations for residential self haulers to bring both Municipal Solid Waste and recyclables. The Town offers four Stop Throwing Out Pollutants Day (STOP Day) per year offered to the residents at

each one of its four transfer facilities. During this event, residents may bring household hazardous waste to the site.

The Community Preservation Fund has been established within the Town to set aside monies to preserve properties as they become available. The Town has purchased many waterfront properties within the impaired waterbodies watershed boundaries. This program is ongoing, the priorities of this property is to purchase lands as they come available within impaired waterbody watersheds.

3.2. TOWN FACILITY INFORMATION

The goal of public education is to prevent or reduce nonpoint source pollutant loadings generated from a variety of activities within the Town with special emphasis given to the activities which contribute to Nitrogen and Pathogen loadings. In addition to the pamphlets, posters, and other information currently available to Town residents, in the next 3 years, the Town will begin implementing a pro-active education within the school districts and local Community Advisory Committees.

3.3. TOWN OF SOUTHAMPTON WEBSITE

The Town of Southampton maintains a website (www.Southamptontownny.gov), with a link to Stormwater Management. In 2012, this link will be updated to include the Stormwater Management Program Plan, MS4 permits, educational pamphlets, posters, and links to the local and national program for non-point source pollution issues.

3.4. CLEAN WATER COALITION –

The Clean Water Coalition is a group of governmental and non-governmental participants engaged with the purpose of clean water albeit surface and ground water. The initial focus of improving water quality for this coalition is through sanitary wastewater reform.

3.5. SOLID WASTE MANAGEMENT PLAN

The Town of Southampton as a regulated planning unit of Suffolk County under the New York Department of Environmental Conservation is required to maintain a Solid Waste Management Plan as a guidance document on proper waste management practices within the Town. The main focuses of the plan are recycling, reduction of waste, education, and detailing future actions that the Town will implement with the overall goal of reducing the amount of landfilled wastes.

3.6. EVALUATING AND MEASURING PROGRESS

The Town will utilize Classification of Outcome Levels for the effectiveness assessment for each Minimum Control Measure. The Classification of Outcome Levels will be based on the document prepared by the California Stormwater Quality Association “Municipal Stormwater Program Effectiveness Assessment Guidance as well as the Municipal Operations Analysis score card.

3.7. ANNUAL REPORTING

The annual reporting period ends March 9 of each year. The annual report must be sent to the DEC by June 1 of each reporting year. For MCM 1, the Town will supply the DEC with the following information:

- Who the targeted audiences where and what topics were included
- What strategies the Town used to achieve the education and outreach goals
- Web Pages that the information is posted on
- How the Town evaluates and measures the progress

4. MINIMUM CONTROL MEASURE 2 – PUBLIC INVOLVEMENT/PARTICIPATION

4.1. LOCAL STORMWATER PUBLIC CONTACT

The public are encouraged to contact the Engineering Department to report illicit discharges, with questions, etc. The Town has an active website page devoted to informing the public on initiatives the Town is taking to improve water quality. This website provides all contact information necessary to contact the Engineering Department. In addition, the contact information is shown on all informational brochures and posters.

4.2. COMMUNITY PRESERVATION

The Town administers a Community Preservation Fund (CPF) Program whereby a seven (7) member advisory board meets, reviews and recommends parcels for preservation. The advisory board is comprised of seven volunteers that provide demonstrated experience in land preservation. The CPF Project Plan is a comprehensive plan that designates parcels eligible for preservation. If approved, the Town Board will adopt a resolution approving the purchase and authorize the Supervisor to execute a contract to purchase said parcel. The Board ranks parcels based upon natural features and significant environmental concerns, including but not limited to wetlands parcels which performs flood protection and pollution control functions.

4.3. CLEAN WATER COALITION – The mission of this organization is to unite Suffolk County’s governments, non-governmental organization, and homeowners in achieving aquifer, ground and surface water quality improvement- starting with addressing the impacts of wastewater.

4.4. LITTER PICK UP EVENTS

The Town also sponsors waste removal for an event called the Great East End Cleanup. This event occurs once per year, generally in May. Participates of local communities and organizations can register with the Town on the area of Town for which they wish to clean up. They then organize into small groups and over a two day period clean areas of the Town and bring litter and debris found in the environment to one of the four Town Transfer Stations. The event is advertised through local papers, radio stations and on Sea TV local television.

4.5. WASTE MANAGEMENT

4.5.1. PAY AS YOU THROW PROGRAM – The Town of Southampton operates four Transfer Stations within the Town of Southampton for residential self haulers. Residential self haulers may dispose of household wastes within a Town green garbage bag. These garbage bags are available at a fee at local markets and hardware stores. Therefore there is a financial incentive for residential self haulers to recycle comingled containers, paper, and cardboard as recycling is free.

4.5.2. SEED / PLANT SWAP AND STOP – In 2012, the Waste Management division will begin an annual event to provide plants and perennial seeds to residential self haulers and visitors to the recycling centers and encourage them in return to bring surplus plants and/or seeds so they may be provided to the public. To run concurrent to this event will be a stormwater and waste management education table containing information on best management practices that residents can begin at home, and compost to begin rain gardens.

4.5.3. STOP DAY

The Town has a household hazardous waste drop-off program that involves four collections each year. In 2012, the Town will also offer battery, styrofoam, recycling drops at the four transfer

stations. Although household chemicals make up only a small percentage of the residential waste stream, in order to protect the environment, it is important that they be disposed of properly. The Town's program accepts chemicals that include, but are not limited to, pesticides, aerosol cans, household cleaners, waste motor oil, batteries, electronics and fluorescent bulbs. With respect to used motor oil, New York State law requires every gasoline station that sells more than 500 gallons of motor oil to accept used motor oil at no charge. Waste motor oil is also collected at each of the Town's four Transfer Facilities.

4.6. SCHOOL DISTRICTS AND CITIZEN ADVISORY COMMITTEE'S (CACs)

The Engineering Division, Waste Management and Sustainability Division will be working integrally with the school districts and the Citizen Advisory Committee's in the next 3 years to provide education regarding Stormwater Runoff and Illicit Discharges to both the Earth Science Classes and the Marine Rehabilitation classes. A measurable goal on the effectiveness of the education program would be a small quiz provided to both Earth Science Students, and a questionnaire for the residents.

4.7. CONSERVATION AND RECYCLING

The Town realizes that part of the stormwater management program deals with good housekeeping, conservation, recycling, and efficiency. The Town has re-vamped its purchasing policies to reduce paper quantities and purchase Green Seal cleaning and paper products for the Town. In addition, we are utilizing more efficient indoor and outdoor lighting products, that utilize less energy and have a longer estimated life span. In addition, in 2012, the Town will develop a stronger water conservation goals, with encouragement to reduce land clearing, encourage use of native drought tolerant plant species, and in-house water conservation initiatives such as night time laundry and irrigation. Residents are encouraged to implement their own water conservation measures such as retrofitting plumbing fixtures with flow restrictors, modifying automatic lawn sprinklers to include rain sensors, repairing leaks in the home, installing water conservation fixtures/appliances and maintaining a daily awareness of water conservation in their personal habits.

A measurable goal for this plan would be to determine if water usage has decreased in 2012, after the public has been provided with the information on water conservation.

4.8. EVALUATING AND MEASURING PROGRESS

The Town will keep an inventory of all public involvement programs, attendance will be taken. The Town hopes that as the information gets out there, more residents will participate in the hosted programs. In addition, we will maintain counts on all public meetings that distribute information regarding Stormwater Awareness.

4.9. ANNUAL REPORTING

The annual reporting period ends March 9 of each year. The annual report must be sent to the DEC by June 1 of each reporting year. For MCM 1, the Town will supply the DEC with the following information:

- What opportunities were provided for public participation in implementation, development, evaluation and improvement of the Stormwater Management Program Plan
- What the public notice of availability of annual report and Stormwater Management Program Plan consisted of.

- Where are public access copies of the annual report, Stormwater Management Program Plan, and comments are kept
- What comments were received during the reporting period

5. MINIMUM CONTROL MEASURE 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

5.1. INTRODUCTION

Storm sewer systems are designed to convey stormwater and exclude water from non-stormwater sources with some exceptions. Illicit Discharges are defined as discharges not entirely composed of stormwater into the small MS4, except those identified in Part I.A.2 of the SPDES General Permit. 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 permittee or the Town has determined to be a substantial contributor of pollutants to the small MS4.

The Town shall work with the Suffolk County Department of Health Services and local advocacy groups on developing and implementing a program to ensure that onsite wastewater treatment (septic systems) within pathogen impaired watersheds are inspected and where necessary maintained, or rehabilitated at a minimum frequency of once every three years. This will affect all property owners with private sanitary systems within the Peconic River, Flanders Bay, Scallop Pond, Phillips Creek, Quogue Canal and West Moriches Bay watersheds.

5.2. PROGRAM

In 2011, the Town's consultant, Dvirka and Bartilucci finalized a Phase II Stormwater Management Program Written Procedures for Minimum Control Measure 3: Illicit Discharge Detection and Elimination. These written procedures are a component of this management plan and are provided in Appendix X of this document.

- 5.2.1** Land Uses of Concern – Since the ToS has nitrogen and pathogen watershed improvement strategies, land uses that contribute to nitrogen and pathogen pollutants have been identified. We have identified the following land uses within the ToS, sorted by their proximity to either a MS4 structure or a surface water body and will be mapping them through the GIS system for inspection tracking purposes. These land uses of concern are presented by location in Appendix C.
- 5.2.2** Animal Care/Kennel Facilities
- 5.2.3** Auto Repair and Fuel Filling Stations
- 5.2.4** Bulk fuel storage
- 5.2.5** Golf Courses
- 5.2.6** Fertilizer and Pesticide distributors.
- 5.2.7** Funeral and Crematorium locations
- 5.2.8** Older Residential Developments within impaired watershed areas.

5.3 Available Equipment

- 5.3.1** The Town of Southampton Highway Department currently one full time and one shared time (with Village of Southampton) vacuum trucks that it utilizes in the cleaning of drainage structures including but not limited to catch basins, leaching pools and storm drain pipes.
- 5.3.2** In the future, a camera would be a welcome addition to the Highway Department for use in conveyance line maintenance and illicit discharge detection.

5.4 Staff

- 5.4.1 Christine Fetten, P.E.-Town Engineer** – Ms. Fetten oversees Municipal Works and Engineering Division. Ms. Fetten reports directly to the Town of Southampton Town Board, who ultimately make decisions concerning the operations of the Town.
- 5.4.2 John LaRosa P.E., Assistant Town Engineer** – Mr. LaRosa participates in the day to day functions of the Engineering Division. Mr. LaRosa along with Michael Collins compile annual information pertaining to the MS4 Annual Reporting requirements. Mr. LaRosa, Mr. Collins, and Michael Sendlenski consult on a regular basis in regards to the MS4 requirements, tracking, legal authorities, etc. for all MCMs, and Watershed Improvement Strategies. Mr. Collins regularly attends Peconic Estuary MS4 meetings to participate in watershed MS4 opportunities.
- 5.4.3 Michael Collins, P.E., Junior Civil Engineer** – Mr. Collins has been actively overseeing the operations of the MS4 requirements. He works very closely with Mr. Baldwin and Mr. LaRosa in developing sub-watershed mapping, outfall reconnaissance and infrastructure mapping. Mr. Collins reviewed the Reeve’s Bay watershed management plan developed by Horsely and Whitten , sponsored by the Peconic Estuary Program (PEP) and developed a workable plan for implementation that did not require private property acquisition and/or easements over private property. Mr. Collins regularly attends Peconic Estuary MS4 Meetings to participate in watershed MS4 opportunities.
- 5.4.4 Michael Balwin, GIS Supervisor** – Mr. Baldwin has worked diligently on developing the ToS’s GIS Mapping system. All employees with desktop access can access the ToS’s GIS system. Mr. Baldwin has made himself available for training opportunities to town staff. Mr. Baldwin has been working on a naming convention so that all MS4 structures may be identified in the field by HWY staff during cleaning operations so they may be better tracked. In the near future the ToS will begin tracking the IDDE program and cleaning program on the GIS system.
- 5.4.5 Mike Sendlenski, Assistant Town Attorney** – Mr. Sendlenski is the legal counsel for the ToS’s MS4 Program. Mr. Sendlenski works closely with the Engineering Division and Town Board to adopt Town Code adoptions for Construction Site Stormwater Controls, Illicit Discharge Detection and Elimination and other Watershed Improvement Strategy Code adoptions. Mr. Sendlenski receives stormwater questions from the Engineering Division and issues Legal Opinions as warranted.
- 5.4.6 Alex Gregor, Southampton Highway Department Superintendent** –Mr. Gregor is an elected Superintendent of the Town of Southampton Highway Department. Mr. Gregor, since becoming the Superintendent of Highways has diligently dedicated staff to the maintenance of MS4 structures.
- 5.4.7 Freda Eisenburg, Southampton Land Management** – Ms. Eisenburg oversees the Land Management Department that consists of Building and Zoning, Licensing, Environment, and current and long range planning. This Department has considerable input into the future of the Program Plan in both current and long range development within the Town. This Department is responsible for such things as the Local Waterfront Revitalization Program and Sewer Studies within the Town and Sustainability Master Plans.
- 5.4.8 Christopher Bean – Parks and Recreation Office** – Mr. Bean oversees the Parks and Recreation Program. This Department has abilities to implement Best Management items within the Town parks, and institute programs in which Waste Management, Sustainability and Storwmater topics can be discussed for education programs.

5.5 Funding –

- 5.5.1 Operational Costs** – The Town currently funds personnel from the Engineering Division and the Town Attorney’s Office that work on MS4 Permit requirements through its operating budget. Michael Collins, is funded entirely out of a dedicated capital budget line for Stormwater projects.
- 5.5.2 Capital Improvement Costs** – Large scale projects such as infrastructure replacement and watershed improvement strategy implementations are generally paid out of a Capital Improvement Project (CIPs). Generally CIPs are funded through either bonding or town budgets coupled with grant monies (shared).

5.5.3 **Grant Opportunities** – The Town has had great success in securing grant funds for the implementation of MS4 projects. The Town has purchased boater pumpout boats through grant monies. The Town has performed stormwater retrofits out of grant monies.

5.6 **WATERSHED MAPPING**

The size of a watershed is closely related to the network of streams contained within its borders. Streams with no upstream tributaries are designated as first-order streams down to their first confluence. A second-order stream is formed when two first-order streams meet.

Watershed – Generally, this is the largest management unit that falls within the local land use planning authority. A community might have one or more watersheds within its borders, depending on its size.

Sub-watershed – The scale encompassed by the watershed. Its boundaries include all land area draining to the point where two second-order streams come together to form a third-order stream. In most regions, sub watersheds are a few square miles in area and are drained by a stream several feet in width.

The Town will work on mapping out the watersheds that discharge to the impaired waterbodies as a first priority. This will aid in determining where illicit discharges originate from in the infrastructure system has been mapped out.

The Peconic Estuary Program sponsored the Reeve’s Bay Watershed Management Plan, prepared by Horsley Witten Group in July 2006. This watershed delineation has been incorporated into the Town’s GIS system.

5.7 **ILLICIT DISCHARGE EDUCATION**

The BMP committee is currently developing a program to educate the public on the dangers of Illicit Discharges. This would provide a partnership which would enhance their wildlife education program. The Town would incorporate information received on non point source pollution in the Peconic Estuary and what elements which should be emphasized the most.

School Districts – the BMP Committee will pursue a partnership with the school districts. This would allow the Town to interact with teachers of Elementary Science, and Earth Science to inform children the measures that the Government is taking and how they can help the process by not littering, maintaining good housekeeping at home, becoming alert on what illicit discharges are and saying something if they see something, as well as spreading the information on to their relatives.

5.8 **POTENTIAL DETECTORS OF ILLICIT DISCHARGE**

The BMP committee has recognized that certain Town functions can be utilized to detect forms of illicit discharge such as the Highway Department, Parks and Recreation Department, and the Emergency Services (Police, Ambulance, Fire Depts.). The areas which would be most likely to be illicit discharges would be older industrial areas and older residential communities.

5.8.1 **HIGHWAY DEPARTMENT**

The Town Highway Department maintains the Town's MS4 system. Typical maintenance operations that the Hwy Dept. performs includes but is not limited to:

5.8.1.1 STREET SWEEPING – During street sweeping operations, the operator is traveling at a slow rate of speed. The operator actively looks for non-MS4 pipes draining to the MS4, overland discharges draining to the MS4, etc. There is a running list maintained at the Hwy Dept. that describes any activities, items that are potential illicit discharges. If there are items of major concern that are discharges of strong odor, or color, the Hwy Dept. will investigate if it is an immediate potential hazard, the Fire Marshal's office is contacted.

5.8.1.2 DRAINAGE STRUCTURE CLEANING - Hwy Dept. actively cleans out drainage infrastructure. The Hwy Dept. currently maintains two vacuum trucks that are utilized for removing debris that has accumulated in drainage catch basins, leaching pools, and manholes. During cleaning operations, if they observe dry weather flow, additional pipes in the structures, or foul odors, they maintain a list of the structure number, and location. There is a running list maintained at the Hwy Dept. that describes any activities, items that are potential illicit discharges.

5.8.2 EMERGENCY SERVICES

The Emergency Services that operate within the Town include the Police Department, Fire Marshal's Office, Fire Departments and Ambulance Departments. During motor vehicle accidents, they are the first responders, and are able to assess the immediate affects of the accident. If there are any penetrations to holding tanks of the vehicles they alert appropriate departments albeit the NYSDEC, Highway Department, to protect the Town's MS4 system and the environment. If during the assessment, they observe dry weather flow, they will contact the Fire Marshal's Office or the Engineering Department depending on the severity of the issue.

5.9 EVALUATING AND MEASURING PROGRESS

The Town will keep an inventory of all illicit discharge complaints and responses. They will be broken down into the quantity of illicit discharges identified and the number eliminated. The quantity of inspections will be utilized as a measuring progress tool. Currently there is limited funds to perform inspection, however, as funding becomes more available the frequency will increase and the time line to eliminate a illicit discharge will be reduced.

5.10 ANNUAL REPORTING

The annual reporting period ends March 9 of each year. The annual report must be sent to the DEC by June 1 of each reporting year. For MCM 1, the Town will supply the DEC with the following information:

- Approximate percentage and numbers of outfalls mapped
- Number of outfalls screened for dry weather discharges during reporting period
- Types of generating sites/ sewersheds targeted for inspection during this reporting period;
- Types of illicit discharges found during the reporting period
- Quantity of illicit discharges/potential illegal connections that have been detected during this reporting period
- Quantity of illicit discharges/illegal connection have been eliminated during this reporting period
- If the storm sewershed mapping has been completed

- If the information is available on GIS
- What percent of staff in relevant positions and departments have received IDDE training.

6 MINIMUM CONTROL MEASURE 4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

6.2 INTRODUCTION

This minimum control measure is intended to reduce the amount of sediment generated from construction sites (erosion control) and reduce the off-site transport of sediment and construction – related chemicals (sediment and chemical control). This measure should be utilized to influence conceptual design drawings to develop a sustainable site, and protect the watershed.

Several pollutants of concern are associated with construction activities, including the following: sediment; pesticides; fertilizers used for vegetative stabilization; petrochemicals (oils, gasoline, and asphalt degreasers); construction chemicals such as concrete products, sealers, and paints; wash water associated with these products; paper; wood; garbage; and sanitary waste (Washington State Department of Ecology, 1991). “Erosion rates from natural areas such as undisturbed forested lands are typically less than 1 ton/acre/year, whereas erosion from construction sites ranges from 7.2 to 500 tons/acre/year” (USEPA, 2005).

6.3 TOWN CODE AMENDMENTS

The Town of Southampton adopted local law for the addition of “Chapter 285 – Stormwater Management and Erosion and Sediment Control Regulations” of the Southampton Town Code. Chapter 285 was modeled after the State policies and procedures for Site Developers to prepare a Stormwater Pollution Prevention Plan (SWPPP) for review by the Town of Southampton . The local law outlines fees, to be set up for the review and inspection of these sites as they become developed

6.4 EDUCATION

Construction site operators, design engineers, municipal staff and other individuals will be trained in sediment and erosion control practices either through the NYSDEC, USEPA, or Geological Group.

6.5 PROGRAM

The Town has prepared informational pamphlets for developers entering either Land Management Department for site plan and/or building applications. The goal of the pamphlets is to inform the developers of the procedural requirements of SWPPP reporting, inspection, best management practices in the layout of site plan features, construction activities, and post-construction considerations.

6.6 WRITTEN PROCEDURES

In 2011 the Town finalized Written Procedures for Minimum Control Measures 4 and 5 Construction Site Stormwater Runoff Control and Post-Construction Management prepared by the Town’s consultant, Dvirka and Bartilucci. The procedures outline the review process of a SWPPP, construction compliance inspections and enforcement actions. This document is included as part of the Management Program Plan and is intended for use by Town employees reviewing applicant SWPPPs.

6.7 EVALUATING AND MEASURING PROGRESS

The Town will keep an inventory of all reviewed SWPPPS, how many requested revisions each one had and when it was approved. The amount of contractor training seminars will be quantified.

6.6 ANNUAL REPORTING

The annual reporting period ends March 9 of each year. The annual report must be sent to the DEC by June 1 of each reporting year. For MCM 4, the Town will supply the DEC with the following information:

- If the Town has adopted a law that provides equal protection to the NYS SPDES General Permit
- Does that Town have a SWPPP review procedure in place
- How many SWPPPS have been reviewed in the reporting period
- Does the Town have a mechanism for receipt and consideration of public comments related to construction SWPPPS
- Does the Town provide education and training for contractors about the local SWPPP process
- Identify the types of enforcement actions used during the reporting period for construction activities.
- How many projects have been authorized for disturbances of one acre or more.
- How many construction projects disturbing at least one acre were active in your jurisdiction during this reporting period
- What percent of active construction sites were inspected during this reporting period
- What percent of active construction sites were inspected more than once.
- Do all inspectors working for the Town use the NYS Construction Stormwater Inspection Manual

7 MINIMUM CONTROL MEASURE 5 – POST-CONSTRUCTION STORMWATER MANAGEMENT

7.2 INTRODUCTION

This minimum control measure addresses runoff from projects after the construction phase is complete. In some cases, construction and post-construction BMPs can be located in the same area, however it is being found that construction and post construction BMPs should be located on different parts of the site and have different sizing and design criteria. In the past, more emphasis has been made on stormwater volume instead of water quality issues. The majority of the Town of Southampton 's stormwater is infiltrated by way of recharge basins with no pre-treatment.

7.3 NON STRUCTURAL BEST MANAGEMENT PRACTICES

Non structural BMPs are measures that communities may take to protect water quality. These often include land preservation, conservation, recycling activities. These can be implemented with volunteer groups working with Town Government, the enactment of Town Code amendments, zoning restrictions, and education.

7.3.1 LAND PRESERVATION IN IMPAIRED WATERSHEDS

The open space and farmland committees review the parcels, conduct site visits, rank or rate the parcels and vote to recommend to the Town Board the most viable options. Thereafter, the Town via resolution votes to hold a public hearing so the public may participate or express opinion regarding the preservation of a particular parcel. If approved, the Town Board will adopt a resolution approving the purchase and authorize the Supervisor to execute a contract to purchase the parcel.

7.3.2 WRITTEN PROCEDURES

In 2011 the Town finalized Written Procedures for Minimum Control Measures 4 and 5 Construction Site Stormwater Runoff Control and Post-Construction Management prepared by the Town's consultant, Dvirka and Bartilucci. The procedures outline the review process of a SWPPP, construction compliance inspections and enforcement actions. This document is included as part of the Management Program Plan and is intended for use by Town employees reviewing applicant SWPPPs.

7.3.3 TOWN CODE AMENDMENTS

The Town adopted a local law for the addition of Chapter 285 entitled Stormwater Management and Erosion and Sediment Control. As part of this code amendment, the Town requires the owner/operator of the permanent stormwater management practices installed in accordance with Town Code to ensure they are operated and maintained to achieve the goals of the chapter and require the owner / operator to prepare and maintain on site a preventative/corrective maintenance program for all critical facilities and systems of treatment and control which are installed or used by the owner/operator to achieve the goals. In addition, the owner/operator shall enter into a formal maintenance agreement for stormwater management facilities (maintained by private entities) binding on all subsequent landowners and recorded in the office of the Suffolk County Clerk as a deed restriction on the property prior to the final plan approval.

7.3.4 PUBLIC EDUCATION

The Town will continue to utilize public education by way of pamphlets, posters, and seminars to inform people that everyone can make a difference. Simple ways to manage stormwater in both residential and commercial sites is to utilize practices to minimize impervious areas, clearing practices and to utilize practices to enhance the site landscaping such as rain gardens, wet ponds which can be incorporated into the landscaping scheme.

7.4 STRUCTURAL BEST MANAGEMENT PRACTICES

Structural BMPs are actions that can be implemented during design/construction and are structural in nature to treat both stormwater quantity and quality. They are sized based upon the volume of water that they can accommodate.

7.4.1 DRY DETENTION POND

Dry detention ponds are vegetated basins designed to fill during storm events and slowly release the water over a number of hours.

7.4.1.1 OPERATION AND MAINTENANCE

All facility components, vegetation, and source controls shall be inspected for proper operations and structural stability. These inspections shall occur, at a minimum, quarterly for the first 2 years from the date of installation, and two times per year thereafter, within 48 hours after each major storm event. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities. Components to be inspected include but are not limited to: pond inlet, forebay, embankment, dikes, berms, side slopes, control devices, overflow structure, sediment and debris management.

7.4.2 WET PONDS AND EXTENDED WET DETENTION PONDS

Wet ponds are constructed with a permanent pool of water (called pool storage or dead storage). Stormwater runoff enters the pond at one end and displaces water from the

permanent pool. Pollutants are removed from stormwater through gravitational settling and biologic processes.

7.4.2.1 OPERATION AND MAINTENANCE

All facility components, vegetation, and source controls shall be inspected for proper operations and structural stability. These inspections shall occur, at a minimum, quarterly for the first 2 years from the date of installation, and two times per year thereafter, within 48 hours after each major storm event. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities. Components to be inspected include but are not limited to: pond inlet, forebay, embankment, dikes, berms, side slopes, control devices, overflow structure, sediment and debris management.

7.4.3 FILTRATION PRACTICES

Filtration practices are a low impact way of filtering stormwater into the groundwater. The concept is to slow the water velocity through use of a parallel conveyance of the stormwater, as the water flows across, it also infiltrates down, the slow release helps contaminants cling to soil particles, or become ingested by plants.

7.4.3.1 GRASSED SWALES

Grassy swales are long narrow grassy depressions used to collect and convey stormwater runoff, allowing pollutants to settle and filter out as the water infiltrates into the ground or flows through the facility. In addition to providing pollution reduction, flow rates and volumes can also be managed for small process (<15,000 square feet of impervious surface) with grassy swales. Swales can be used to fulfill a site's required landscaping area requirement.

Operation and Maintenance – The swale should drain within 48 hours of a storm event. All facility components, including but not limited to vegetation, source controls, swale inlet, side slopes, swale media, and swale outlet shall be inspected for proper operations and structural stability, at a minimum, quarterly for the first 2 years from the date of installation, 2 times per year thereafter, and within 48 hours after each major storm event. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities.

7.4.3.2 SAND FILTERS

There are two sand filter options. One is designed with an impervious bottom or is placed on an impervious surface. It can be used for all soil types. The other option, for native soils with a minimum infiltration rate of 2 inches per hour (NRCS soil types A and B), allows filtered water to infiltrate into the ground. For both options, pollutant reduction is achieved as the water filters through the sand; flow control is obtained by slowing the discharge rate as the water filters through the sand. Filters may be constructed in-ground or above grade. Because they include a waterproof lining, sand filters are extremely versatile and can be used next to foundation walls, adjacent to property lines or on slopes. An overflow to an approved conveyance and disposal method is required.

Operation and Maintenance – All facility components including but not limited to vegetation, filter inlet, reservoir, filter media, under-drain piping, and overflow or emergency spillway shall be inspected for proper operations and structural

stability. These inspections shall occur, at a minimum, quarterly for the first 2 years from the date of installation, and 2 times per year thereafter, and within 48 hours after each major storm event. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities.

7.4.3.3 INFILTRATION PLANTER

Infiltration planters are structural landscaped reservoirs used to collect, filter, and infiltrate stormwater runoff, allowing pollutants to settle and filter out as the water percolates through the planter soil and infiltrates into the ground. In addition to providing pollution reduction, flow rates and volumes can also be managed with infiltration planters. Planters can be used to help fulfill a site's required landscaping area requirement and should be integrated into the overall site design.

Operation and Maintenance – Water should drain through the planter within 3 - 4 hours after a storm event. All facility components including but not limited to downspout, splash blocks, planter reservoir, filter media, planter, overflow pipe, and vegetation shall be inspected for proper operations and structural stability. These inspections shall occur, at a minimum, quarterly for the first 2 years from the date of installation, 2 times per year thereafter, and within 48 hours after each major storm event. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities.

7.5 STORMWATER RETROFITTING

The MS4 requirements pertain to new development and redevelopment projects. Redevelopment cases, in particular are places where retrofitting can play a major role. For instance, existing stormwater facilities and/or conveyance systems can be retrofitted to provide better water quality treatment.

7.5.1 RETROFITTING PROTOCOLS

The Town will establish construction measures that developers can utilize in redevelopment projects on how to deal with roof runoff, parking lot runoff etc.

7.5.2 MUNICIPAL RETROFIT

The Town shall implement a program to build retrofitting into the Town facilities, capital improvements and facilities maintenance program. The Town will continue to retrofit stormwater facilities as it is economically feasible. Public education and involvement is most probable in low impact areas such as roof runoff.

7.6 EVALUATING AND MEASURING PROGRESS

There are three opportunities for measurement and evaluation for Post Construction Management. For new subdivisions that are developed and then given to the Town for adoption into the Highway System, the number of these adoptions / year will be recorded. For private developments that discharge to a public stormwater system, the quantity of these developments/year will be recorded. For developments that have a private discharge to a public water which will require a State Pollutant Discharges Permit through the NYSDEC, the Town will receive a copy of this permit and track the number of these permits/year. We will also track the progress of new installations of Green technologies such as Rain Gardens, and Swales that the Town is installing as well as recommending these for use in private developments.

7.7 ANNUAL REPORTING

The annual reporting period ends March 9 of each year. The annual report must be sent to the DEC by June 1 of each reporting year. For MCM 5, the Town will supply the DEC with the following information:

- How many and what type of post-construction stormwater management practices has the Town inventoried, inspected, implemented in the period
- Does the Town use GIS or spreadsheets to track post-construction BMPs, inspections and maintenance.
- What types of non-structural practices have been used to implement the Low Impact Development/Better Site Design/Green Infrastructure principles.

8 MINIMUM CONTROL MEASURE 6 – POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

8.2 INTRODUCTION

This minimum control measure is intended to prevent or reduce nonpoint source pollutant loadings generated from a variety of activities within urban areas. Everyday activities of municipal employees and businesses have the potential to contribute to nonpoint source pollutant loadings. These activities include improper use and disposal of household chemicals, lawn and garden maintenance, turf grass management, operation and maintenance of diesel, and gasoline vehicles, illicit discharges to the MS4, commercial activities and improper pet waste disposal. Performing these activities in an environmentally responsible manner potentially will improve

8.3 OBJECTIVES

- To design and implement an operation and maintenance program to reduce and prevent discharge of pollutants to the maximum extent practicable from municipal operations and facilities.
- Include training in the program on pollution prevention and good housekeeping techniques in municipal operations;
- Select and implement management practices for pollution prevention and good housekeeping in municipal operations; and
- Develop measurable goals to ensure the reduction of all pollutants of concern in stormwater discharges to the maximum extent practicable.

8.4 TOWN FACILITIES AND OPERATIONS

The Town has many facilities which it operates for public interactions. Information regarding these properties and facilities are located in Appendix A and are sorted by Department. The information contained within the database and detail sheets are updated on an annual basis.

8.5 BUILDING MAINTENANCE

The Town Division of Buildings and Facilities Management maintains all Town buildings in terms of maintenance and repairs with the exception to some Recreational Buildings. The Town utilizes Green Purchasing of paper and cleaning supplies used for Building Maintenance activities. As buildings require renovations, the Town attempts (to the maximum extent practicable) to comply with LEED requirements. We are employing LEED maintenance procedures with GS-37 labeled cleaning solvents, and only ordering enough to maintain buildings for a 6 month time frame. LIPA has conducted energy audits for all facilities. The Town is pursuing entering into an Energy Services Contract (ESCO) with the purpose to improve building efficiency, health, and reduce operational costs.

When existing mercury containing lighting is at the end of its useful life albeit fluorescent interior lighting or exterior street lights, the Town stores these materials for pick up by a registered / licensed recycling facility in accordance with the Federal legislation.

8.6 TOWN PARKS

The Department of Parks and Recreation maintains all of the Town Parks and facilities beyond the building envelope.

8.6.1 COMMERCIAL DOCKS

The Department of Parks and Recreation provides the Commercial Fishing Dock in Hampton Bays with a covered waste container to assist the fisherman in best management practices regarding waste management.

8.6.2 RECREATIONAL FIELD FERTILIZATION

The Parks and Recreation Maintenance crews fertilize some recreational playing fields at Town facilities. Fertilizer deployment is reduced as a program item to reduce nitrogen introduction into the watershed. When it is deployed, the Parks Maintenance Staff abide by all current NYSDEC and Suffolk County regulations.

8.6.3 DOCKING FACILITY BOATER PUMPOUTS

The Parks and Recreation Department maintains boater pumpout stations located at the East Quogue Marina. This is a community asset to promote the zero tolerance of boater pumpout in the estuary.

8.6.4 GOLF COURSE –

The Parks Department and Recreation oversees the use of the Town Golf Course. The oversight of the golf course is generally sub-contracted to another entity. During the next round of contract negotiations, the Town will require a phased in approach to converting the fertilization of the grounds to organic fertilizers.

8.6.5 GRASS MOWING

The Department of Parks and Recreation does not bag grass clipping, but allows them to stay on the lawn providing nutrients such as nitrogen to slowly dissolve into the turf. These mowers are maintained by the Parks Department, with regular inspections for leaks, and efficient operation.

8.7 ROADWAY MAINTENANCE

8.7.1 TREE TRIMMING

The HWY Dept. maintains the trees within the ROWs. Maintenance of the trees includes removing dead trees and removing damaged or deteriorated tree limbs which potentially could fall in the roadway causing damage and possible injury. Organic waste is brought to the Yard Waste area of the three regulated Transfer Facilities.

8.7.2 ROAD KILL REMOVAL

The HWY Dept. removes all dead animals that have been struck and killed by motor vehicles within the roadway. This operation is generally performed by 2 staff members. The carcasses are brought to the North Sea Transfer Station for organic composting.

8.7.3 STREET SWEEPING

The Highway Department performs the street sweeping operations. There are currently one full time and one part time Hwy Dept. street sweepers in the Town, they are regularly maintained by the Highway Garage. There are multiple staff members that run these sweepers in addition to other equipment. This staff actively maintains records on when and where they have swept and how much debris they have swept off the roadway.

8.7.4 WINTER ROAD MAINTENANCE

The Town Highway Department currently utilizes a mixture of pre-storm brine treatment, sand and sodium chloride to provide de-icing and friction to roadways as the temperature drops and calcium chloride spray to the sand/salt mix for de-icing in lower temperature ranges of 20 degrees and below.

Alternatives: Alternatives to the use of sodium chloride and calcium chloride include magnesium chloride which is essentially equivalent to the two compounds the Town uses in terms of costs and corrosion, as well as calcium magnesium acetate (CMA) and urea. CMA is a biodegradable material made from limestone and acetic acid, and is considered a viable alternative to solid and liquid de-icers due to its low environmental impact. However, this compound melts at a slower rate than conventional salts and is on average 15 to 30 times the cost of conventional salts. Therefore, the Town does not use this material due to fiscal constraints, and vehicular safety concerns. Urea is utilized by airports for de-icing of planes and runways. Due to the high nutrient concentrations, the Town would not utilize this in and around wetlands

8.8 EVALUATING AND MEASURING PROGRESS

The Town will address Good Housekeeping by self evaluation in accordance with the Municipal Operations Analysis developed by the Center for Watershed Protection. Once this is performed, and a grade is assess, the Town will proactively work on specific items to improve the grade on an annual basis.

8.9 ANNUAL REPORT

The annual reporting period ends March 9 of each year. The annual report must be sent to the DEC by June 1 of each reporting year. For MCM 6, the Town will supply the DEC with the following information:

- List each municipal operation/facility that contributes or may potentially contribute POCs to the MS4 system.
- List of Municipal Operations good housekeeping programs
 - Acres of parking lots swept
 - Miles of street swept
 - Inspections of Post Construction Control Practices
 - Lbs of Phosphorus applied in chemical fertilizer
 - Lbs of nitrogen applied in chemical fertilizer
 - Lbs of pesticide/herbicide applied as pure product
- Quantity of stormwater management trainings have been provided to municipal employees.
- Date of last training
- Quantity of municipal employees have been trained in this reporting period
- Percentage of municipal employees in relevant positions and departments receiving stormwater management training.

