

NASSAU COUNTY STORM WATER MANAGEMENT PROGRAM PLAN

Edward P. Mangano
County Executive



Shila Shah-Gavnoudias, P.E.
Commissioner of Public Works

2009



NASSAU COUNTY STORM WATER MANAGEMENT PROGRAM

INTRODUCTION

The County of Nassau has developed and implemented a storm water management program (NCSWMP) as required for coverage under the New York State Pollution Discharge Elimination System (SPDES) general permit GP-02-02 and now under the renewed permit GP-0-08-002. The NCSWMP includes a listing of Best Management Practices (BMP's) that have been implemented by the County and a coalition of local municipalities in order to achieve the regulatory standard of reducing pollutants in the County's storm water to the maximum extent practicable. Existing County and local municipal governments' storm water programs and activities designed to protect the County's water quality have been supplemented with new Best Management Practices (BMP's). Initial measurable goals and an implementation schedule were developed for each of the BMP's in the NCSWMP. The BMP's, measurable goals, implementation schedule and initial NCSWMP were developed by the County's Department of Public Works with input from Task Groups during a series of meetings held in November and December 2002, and January 2003. The Task Groups consisted of a combination of municipal officials, watershed protection committee members and consulting engineers. The BMP's, measurable goals and implementation schedule were selected based on their ability to meet specific permit requirements and to reduce pollutants in the County's storm water runoff to the maximum extent practicable. They were also selected based upon a general assessment of BMP effectiveness, applicability to Nassau County, and cost associated with the implementation of the BMP's. The effectiveness of the selected BMP's and success in achieving the selected measurable goals has been reviewed annually and modified, if necessary.

PROGRAM DEVELOPMENT

Nassau County has developed a storm water management program (NCSWMP) in accordance with the New York State Discharge Elimination System (SPDES) requirements for obtaining authorization for storm water discharges and certain non-storm water discharges. This NCSWMP 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-0-08-002. The NCSWMP has been developed to facilitate the County's efforts in reducing storm water pollutants from the County's municipal separate storm sewer system (MS4) to the maximum extent practicable (MEP), as required by the SPDES General Permit.

The NCSWMP describes specific actions, programs, laws and procedures that have been implemented over the five-year period from 2003 to 2008 to reduce pollutants and protect the County's surface waters. Various BMP's have been developed for each of the six Minimum Control Measures (MCM's) required by the General Permit.

BEST MANAGEMENT PRACTICE SELECTION

The Nassau County Department of Public Works hosted an informational workshop in November 2002 on the Phase II regulations. Representatives of 67 Cities, Towns and Villages were invited to participate in the workshop in an effort to develop a coordinated approach to a SWMP. Facilitated by the Nassau County Department of Public Works, two Task Group meetings were then held at the end of 2002 and the beginning of 2003 to develop BMP's for each of the six MCM's. There were over 50 municipalities that participated in these meetings in order to develop a SWMP that each individual municipality could enact, whereby information is shared and activities are coordinated to avoid the duplication of services. The Task Group meetings culminated in the development of the initial NCSWMP, submitted to the NYSDEC in March 2003.

The County of Nassau and the local municipalities have historically implemented various storm water related BMP's intended to specifically protect the County's storm water quality. Details of the County's and local municipalities storm water related programs were collected, summarized and categorized into each of the six MCM's required by the General Permit. While some of the existing programs met specific permit requirements, many others had to be developed over the five years of the first General Permit GP-02-02.

MINIMUM CONTROL MEASURES

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

1. Public Education and Outreach
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

As a Traditional Non-Land Use Control MS4, Nassau County must meet the requirements for the six MCM's under Part VIII of GP-0-08-002. Details of each MCM follow in later sections of this document.

NASSAU COUNTY MUNICIPALITY BACKGROUND

Permit Coverage Area

Nassau County occupies an area 285.4 square miles (182,680 acres) that is located between New York City on the west, Suffolk County on the east, the Atlantic Ocean on the south and the Long Island Sound on the north. The population of Nassau County based upon the 2001 census was 1,334,648. There are 2 Cities, 3 Towns and 62 Villages that are located within the boundaries of Nassau County.

Countywide Program Strategy

The management of storm water and/or the requirements associated with drainage is handled in the county at various levels of government including Nassau County. The strategy that Nassau County has proposed in meeting the requirements of the Phase II Storm Water Regulations is developing a partnership with all the local municipalities to address the common requirements of the regulations.

The County obtained a Grant from New York State in 2003 to help in the implementation of the NCSWMP. At this time, the County agreed to share the Grant with all municipalities willing to pass an in-kind services agreement to provide for a 50% match with the State. The following sixty (60) municipalities joined Nassau County:

City of Glen Cove NYR20A100
City of Long Beach NYR20A189
Town of Hempstead NYR20A390
Town of North Hempstead NYR20A318
Town of Oyster Bay NYR20A371
Village of Atlantic Beach NYR20A097
Village of Baxter Estates NYR20A174
Village of Bayville NYR20A304
Village of Bellerose NYR20A388
Village of Brookville NYR20A439
Village of Cedarhurst NYR20A010
Village of Cove Neck NYR20A440
Village of East Rockaway NYR20A410
Village of East Hills NYR20A001
Village of Farmingdale NYR20A
Village of Floral Park NYR20A347
Village of Flower Hill NYR20A171
Village of Garden City NYR20A070
Village of Great Neck NYR20A453
Village of Great Neck Estates NYR20A321
Village of Great Neck Plaza NYR20A366
Village of Hewlett Bay Park NYR20A085
Village of Hewlett Harbor NYR20A062
Village of Hewlett Neck NYR20A090
Village of Island Park NYR20A384
Village of Kensington NYR20A452

Village of Kings Point NYR20A451
Village of Lake Success NYR20A034
Village of Lattingtown NYR20A
Village of Laurel Hollow NYR20A441
Village of Lawrence NYR20A336
Village of Lynbrook NYR20A169
Village of Malverne NYR20A450
Village of Manorhaven NYR20A338
Village of Massapequa Park NYR20A063
Village of Matinecock NYR20A437
Village of Mill Neck NYR20A449
Village of Mineola NYR20A111
Village of Muttontown NYR20A448
Village of New Hyde Park NYRA20014
Village of Old Brookville NYR20A447
Village of Old Westbury NYR20A434
Village of Plandome NYR20A066
Village of Plandome Heights NYR20A162
Village of Plandome Manor NYR20A360
Village of Port Washington North NYR20A438
Village of Roslyn NYR20A071
Village of Roslyn Estates NYR20A446
Village of Roslyn Harbor NYR20A059
Village of Russell Gardens NYR20A016
Village of Saddle Rock NYR20A445
Village of Sands Point NYR20A444
Village of Sea Cliff NYR20A075
Village of South Floral Park
Village of Stewart Manor NYR20A011
Village of Thomaston NYR20A443
Village of Upper Brookville NYR 20A442
Village of Valley Stream NYR20A002
Village of Westbury NYR20A408
Village of Williston Park NYR20A068
Village of Woodsburgh NYR20A107

This Grant was used to generate a Municipal BMP Manual, develop SWPPP's for various municipal operations, develop and print storm water related literature, purchase display stands, purchase catch basin medallions for installation throughout the county and develop a pollutant loading procedure for stream assessment

Storm Water Infrastructure

Storm water within the county is discharged to the surface waters of the United States and to the groundwater. Historically, development within the county prior to 1940 utilized the existing topography in directing and disposing of storm water to the natural streams and ponds. As shown in Figure One, nearly half of the land area in the County drains to surrounding surface waters. In 1953, Ordinance Number 157 was adopted by the Nassau County Board of Supervisors, which pertained to the Regulations for the

Subdivision of Land. This regulation and the Department of Public Works requirements that followed, required storm water to remain onsite. The onsite storage of storm water was typically achieved by the installation of drywells, recharge basins or drainage reserve areas. As shown in Figure Two, nearly half of the land area of Nassau County is serviced by recharge basins. In many cases, these facilities also included overflow structures that directed storm water 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 storm water facilities within the County include:

- 3720 storm water outfalls to the waters of the United States
- 1000 storm water recharge basins, of which, 555 are owned by Nassau County
- Approximately 57 miles of open stream corridors maintained by Nassau County

Nassau County has, in the past, initiated Capital Improvement Projects on drainage infrastructure and facilities on an as needed basis. The current administration has initiated, and the Nassau County Legislature has adopted, a Multi-Year Capital Spending Plan whereby drainage improvement projects are proposed, authorized and constructed.

Natural Resources

The Nassau County Soil and Water Conservation District in cooperation with the Nassau County Planning Department completed the Nassau County Natural Resources Inventory in 2000. This document identifies the various natural resources that are utilized as part of the storm water infrastructure by all the municipalities in the county. In addition, the document identifies surface water classifications, the various preserves and open spaces in the county including their significant environmental features and habitats.

Pollutants of Concern

When a storm water discharge enters a New York State Department of Environmental Conservation 303(d) listed water body, the municipality's storm water program must ensure no increase of the listed pollutant of concern to the 303(d) listed water. There are 32 water bodies, see Table A, on the 303(d) list that have the potential to receive storm water runoff from a municipality within Nassau County.

Based upon the 303(d) list the best management practices included in this document for the six minimum control measures have been tailored to address the following pollutants of concern for all storm water discharges:

- Pathogens
- Phosphorus
- PCBs
- Silt and sediment
- Oxygen demand
- Nitrogen

Additional information with regards to these pollutants of concern, the impairments associated with them and the source can be found in the following two documents:

- The 2000 Atlantic Ocean/Long Island Sound Basin Waterbody Inventory and Priority Waterbodies List, Volume 2: Nassau and Suffolk County Waters, Bureau of Watershed Assessment and Research, Division of Water, NYSDEC
- 2001 Nonpoint Water Quality Strategy for Nassau County, Nassau County Soil and Water Conservation District, for the Water Strategy Coordinating Committee of Nassau County

In addition, any municipality that discharges storm water to any waters of the United States that have been approved by the United States Environmental Protection Agency (USEPA) for a Total Daily Maximum Load (TMDL), must include the appropriate best management practices to meet the TMDL storm water allocations.

The following page contains the list of the Impaired Stream Segments and Primary Pollutants of Concern for Nassau County. It contains both Section 303 (d) Listed Waters for which beneficial uses of the water – such as drinking, recreation, aquatic habitat, and industrial use – are impaired by pollutants as well as TMDL waters which designate the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources to that water body.

Nassau County Water Bodies With 303(d) or TMDL Classification

Impaired Waters Name (from 303 (d) list and/or TMDL)	Pollutant(s) of Concern (from 303 (d) list and/or TMDL)	Classification	
		303 (d)	TMDL
East Bay	Phosphorus, Silt/Sediment, Pathogens	X	
South Oyster Bay	Pathogens	X	
Middle Bay	Pathogens	X	
East Rockaway Inlet	Pathogens	X	
Reynolds Channel, East	Pathogens	X	
Hempstead Bay	Nitrogen, Pathogens	X	
Woodmere Channel	Pathogens	X	
Long Island Sound, Nassau County Waters	Pathogens, Nitrogen	X	
Manhasset Bay	Pathogens	X	
Hempstead Harbor	Pathogens	X	X
Dosoris Pond	Pathogens	X	
Cold Spring Harbor	Pathogens	X	
Oyster Bay Harbor	Pathogens	X	X
Massapequa Reservoir	Chlordane	X	
Freeport Reservoir	Chlordane	X	
Smith/Roosevelt Pond	Chlordane	X	
Lofts Pond	Chlordane	X	
Smith Pond	Chlordane	X	
Halls Pond	Chlordane	X	
Grant Park Pond	Phosphorus, PCB's	X	
Whitney Lake	Chlordane	X	
Glen Cove Creek	Pathogens	X	
Hempstead Lake	Phosphorous	X	
East Meadow Brook	Silt/Sediment	X	
Mill Neck Creek	Pathogens	X	X
Ridders Pond	Chlordane	X	
Little Neck Bay	Pathogens	X	

Table A

Minimum Control Measure 1: Public Education and Outreach

The Public Education and Outreach control measure is directed at educating the public, specific groups (ie. construction trades, landscapers) and municipal officials to the impact storm water runoff has on the environment. In addition, this education initiative involves teaching targeted groups steps that can be taken to reduce certain pollutants associated with runoff. Nassau County continues to work with and fund many agencies (Nassau County Soil and Water Conservation District, Hempstead Harbor Protection Committee, Friends of the Bay, etc.), and their programs that deal with educating the general public and targeted audiences.

Important components of MCM 1 include the continuation of 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.

Strategies

Nassau County's overall strategy for this minimum control measure is to provide guidance and act as a central clearinghouse or library of information associated with the impacts of storm water runoff and the measures to reduce or eliminate the effects the pollutants of concern have on the environment. This centralized information can be tailored to the local watershed issues that are important to the residents and be distributed by local municipalities by a mailing, local display or signage. The distribution of material at a local level can reach the target audiences more readily and succinctly.

Nassau County has created several brochures that target homeowners, small business owners and landscapers as well as a bookmark that addresses storm water runoff in general. These materials along with available informational documents distributed by the NYSDEC and the USEPA, have become the building blocks of a clearinghouse of educational materials pertaining to storm water that are disseminated at libraries, government buildings, community fairs, museums, etc.

In addition, dissemination of storm water related material via the County website to the municipal supervisors of our coalition partners' is a high priority objective of Nassau County. Since education, training and information dissemination are key elements to several minimum control measures, the County will continue to make available public education materials, BMP information, watershed maps, etc. The website also provides the public with information related to the NCSWMP and supply links to additional websites. Nassau County will also continue to pursue grant funding opportunities in an effort to accomplish certain components of this control measure through coordination with Nassau County's Grant Office.

Nassau County has reached our target audiences on a one-on-one basis by participating in numerous community fairs, festivals, school visits and science education events. In the five years of implementation, County personnel have set up informational displays at the Freeport Nautical Festival, the Great Neck Street Fair, the Town of Oyster Bay Marine Education Day, the Port Washington Harbor Fest and many others.

Minimum Control Measure 1: Public Education and Outreach

- Nassau County will use the services of the Nassau County Soil and Water Conservation District (NCSWCD) personnel to provide coverage for all public education events. Nassau County DPW personnel will be available to supplement NCSWCD personnel where needed. The following events will be attended on a yearly basis:
 - Long Island Regional Envirothon
 - Cold Spring Harbor Fish Hatchery & Aquarium Spring Fair
 - Planting Fields Arboretum Arbor Day Festival
 - Great Neck Street Fair
 - Freeport Nautical Festival
 - Port Washington Harborfest
 - Town of Oyster Bay Marine Education Day
 - Long Island Fair at Old Bethpage Village Restoration
 - Cold Spring Harbor Fish Hatchery & Aquarium Fall Fair
 - Nassau-Suffolk Landscape Gardener's Association Annual Conference

- Both Nassau County and NCSWCD are available to make presentations to schools, civic groups, chambers of commerce, etc. by scheduled appointment.

- Nassau County DPW personnel will manage the information clearinghouse, developing and printing brochures as necessary. We will distribute educational materials with the assistance of our municipal partners, the Friends of the Bay, South Shore Estuary Reserve, Operation SPLASH, Hempstead Harbor Protection Committee, Sierra/Lions Club, Long Island Sound Study, the Meadowbrook Task Force and the Manhasset Bay Protection Committee.

- Display stands placed in County offices such as Consumer Affairs, Parks and Recreation Headquarters, Nassau County Department of Health, DPW Permit Office, etc. will continue to be stocked with educational materials.

- Bookmarks with storm water related educational messages will continue to be printed and supplied to all the libraries in the county. Tabletop displays with bookmark holders have been placed in every library.


- County personnel will continue to procure storm drain medallions and distribute them to our municipal partners, scout groups, environmental organizations, etc. for placement throughout the county.

- County personnel will manage the EcoZone Program in its mission to provide funding for County programs in water quality as well as provide educational materials through its website, television programs, etc. Use the following link to the EcoZone: <http://www.ecozonemedia.com>


- County personnel will keep the Nassau County storm water website up to date with the latest watershed reports, BMP's, programs, announcements, etc. This is also the avenue for general education on storm water pollution and the science behind it. <http://www.nassaucountyny.gov/agencies/DPW/stormwater.html>

*Our Pollution Only
Harms Ourselves!*

Storm Drain Awareness
For
Nassau County Homeowners




County of Nassau




THOMAS R. SUOZZI
County Executive

Be Part of the
Solution to Storm
Water Pollution!

Storm Water
Management Practices
for Landscape
Maintenance



County of Nassau




THOMAS R. SUOZZI
County Executive


**Nassau County Storm Water Related
Educational Materials**

*Use Your Brain
Stop Polluting Our Drains!*

Storm Water
Management Practices for
Businesses



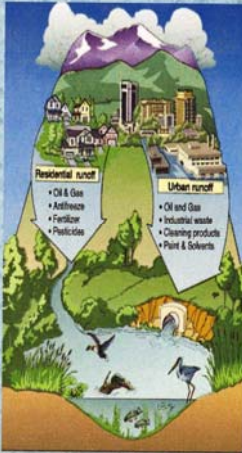
County of Nassau




THOMAS R. SUOZZI
County Executive

Storm Water

*It's Up To Us!
Help Keep Nassau
County's Water Clean*



FOR MORE INFORMATION
CALL 571-6850 OR VISIT
[www.nassaucountyny.gov/
agencies/DPW/stormwater.html](http://www.nassaucountyny.gov/agencies/DPW/stormwater.html)



THOMAS R. SUOZZI
COUNTY EXECUTIVE

Minimum Control Measure 2: Public Involvement/Participation

The Public Involvement/Participation MCM is directed at involving the public in the development, implementation and evaluation of our storm water management program. Nassau County continues to work with many volunteer organizations, watershed groups and non-profit organizations in an effort to reach the general public and solicit input to the Nassau County Storm Water Management Program (NCSWMP).

An important component of this plan is to specifically educate audiences pertaining to storm water management, and to reduce pollutants of concern in storm water discharges to the maximum extent practicable.

Strategies

Nassau County's overall strategy for the implementation of this minimum control measure is to provide guidance and act as a clearinghouse to other municipalities in Nassau County for activities associated with best management practices. This information can be utilized by the smaller municipalities through the implementation of local and/or watershed based activities.

To accomplish the tasks associated with the requirements of this minimum control measure as it pertains to Nassau County, specific strategies include the countywide storm drain medallion program, egg oiling for the goose management program and continuing the adopt-a-spot program where the public can be involved with cleanups of stream corridors, ponds, parks, beaches and roadways.

In addition, the continuation of working with watershed based organizations and in some cases providing funding to such organizations is a very important component of meeting the requirements of this minimum control measure.

Finally, to allow the public easy access to documents via the internet, including annual reports and technical guidance documents, is a goal of this minimum control measure. These strategies are geared to educate and inform the general public of the program, pollutants of concern in storm water discharges and about the specific watersheds in which they live.

Minimum Control Measure 2: Public Involvement/Participation

- County personnel will continue to procure storm drain medallions and distribute them to our municipal partners, scout groups, environmental organizations, etc. for placement throughout the county.
- County personnel will manage the EcoZone Program in its mission to provide funding for County programs in water quality as well as provide educational materials through its website, television programs, etc.
- Long Island Regional Envirothon, an outdoor, hands-on, environmental/natural resources competition for High School students is held every year and is coordinated by the Nassau County Soil and Water Conservation District (NCSWCD) along with its sister agency from Suffolk. Activities cover relevant topics including marine education, preserve clean-ups, non-point source pollution, health and safety, landscaping, and teacher education.
- Egg Oiling Program begins every April to control the resident Canada Geese population. During a typical year, 1,500 eggs are oiled under the direction of the Public Works Department and the NCSWCD. Site aversion techniques occur during the summer months, after the molt. We will continue working with the NCSWCD and the USDA to implement additional Goose Management initiatives. Recently passed ordinance Local Law 7-2007 making it illegal to feed waterfowl on Nassau County property:
http://www.nassaucountyny.gov/agencies/legis/Docs/PDF/2007_LL07.pdf
- Continue to sit on watershed organization committees for: Hempstead Harbor Protection Committee, Manhasset Bay Protection Committee, South Shore Estuary Reserve Council and the Long Island Sound Study. We also work with Friends of the Bay, in Oyster Bay and Operation Splash, in Freeport.
- Distribution of Nassau County Soil and Water Conservation District Newsletter. During the past several years the Soil and Water Conservation District increased their newsletter circulation to almost 4,000. The District will continue to distribute newsletters on a quarterly basis with the goal of increasing the mailing list by another 500.
- Nassau County Soil and Water Conservation District obtains grants to fund public participation events such as beach grass planting, wetland restorations and beach restorations.
- Adopt-A-Spot, stream and beach cleanups occur year round at various Nassau County locations. This is an ongoing program that typically occurs around Earth Day of each year.

Minimum Control Measure 3: Illicit Discharge Detection and Elimination

The illicit discharge detection and elimination is a minimum control measure used to identify and eliminate any discharge that is not composed entirely of storm water. Discharges from MS4's often include wastes and wastewater from non-storm water sources. Illicit discharges enter the system through either direct connection via piping or indirect connections such as infiltration from failed sanitary systems or spills on roads that are collected by catch basins. The result is untreated discharges that contribute high levels of pollutants including heavy metals, toxics, oil and grease, solvents, nutrients, viruses and bacteria to receiving waterbodies.

This minimum control measure involves both municipal staff and local citizens. Nassau County will locate illicit discharge problem areas through dry weather sampling of major streams, public complaints, Outfall Reconnaissance Inventories (ORI's) and employee training. The program works to detect and eliminate illicit discharges.

Strategies

The Nassau County Geographic Information System (GIS) was used to generate a map showing the location of all storm sewer outfalls and all the waters that receive storm water discharges. Nassau County will add outfall ownership to the system map as this data becomes available from the local municipalities.

Routine sampling of the major streams throughout the County is used to identify water quality trends and detect areas for further study. Nassau County field personnel will use the sampling data during dry weather flow inspections to help pinpoint sources of illicit discharges. We then work with the local municipalities and the Nassau County Department of Health (NCDH) to gain access to the building or property suspected of the discharge. Dye testing of all possible sources will be done to confirm the connection to the storm water system. Another field screening method that will be employed is video inspection of storm sewers.

The Nassau County agencies that have been trained in illicit discharge detection include Road Maintenance, Drainage Maintenance, Facilities Management and the Department of Recreation and Parks. Any illicit connections or discharges found by County personnel, private citizens or an employee of our municipal partners will be investigated fully by Nassau County Water/Wastewater Engineering Unit personnel. A Nassau County telephone hotline has been instituted to allow the input of citizen's complaints. The hotline is a 24-hour answering machine that is checked every County work day.

A Drainage Use Ordinance has been promulgated and passed into law by the Nassau County Legislature to regulate what can legally enter the storm sewer system, which agency will enforce it, the powers of the enforcement agency and the enforcement actions to be taken if the ordinance is violated. The enforcement actions that will be taken against those properties found to be in non-compliance or that refuse to allow access to their facilities include criminal and civil penalties, including charging the owner of the property for the cost of abatement. The full Drainage Use Ordinance can be found here: <http://www.nassaucountyny.gov/agencies/DPW/documents/NassauCountyDrainageUseOrdinance.pdf>

The following is a list of all the dry weather flow locations that have been sampled in the

past 6 years. Not every location is sampled every time and some locations have been modified for various reasons such as stream flow, access, etc.

Community	Site_No	Watershed
No. Valley Stream	1	Elmont Drain
Valley Stream	2	Valley Stream Brook
Valley Stream	3	Doxey Brook (W branch)
Woodmere	4	Doxey Brook (Main branch)
Valley Stream	5	Doxey Brook (E Branch)
Baldwin	7	Parsonage Creek
Oceanside	6	Powell Creek
Baldwin	8	Parsonage Creek (W branch)
Baldwin	9	Parsonage Creek (E branch)
Baldwin	12	Milburn Creek
Baldwin	13	Milburn Creek
Baldwin	10	Parsonage Creek
Roosevelt	15	East Meadowbrook
Roosevelt	16	East Meadowbrook
Merrick	17	Newbridge Creek
Merrick	18	Newbridge Creek
Bellmore	19	Bellmore Creek
Bellmore	20	Bellmore Creek
Massapequa Park	22	Massapequa Creek
Massapequa	23	Massapequa Creek
Massapequa	24	Massapequa Creek
Massapequa	25	Massapequa Creek
Lynbrook	46	Pines Brook
Lynbrook	47	Pines Brook
Saddlerock	28	Old Mill Brook
Russell Gardens	29	Cutter Mill Drain
Plandome Manor	30	Stoneytown Road Drain
Port Washington	31	Port Washington Drain
Port Washington	32	Stannards Brook
Baxter Estates	33	Baxter Brook
Baxter Estates	34	Baxter Pond
Roslyn	35	Roslyn Pond
Sea Cliff	36	Scudders Pond
Old Brookville	37	Cedar Swamp Creek
Glen Cove	38	Cedar Swamp Creek
Oyster Bay	40	Mill River
Laurel Hollow	42	Cold Spring Harbor
Cove Neck	43	Tiffany Creek
Mill Neck	44	Beaver Lake
Kings Pt	45	Mitchell's Creek
Manhasset	48	Whitney Drain
Oyster Bay	49	White's Creek
East Massapequa	51	Carmans Creek
Seaford	52	Seaford Creek
Locust Grove	53	Cold Spring
Baxter Estates	50	Baxter Pond
North Merrick	14	East Meadowbrook

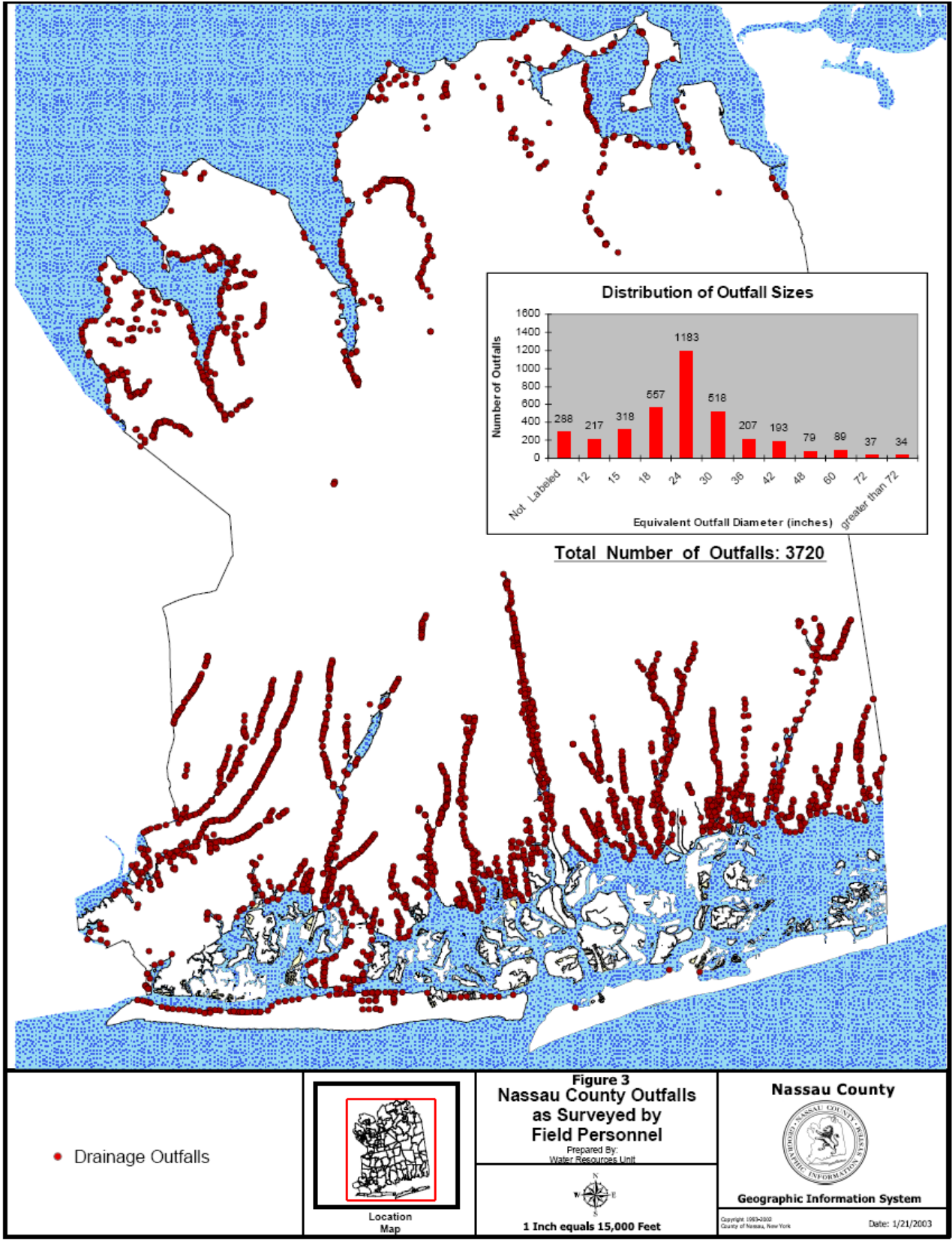
Community	Site_No	Watershed
Wantagh	21	Seamans Creek
Nassau Shores	26	Unqua Creek
Nassau Shores	27	Unqua Creek
Lattingtown	41	Dosoris Drain
Lattingtown	39	Bailey Arboretum

Minimum Control Measure 3: Illicit Discharge Detection and Elimination

- The dry weather sampling program will continue on a biannual basis by sampling a variety of the 53 different locations in the spring and fall of each year. We use this data to screen all major drainage corridors for illicit discharges.
- Maintain Illicit Discharge Hotline (516-571-7535). 24 hour telephone number that is listed on the County Storm Water website. The website address is: <http://www.nassaucountyny.gov/agencies/DPW/IllicitDischargeHotline.html>
- Continue the ORI program with consultant personnel. The following is the schedule of the watersheds that have been done to date and those that will be done over the next four years:
 - 2007: Elmont Drain, Clements Brook, Bellmore Creek, Bailey Arboretum, Kentucky Brook, Francis Pond, Tiffany Brook, Mill River and White's Creek
 - 2008: East Meadow Brook, Horse Brook, Pines Brook, Baldwin Drain, Yorkshire Brook, Milburn Creek and Mill Creek.
 - 2009: Udalls Mill Pond, Cutter Mill Brook, Whitney Pond, Dosis Pond, Frost Creek, Mill Pond, Cold Spring Brook, Cedar Swamp Creek, Scudders Pond and Roslyn Pond.
 - 2010: Narraskatuck Creek, Carmans Creek, Unqua Creek, Massapequa Creek, Seaford Creek, Seamans Creek, Cedar Creek, Newbridge Creek, Cammans Creek, Woodcliff Basin, Freeport Brook and Randalls Bay.
 - 2011: Baxter Brook, Kings Point, Leeds Pond, Manhasset Valley Park, Mitchells Creek, Sheets Creek, Stannards Brook and Welwyn.
 - 2012: Clear Stream, Bedell Creek, Doxey Brook, Fortesque Creek, Fosters Brook, Grand Canal, Hook Creek, Macy Channel, Mott Creek, Parsonage Creek, Powells Creek, Thixton Creek, Valley Stream and Woodmere Channel.
- After 2012, the feasibility of combining the watersheds from the first two years will be considered in order to be on the five year schedule desired by the NYSDEC.
- Nassau County outfalls in tidal areas will not be included in the annual ORI's due to the continuous flows from these outfalls as the result of groundwater infiltration and tidal outflows.
- The ORI reports will be used by County personnel to track down illicit discharges by field verification, dye tests, sampling, etc. The NCDH and our

municipal partners will be contacted when and if access is needed to private property.

- Training of County personnel will continue in the detection of illicit discharges through the viewing of a training DVD that also addresses BMP's and good housekeeping practices.
- All illicit discharge investigations will be electronically tracked via an in-house data base starting in 2009.
- The mapping of the storm water infrastructure including catch basins, pipes, manholes and outfalls will be added to over the next several years until the entire County is represented on the Nassau County GIS. Nassau County plans on contracting out the remainder of this task, which will include ascertaining what work has already been accomplished by other municipalities in the county as to avoid duplication and to coalesce all mapping into one comprehensive layer on the Nassau County GIS.
- Additional drainage infrastructure information, including new structural BMP's will be added to the NCGIS as they are installed during future construction projects.



Minimum Control Measure 4: Construction Site Storm Water Runoff Control

Construction site storm water runoff control is a minimum control measure designed to address the pollution of storm water runoff generated at construction sites. Activities that are performed on construction sites usually disturb a large amount of land and generate large amounts of waste. This has been found to lead to elevated levels of sediment, phosphorous, nitrogen, pesticides, petroleum derivatives, construction chemicals, and solid wastes in receiving streams and estuarine areas. During a short period of time, construction sites can contribute more sediment to streams than can be deposited naturally during several decades. The resulting siltation, and the contribution of other pollutants from construction sites, can cause physical, chemical and biological harm to our nation's waters.

Strategies

The major issue in addressing this control measure is related to the limited regulatory authority that Nassau County presently wields over site developers and construction site managers to design, install and maintain sedimentation and erosion control measures on their sites. The County does not issue building permits, hence, there is no County mechanism in place to enforce compliance with any program. These responsibilities would fall directly on the many local Towns and Villages, whose building departments would have the necessary controls in place including non-monetary penalties, fines, bonding requirements, and permit denials.

Nassau County has, however, provided formalized drainage guidelines for site developers throughout the years. These drainage guidelines pertain to the handling of storm water runoff generated at the development and the provision that certain storm water quantities be contained within that development. Through the enactment of Section 239-F of the General Municipal Law by the New York State Legislature, the County developed requirements for site grading and drainage as they relate to the erection of buildings having frontage on, direct access to, or are otherwise directly related to any portion of the 500 miles of County roads. These requirements are that eight (8) inches of rainfall at an appropriate runoff factor be contained in dry wells within the site.

With regard to larger developments, or sub-divisions, the County has developed the same requirements based on current engineering practice. These guidelines recommend that eight (8) inches of on-site storage be provided when no connection or overflow to another drainage system is possible. In those cases where connection or overflow to another drainage system is possible and allowable, then five (5) inches of on-site storage should be provided. These guidelines, whether 5 or 8 inches, insure that storm water runoff generated at the development is contained within the site and will not be discharged to the waters of the United States, thereby providing a protective safeguard to those waters.

http://www.nassaucountyny.gov/agencies/DPW/documents/NC_Drainage_Requirements.pdf

Only since the promulgation of the Federal Phase I regulations has sediment and erosion control been examined and included in site plan review on the County level. For example, when plans are examined for site grading and drainage, then requirements for

sediment and erosion controls at the construction site are also verified. We require a copy of the Storm Water Pollution Prevention Plan (SWPPP) Acceptance Form that was filed by the local MS4 with the NYSDEC to accompany the plans under review.

Site Plan Review

The County's site plan review process ensures compliance by construction site operators with current erosion and sediment control methods and the oversight by the local municipality. The County, having no regulatory authority in the case, will seek the assistance of each municipality that issues building permits to conduct site inspections and impose enforcement actions, if necessary

Receipt of Public Inquiries

A final requirement under this minimum control measure is the development of a procedure for the receipt and consideration of public inquiries, concerns, and information submitted regarding local construction activities. The County, and most local municipalities already receive and respond to numerous inquiries from the public. This provision is intended to further reinforce the public participation component of the Storm Water Management Program and to recognize the crucial role that the public can play in identifying instances of noncompliance.

Information submitted by the public need only be considered and may not necessarily require a follow-up or response, but the County or the local municipality should demonstrate acknowledgment and consideration of the information submitted. Given the County's minimal involvement with construction oversight, the County looks to the local municipalities to oversee the collection of public inquiries.

Minimum Control Measure 4: Construction Site Storm Water Runoff Control

- Continue sub-division and 239-F reviews with enforce the requirements to store an eight (8) inch rainfall on-site.
- Require construction site operators working on County jobs have received erosion and sediment control training as per permit GP-0-08-002, Part VIII.A.4.a.vii., by May1, 2010.
- Work with the Nassau County Soil and Water Conservation District to establish the erosion and sediment control training course as specified above and offer it on a routine basis for construction site operators working in Nassau County.
- To have language in our design and construction contracts that deals with erosion and sediment control on County run jobs at County owned facilities and properties.
- The following forms will be used on all County run jobs on County owned facilities or properties:
 - Form 1-1: Contractor Storm Water Pollution Prevention Third Party Certification
 - Form 1-2: Checklist for Preparation of Storm Water Pollution Prevention Plans
 - Form 1-3: Procedure/Checklist for Pre-Construction Site Inspection
 - Form 1-4: Procedure/Checklist for Site Inspection During Construction
 - Form 1-5: Checklist for Concrete Tank Washout Inspection
 - Form 1-6: Checklist for Leaking Truck Inspection
 - Form 1-7: Procedure/Checklist for Construction Site Inspection After Project Completion

Link to forms:

<http://www.nassaucountyny.gov/agencies/DPW/documents/SWPPPInspectionFormsForContractors.pdf>

Minimum Control Measure 5: Post Construction Storm Water Management

This minimum control measure focuses on implementation of controls that will try to maintain good water quality conditions after an area has been developed or after construction. An effective plan to accomplish this goal is to recommend planning and design strategies that will minimize the introduction of pollutants in post-construction storm water discharges. The challenge of this minimum control measure is to encourage developers and consulting design engineers to take storm water quality into account early in the development planning process. The development or modification to existing regulations, ordinances or planning strategies by municipal government that will emphasize storm water quality is the linchpin of this control measure.

Strategies

Nassau County is in a similar position with this minimum control measure as with Minimum Control Measure 4 - Construction Site Storm Water Runoff Control. The County has limited regulatory authority at the present time to restrict site development, or require the implementation of structural or non-structural controls in areas located beyond its jurisdiction, (such as incorporated villages). Incorporated areas within the County have existing planning departments, zoning boards etc., that have the regulatory authority to impose restrictions on site development/redevelopment. As detailed in the previous section on construction site storm water runoff control, the County, through the Department of Public Works, has formalized drainage requirements for subdivisions and other developments and redevelopments. These requirements and guidelines already provide a strong foundation for storm water quality improvement at site development and redevelopment within the County.

Capital Improvement Plan/Environmental Bond Act Projects

There is currently a County-wide capital plan to improve various streams, ponds and waterways, which include installation of sedimentation basins, dredging, wetland plantings and stream bank stabilization. This plan includes recently finished projects at Silver Lake, Lofts Pond, Mill Pond (Wantagh), Roosevelt Pond and the ongoing Massapequa Preserve project, which includes augmenting stream flow with pumped groundwater.

A major part of our retrofit program will be funded through the Nassau County Environmental Bond Act Voter Referendum Program, which includes projects county-wide such as sedimentation basins, in-line treatment devices, wetland plantings, catch basin inserts and floatable removal structures. Nassau County is working in conjunction with many of our municipal partners, who will provide matching funding as well as assuming the future maintenance responsibilities of these BMP's.

The following is a list of the storm water projects chosen for funding through the 2004 and 2006 Environmental Bond Acts:

2004 Environmental Bond Act Storm Water Projects

Project Location (Maintenance)	Storm Water Controls	Estimated Cost	Contributing funds	Contributing entity	Recommended Funding
North of Halls Pond, West Hempstead (NC)	Installation of sediment collection basin and baffle system.	\$280,000	\$140,000	Nassau County/New York State Grant (pending)	\$140,000
Smith Street Right-of-Way, Merrick (NC)	Installation of in-line treatment chamber.	\$385,000	\$75,000	Nassau County/New York State Grant (awarded)	\$310,000
Throughout Nassau County (NC)	Installation of thirty to fifty catch basin inserts.	\$40,000	\$15,000	Nassau County/New York State Grant (awarded)	\$25,000
Willow Pond, Hewlett Harbor & Hewlett Bay Park (Hewlett Harbor & Hewlett Bay Park)	Installation of in-line treatment chamber.	\$252,000	\$50,000	Villages of Hewlett Harbor & Hewlett Bay Park/ New York State Grants (pending)	\$202,000
Brookside Preserve, Freeport & Baldwin (Freeport)	Installation of four in-line treatment devices.	\$462,000	\$20,000	Village of Freeport /In-kind services	\$442,000
Little Worth Lane & Scudder's Pond Wetlands, Sea Cliff (Sea Cliff)	Installation of swirl separator and wetland plantings, and removal of sediment	\$1,578,000	\$1,240,000	Village of Sea Cliff /New York State Grant (pending)	\$338,000
Skillman Street & Lumber Road, Roslyn (Roslyn)	Installation of two in-line treatment devices.	\$201,000	\$50,000	Village of Roslyn	\$151,000
Merokee Pond, Merrick	Removal of sediment together with installation of in-line treatment chamber (SW-7) and enhanced floatable collection device.	\$1,500,000	\$1,200,000	*	\$600,000
Meadowbrook Creek, Merrick (TOH)	Installation of seven in-line treatment devices.	\$704,000	\$350,000	Town of Hempstead	\$354,000
Florence Avenue area, Massapequa (TOB)	Installation of seventeen in-line treatment devices.	\$840,000	\$420,000	Town of Oyster Bay	\$420,000
Massapequa Preserve, Massapequa (TOB)	Installation of in-line treatment device.	\$198,000	\$40,000	Town of Oyster Bay	\$158,000
Roosevelt Marina, Oyster Bay (TOB)	Installation of in-line treatment devices.	\$270,000	\$135,000	Town of Oyster Bay	\$135,000

Silver Lake Park, Meadowbrook Creek, Baldwin, Merrick & Freeport (Freeport)	Installation of booms and six in-line treatment devices.	\$382,000	\$40,000	Village of Freeport /In-kind services	\$342,000
Mill Pond and Village Green Park, Valley Stream (Valley Stream)	Installation of sediment collection basin and wetland plantings.	\$500,000	\$75,000	Village of Valley Stream /In-kind services	\$425,000
Roslyn Pond Park, Roslyn (Roslyn)	Installation of sediment collection basin, boom and wetland plantings.	\$405,000	\$200,000	Town of North Hempstead /New York State Grant (pending)	\$205,000
Mill Pond Park, Port Washington North (TONH)	Installation of sediment collection basin and wetland plantings, elimination of direct private connections, and removal of sediment.	\$2,193,000	\$1,790,000	Town of North Hempstead /Combination of New York State Grant (awarded), Federal Grant (awarded) and Town of North Hempstead Legacy Fund	\$403,000
North Sheets Creek, Manorhaven (TONH)	Installation of six in-line treatment	\$99,000	\$25,000	Town of North Hempstead Legacy Fund	\$74,000
Total		\$10,289,000			\$4,724,000

2006 Environmental Bond Act Storm Water Projects

Project Location (Maintenance)	Storm Water Controls	Estimated Cost	Contributing funds	Contributing entity	Recommended Funding
Merokee Pond, Bellmore / Merrick (NC)	Dredge Merokee Pond.	\$1,850,000			\$1,850,000
Lofts Pond, Baldwin (NC)	Install debris nets.	\$5,000			\$5,000
Milburn Pond, Baldwin / Freeport (NC)	Install debris nets and access ramps.	\$12,000			\$12,000
Mill Basin, Freeport (NC)	Install floating debris docks and an oil boom.	\$54,000			\$54,000
Willow Pond, Hewlett Harbor and Hewlett Bay Park (Villages of Hewlett Harbor and Hewlett Bay Park)	Dredge the north end of Willow Pond.	\$300,000	\$150,000	Villages of Hewlett Harbor and Hewlett Bay Park	\$150,000
Storm Water Basin 500, Baldwin (NC)	Construct weir in sump to collect floatable debris.	\$300,000			\$300,000
Massapequa Preserve, Farmingdale / Massapequa (NC)	Dredge stream (will supplement the Liberty Site remediation).	\$500,000	\$250,000	Nassau County	\$250,000
Freeport (Village of Freeport)	Purchase a vacuum truck to clean catch basins.	\$85,000	\$42,500	Village of Freeport	\$42,500
Mill Pond Park, Valley Stream (Incorporated Village of Valley Stream)	Dredge pond and install wetland plantings.	\$600,000	\$90,000	Village of Valley Stream	\$510,000
Hendrickson Pond Park, Valley (Incorporated Village of Valley)	Sediment Collection basin, channel restoration, drain outlet protection and footbridge.	\$1,100,000	\$165,000	Village of Valley Stream	\$935,000
Floatable Debris Nets, Merrick / Bellmore / Wantagh / Seaford / Massapequa (NC)	Install thirteen debris nets.	\$65,000			\$65,000
Nassau County Urban Forest Master Plan and Street Tree Inventory, County Wide (NC)	Inventory Nassau County street trees and develop a master plan.	\$130,000			\$130,000
Stormwater Interceptors, Island Park (Village of Island Park)	Install Swirl separators on eighteen outfalls.	\$476,000	\$62,000	Village of Island Park	\$414,000
Catch Basin Inserts, County Wide (NC)	Install catch basin inserts in the villages of Bayville, East Rockaway, Freeport, Flower Hill, Oceanside, and the Towns of Hempstead, North Hempstead, and Oyster Bay. (Massapequa?)	\$1,700,000			\$1,700,000
Roslyn Pond Park, Town of North Hempstead (TONH)	Develop a waterbody management plan and install drainage controls, catchbasin inserts, a swirl separator, plantings, a walkway, and perform dredging and stream channel improvements.	\$4,573,100	\$3,285,450	Town of North Hempstead	\$1,287,650
Manorhaven Park & North Sheets Creek, Manorhaven (TONH)	Address erosion using sediment basins, trench drains, and wetland plantings.	\$353,060	\$176,530	Town of North Hempstead	\$176,530

Mill Pond, Glen Cove (City of Glen Cove)	Construct a sedimentation basin and install floatable controls.	\$698,500	\$220,000	City of Glen Cove	\$478,500
Dogwood Lane, Locust Valley / Mill Neck (TOB)	Conduct a drainage study and install an outfall treatment device.	\$120,000			\$120,000
Storm Water Outfalls, Massapequa Park (Village of Massapequa Park)	Install swirl separators.	\$776,000	\$86,000	Village of Massapequa Park	\$690,000
Massapequa Preserve, Massapequa (NC)	Install catch basin piping and swirl separators.	\$75,000			\$75,000
Leeds Pond, Plandome (Incorporated Village of Plandome Manor)	Conduct study to identify sources of pollutants affecting Leeds Pond, Plandome	\$40,000			\$40,000
Scudders Pond, Sea Cliff (VSC)	Install swirl separators and a UV treatment device, reinforce stream channel banks and redirect flow, create wetland areas and native-plant buffers, construct a goose barrier wall, eliminate direct discharges, construct spillways, convert ornamental ponds to vegetated swales, treat southern bank outfalls, remove phragmites and replace with native plants, dredge pond. Bond Act will fund dredging, phragmite removal, goose barrier, conversion of ornamental ponds, and outfall treatment.	\$3,130,000	\$2,342,439	Village of Sea Cliff, NY Environmental Protection Fund grants, Nassau County Environmental Bond Act I.	\$787,561
Hempstead Lake State Park, Hempstead (NYS)	Install catch basin inserts and swirl separators	\$2,500,000			\$2,500,000
Total		\$19,442,660	\$6,869,919		\$12,572,741

Minimum Control Measure 6: Pollution Prevention/Good Housekeeping

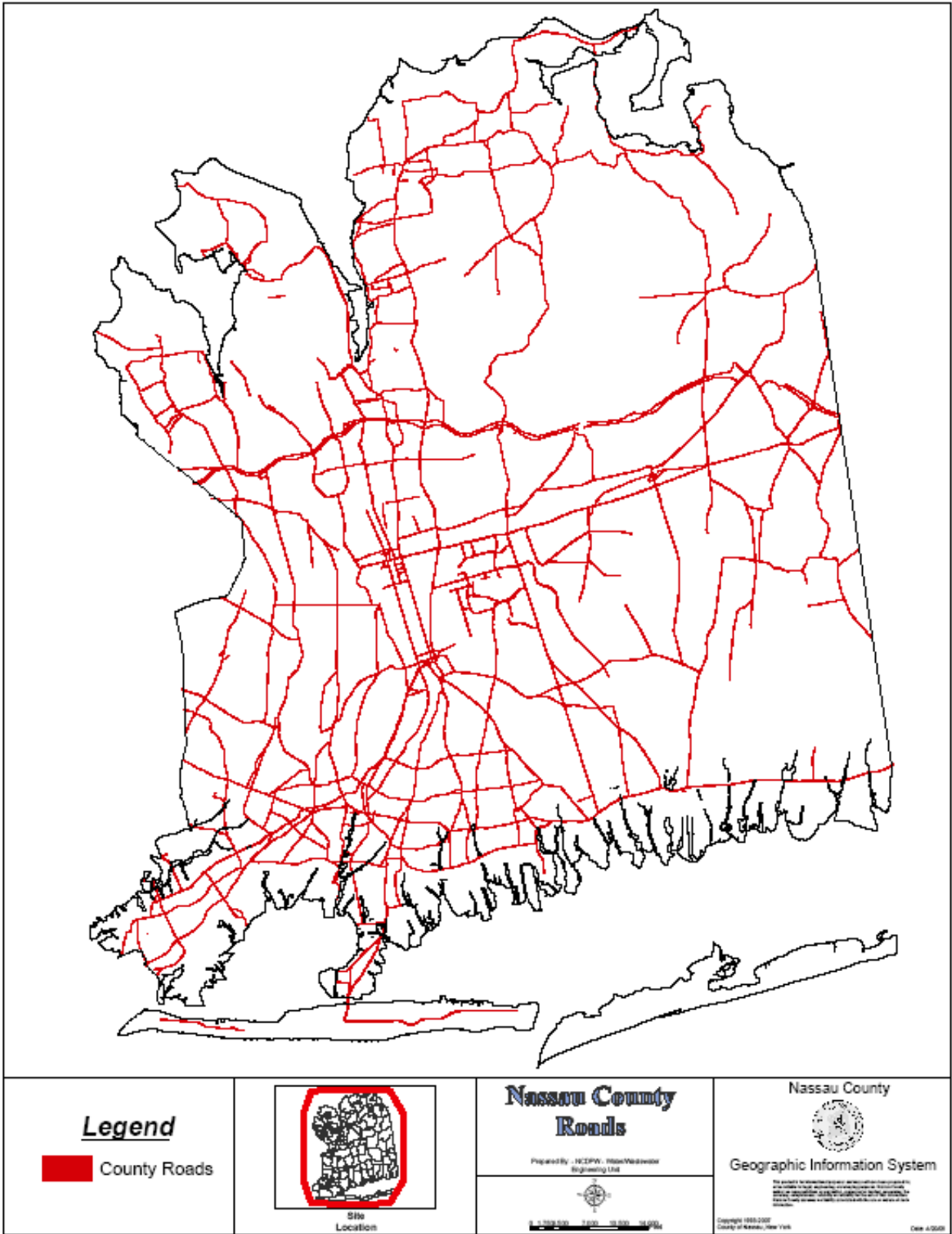
The goal of the Pollution Prevention/Good Housekeeping minimum control measure is to reduce pollutant runoff from Nassau County municipal operations. This plan covers Nassau County facilities only and does not incorporate the operations of the other various municipalities located within the County. The pollution prevention plans that will be developed for Nassau County facilities will institute procedures that effectively address such issues as hazardous materials storage, proper handling and disposal of street sweepings, floatables and other debris, spill clean up and vehicle storage.

- The County has studied ways to reduce the amount of sand and salt used for deicing procedures and has adopted these measures. The County communicates with the NYSDOT to obtain real time roadbed temperature readings that determine the optimal amount of road salt deposition during winter storm events. This provides savings in the amount of salt applied to the roadways and consequently a reduction in the amount applied to our waterways. The following is a link to the study on sand and salt use: <http://www.nassaucountyny.gov/agencies/DPW/Docs/PDF/Nassau%20County%20Sand-Salt%20Use%20BMPs.pdf>
- An Integrated Pest Management program (IPM) for County facilities was developed and distributed to the appropriate departments. The program advocates the use of non-chemical alternatives to pesticides and herbicides in County parks and buildings. The following is a link to the program: <http://www.nassaucountyny.gov/agencies/DPW/Docs/PDF/Nassau%20County%20Integrated%20Pest%20Management%20Program.pdf>
- A goose management plan has been enacted to control the large communities of non-migratory waterfowl currently populating County parks. This program will decrease the nutrient loading associated with these communities that reside in the ponds and streams of all the major tributaries of the County. The program includes egg oiling, dog running and the enacting of a local law that prohibits the feeding of waterfowl on County property.
- The County has adopted a requirement that any drainage project that includes outfalls larger than 36" must include a physical control (structural BMP) to retain sediments and floatables.
- NCDPW sweeps the 492 miles (1,969 lane miles) of County-owned roads on a biannual basis, once in the spring and once in the fall by the Highway and Bridge Maintenance Unit.
- Catch basin cleaning is done on an as needed basis by the Highway and Bridge Maintenance Unit.
- Storm Water Pollution Prevention Plans (SWPPP's) have been developed and distributed to the NCDPW Highway and Bridge Maintenance Unit, the NCDPW Facilities Management Unit, the NCDPW Sewage Treatment Plants,

the Nassau County Department of Parks, Recreation and Museums, the Nassau County Police Department and the Nassau County Sheriff's Department. The following is a link to these SWPPP's: <http://www.nassaucountyny.gov/agencies/DPW/PollutionPreventionandGoodHousekeeping.html>

- The training of County personnel in pollution prevention/good housekeeping and illicit discharge detection will continue on an ongoing basis.
- The Drainage Maintenance Unit of the NCDPW is responsible for the cleaning and maintenance of our streams, ponds, culverts and other drainage appurtenances. Streams, ditches and culverts are cleaned based upon need.
- Trash racks throughout the County are cleaned prior to and after significant precipitation.
- The following structural BMP's are inspected and cleaned on a scheduled basis:
 - Baxter Pond Sediment Basin-biannual
 - Newbridge Creek (at Smith Street) Sediment Basin- annually
 - Newbridge Creek (at Smith Street) Floatable Collection Boom- post rain event
 - Pines Brook Sediment Basin- annually
 - Pines Brook Floatable Collection Boom- post rain event
 - Baldwin Drain Trash Rack- post rain event
 - Milburn Creek Sediment Basin-Brookside Drive- annually
 - Milburn Creek Sediment Basin-Circle Drive- annually
 - Milburn Pond Sediment Basin- annually
 - Milburn Pond Sediment Chamber- annually
 - Glen Cove Marina Stormceptor Unit- annually
 - Sea Cliff Stormceptor Unit- annually
 - Woodmere Country Club CDS Unit- annually
 - Peninsula Blvd, N. Woodmere (2 Vortechs units) - annually
 - Newbridge Creek (at Hale Place), Bellmore CDS Unit- annually
 - Mineola Catch Basin Inserts (30 units in County seat) - quarterly
 - Roosevelt Pond Sedimentation Basin- annually
 - Roosevelt Pond Floatable Collection Boom- post rain event

Nassau County Owned Roads



Pathogen Impaired Watershed Discharging to Oyster Bay Harbor

In addition to the requirements in Part VIII of our permit, Nassau County as well as all the MS4's within the designated area (see map below) must develop and implement the following MCM's by April 15, 2011. A meeting of the included municipalities was held in 2008 and it was decided that a formal Oyster Bay Harbor Protection Committee (OBHPC) would be formed through the Town of Oyster Bay to help accomplish the goals set forth by the NYSDEC.

MCM 1:

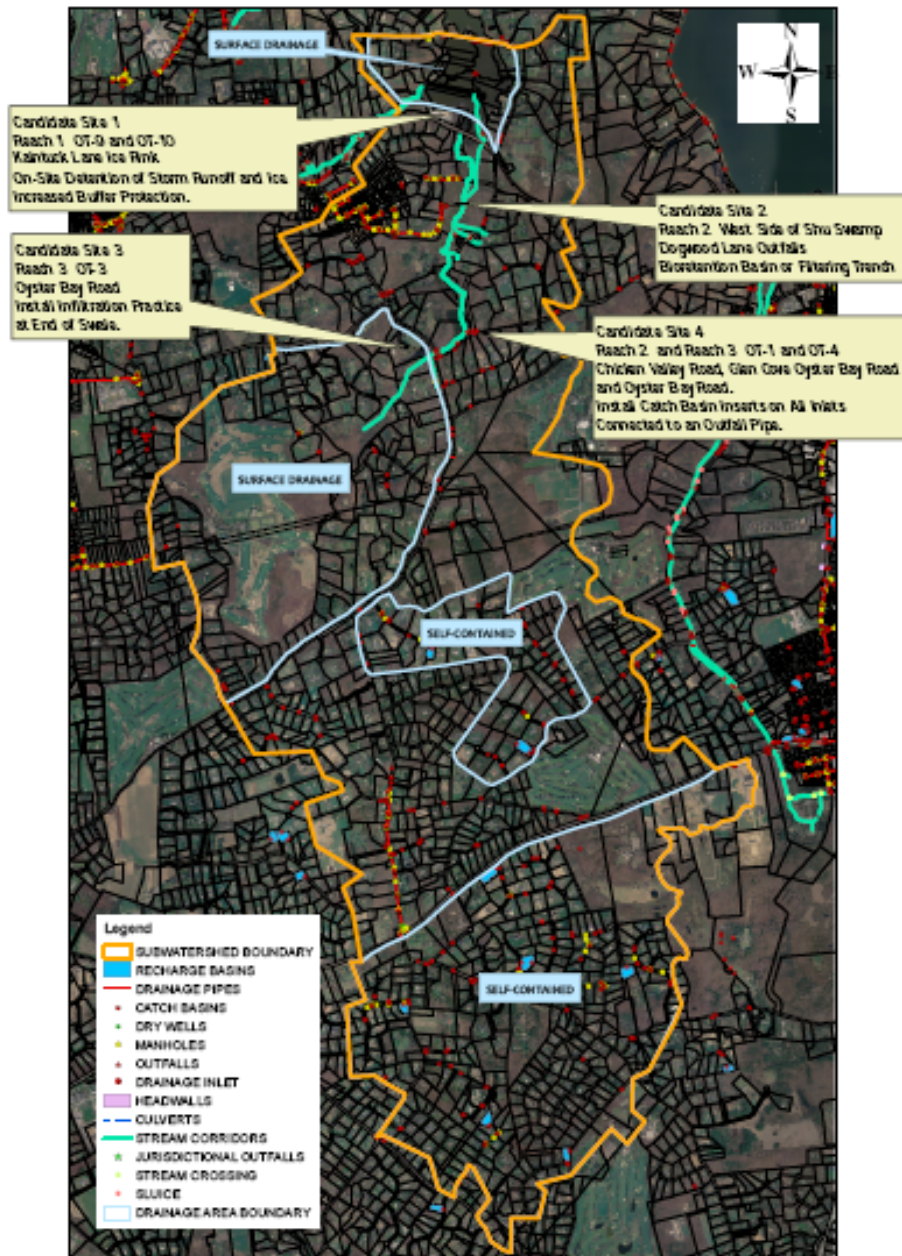
Specific educational materials will be developed and distributed within the watersheds that address pathogens; with emphasis on pet waste, waterfowl feeding, septic systems and manure handling at livestock/horse boarding facilities.

MCM 3:

The development of an onsite septic system inspection/maintenance program is being discussed with the affected municipalities and the Nassau County Department of Health at this time to determine the best course of action. Several programs that are in place in other parts of the country will be studied to ascertain the feasibility of enacting a similar program here. The minimum inspection timeframe may have to be increased from the current 3 years, to make this program manageable.

MCM 5:

The development and commencement of a Retrofit Program to correct or reduce pollutant loads has been previously studied for the affected sub-watersheds. The three sub-watersheds that make up the Pathogen Impaired Watershed that go to Oyster Bay were studied and mapped by Cashin Associates for the County in Year 5. The study included identification of 12 candidate sites for storm water improvement projects. The BMP's proposed include wet swales, dry swales, catch basin inserts, sedimentation basins and infiltration trenches. Policy and procedure for permitting, design, funding, construction and maintenance will be developed over the next 2 years. The following is a map showing candidate sites for one of the Francis Pond sub-watershed.



SOURCE: NCGIS AND CASHIN ASSOC. P.C.

MAP 3-1
NASSAU COUNTY STORMWATER
MANAGEMENT PROGRAM
STORMWATER RUNOFF IMPACT ANALYSIS
SMP CANDIDATE SITE MAP
FRANCIS POND SUBWATERSHED



0 1,000 2,000 4,000 6,000 8,000

MCM 6:

The development of local laws prohibiting pet waste and goose feeding on municipal properties are already on the books for the watershed. Both the Town of Oyster Bay (TOB) and Nassau County have recently passed local laws prohibiting waterfowl feeding and the TOB has had a pet waste law for some time. A pet waste bag program will be developed and implemented where possible. The TOB also has an in-place goose management program that addresses population control through egg oiling and dog diversion. This program will be expanded to cover all relevant parts of the Pathogen Impaired Watershed.

OYSTER BAY WATERSHED MAP

