

VILLAGE OF HUNTINGTON BAY

MS4 PERMIT # NYR200A29

STORMWATER MANAGEMENT PLAN (SWMP)

2019 ANNUAL UPDATE

Prepared by:
Jeffrey P. Vollmuth, P.E.
Village Engineer
Vollmuth & Brush
200 Blue Point Avenue
Blue Point NY 11715

June 2019

1.0 Street Maintenance

General:

The Village of Huntington Bay owns and maintains approximately 4.9 miles of roadways. The Village roadways are tributary to subsurface leaching basins and catch basins. These basins serve the dual purpose of flood control and protection of water quality. If the stormwater system is not properly maintained the capacity of the system to control street flooding will be directly impacted. In addition the system will not function as a water quality treatment device. Each basin receives first flush runoff from the streets that would ultimately discharge to the Harbor or Bay if the basins are not functional. First flush runoff contains up to 90% of the pollutant loading from a drainage basin. The basins capture sediments, oils, greases, nutrients and bacteria.

The locations of existing catch basins and drainage areas in the Village of Huntington Bay are depicted on Sheets 1 -5 Tributary Analysis Plans dated 7/15/99 last updated 6/15/11 prepared by Vollmuth & Brush.

Catch basins and leaching pools are impacted by excessive buildup of sediment and materials which clog catch basins and ultimately decrease the leaching rates of connected structures. It is therefore important that the connected catch basins be inspected on an annual basis and serviced to remove accumulated debris. In addition the connected leaching pools require periodic maintenance inspections to remove accumulated sediments.

1.1 Catch Basin Inspections:

The Village of Huntington Bay will maintain an inspection record of all Village owned and/or maintained catch basins. For the purposes of this implementation, leaching pools with grate inlets will also be considered "catch basins". The inspection will occur annually during the months of March and April.

1.1.1 Inspection Method:

Each catch basin will be visually inspected for standing water or excessive floatable material. The depth below grade of standing water will be recorded on the inspection form. This inspection will also report the presence of petroleum sheen in the basin.

Each catch basin will be measured to determine accumulation of sediment. The depth below grade of the sediment will be recorded. In addition the depth below the outlet will be recorded.

All catch basins which have sediment accumulations of more than 1/3 of the free depth between the outlet and bottom of the catch basin will be scheduled for maintenance cleaning. Maintenance cleaning should occur within 90 days of the inspection period.

Catch basins which are inspected and determined to have a significant floating layer of petroleum will be cleaned using an absorbent pad removed and disposed of prior to the next rainfall event.

Leaching catch basins/pools which are holding water more than 48 hours measured to be ½ of the effective depth of the leaching pool/basin will be scheduled for reinspection after (7) days of dry weather. If the standing water persists in the basin after the (7) day period it will be scheduled for a maintenance cleaning.

Maintenance of catch basins will include vacuum removal of accumulated sediment and to reestablish leaching. If the vacuum procedure removes more than 1 ft of sand below the bottom of the pool it will be replaced with clean sand to maintain the structure.

The Village is responsible for the inspection and maintenance of the following stormwater inlets and associated systems:

		Inventory Label
Village ROWs:	76 inlets	V#
Wincoma Association ROWs:	14 inlets	VW#
Baycrest Association ROWs:	14 inlets	VB#
Nathan Hale Association ROWs:	2 inlets	VN#
Bay Hills Association ROWs:	23 inlets	VBH#
Site Plan Required:	2 inlets	VA#

A total of 131 stormwater inlets will be inspected and maintained by the Village. This is a significant increase in responsibility. As a result of the decision by Village Trustees the number of basins municipally maintained increases from 69 to 131.

A total of 181 catch basin inlets were inventory located and labeled. The remaining inlets are privately maintained.

1.1.2 Reporting Method:

The catch basin inspection will be reported on the attached data sheet. The Village will maintain a record of maintenance on each catch basin within the Village maintained collection system. The maintenance record will include quantity of material removed from each basin.

1.1.3 2018 Reporting Period Goals

Continue to encourage that the selected catch basin contractor utilize the reporting format established by the Village. The Village Highway Trustee inspects the basins pre and post cleaning. The Village will consider utilizing the services of the Village Engineer to inspect during the cleanup work as a quality control measure.

The Village Trustees have decided to move forward with installation of FABCO Catch Basin Inserts in the following locations during the 2018-2019 Reporting Period. The basins are located in the Huntington Harbor tributary area and discharge directly to the Harbor. The FABCO inserts will be fitted with filters which are specifically designed to remove Pathogens.

The following basin upgrades are planned for the 2018-2019 Reporting Period

Kanes Lane Intersection: (5) Catch Basins: Inventory ID V4, 45, V6, V7 & V176
Install new standard double catch basin
Install (3) inlet Filter (double CB)
Install (4) single filter inserts on remaining CBs

**This work requires the replacement of an existing non standard inlet which receives a major portion of the tributary flow. A standard precast double inlet will be installed and fitted with FABCO filters. There are no construction records at this location and therefore it is likely that the proposed construction work will interfere with existing utilities etc.*

East Shore Road: Remove and Replace collapsed catch basins which have been historically paved over with asphalt. Inventory # V8 and V#185
(2) Install two new catch basins
Adjust/identify discharges to basins
Install FABCO filters in each new Catch Basin

**Based on inspection of the areas it appears that the basins may receive discharges from the Pond located east on private property. The piping may require rerouting to accommodate the replacement of the basin # V8 was included in the inventory of inlets. The second inlet V#185 was discovered in 2017 via a hole approximately 2 inch diameter in the pavement.*

There are (5) additional stormwater inlets which discharge to the Harbor. The Inventory ID# V10, V11, V12, V14, V15 will be scheduled for installation of FABCO Filters in the next reporting period 2019-2020.

1.1.4 2018 Progress

A total of 74 inlets were inspected by the contractor during the 2018-2019 reporting period. A total of 71 units required cleaning/removal of debris. The contractor reports that a total of 46.25 cu.yds (approximately 56 tons) of material was removed.

Review of the records of inspection and cleaning indicates that there are (18) inlets that have no prior report of inspection or clearing from 2014 – 2018. There are (20) inlets with the last reported inspection dated 2014.

Excess material was removed and disposed of by the contractor at 110 Sand, Farmingdale NY.

The contractor utilized a reporting form that was similar to the form provided by the Village Engineer which simplified the MS4 reporting.

There are (3) FABCO Filter Inserts installed in East Shore Road catch basins. The inserts and basins are serviced by FABCO technicians. The inlets are scheduled to be cleaned June 2019.

The Village of Huntington Bay installed (2) new/replacement inlets in East Shore Road to address the collapsed basins (#V8 & #V185). The basins were installed and the drainage piping was cleared of debris. A gravel French drain was installed to collect slope runoff and overflow from the private pond and route it to the new catch basin to eliminate sheetflow across the sidewalk. The basins were measured for FABCO filter inserts and the installation is scheduled for June 2019.

The Kanen Lane intersection drainage work was not completed during the reporting period. It is anticipated that the work will be completed in 2019-2020 reporting period.

1.1.5 2019 Goal

Determine why there are (18) inlets that have no record of Village or Contractor inspection. Require that the basins be inspected during this reporting period and cleaned if necessary. A table of the Inlet # is attached to this report.

Inspect the (20) inlets that have no record of inspection dating to 2014. Clean the basins if necessary. A table of the Inlet # is attached to this report.

Change the Contractor reporting strategy to include inspection of 100% of the inlets each year. Each inlet must be inspected and cleaned as deemed necessary. To address this issue the Village Engineer will inspect all basins during the 2019-2020 reporting period as a quality control measure. The status of the inlet labels and the map of inlet locations will be reviewed and improved if necessary.

During the 2019-2020 Reporting Period the Kanen Lane drainage improvement at East Shore Road will be completed.

Kanen Lane Intersection: (5) Catch Basins: Inventory ID V4, 45, V6, V7 & V176
Install new standard double catch basin
Install (3) inlet Filter (double CB)
Install (4) single filter inserts on remaining CBs

**This work requires the replacement of an existing non standard inlet which receives a major portion of the tributary flow. A standard precast double inlet will be installed and*

fitted with FABCO filters. There are no construction records at this location and therefore it is likely that the proposed construction work will interfere with existing utilities etc.

1.2 Leaching Basin Inspections:

In cases where leaching basins receive discharge from properly maintained catch basins the potential for sediment/oil clogging of the soils which provide percolation is reduced. Catch basins however are not 100% effective in removing materials. Leaching basins therefore over time will accumulate sediment which impacts the efficiency of disposal.

1.2.1 Inspection Method:

Leaching basins shall be inspected every (3) years to determine if excessive sediment is present. The basins will be opened and measured to determine if there is standing water 48 hours after a storm event of more than 0.5 inches. Leaching pools that have more than 50% of the depth impacted by standing water will be scheduled for a reinspection after (7) days of dry weather. If the basin continues to have a standing water elevation of more than 50 % of its depth it will be scheduled for cleaning.

Cleaning of leaching pools will be accomplished using a vacuum truck to remove accumulated sediment and restore leaching.

1.2.2 Reporting Method:

The leaching basin inspection will be reported on the attached data sheet. The Village will maintain a record of maintenance on each leaching basin within the Village maintained collection system. The maintenance record will include quantity of material removed from each basin.

1.2.3 2018 Goal

Excavate stone in the drainage system along the edge of East Shore Road to remove silt buildup. Install new stone with a 4 inch diameter manifold of fabric covered perforated pipe along the edge zone and route to the leaching inlet in the middle of zone.

1.2.4 2018 Progress

The gravel along the edge of the East Shore Road was serviced to remove silt and the system function was restored.

1.2.5 2019 Goal

Continue to monitor the status of the East Shore Road leaching system. It may be necessary to take additional corrective action at the location to reliably address Street flooding without creating an overflow to the adjacent wetland.

Continue to monitor leaching basin function and take correction action if the installation becomes impacted by silt. The Village will include a provision in Site Plan approval which will include an inspection of the status of the leaching systems and inlets adjacent to construction sites prior to the start of work and at the completion of the project. If the inlet or leaching pool has been impacted by construction runoff siltation the applicant/contractor/owner will be responsible for cleaning of the impacted basin as a condition of Roadway Bond release.

2.0 Winter Roadway Maintenance:

The roadways within the Village are tributary to catch basins and leaching pools. In addition there are portions of the Village where roadways may overflow into the surrounding surface waters of the Bay and Harbor during significant storm events. Excessive application of sand and deicing salts to the roadways in the Village could result in water quality impacts to the Bay and Harbor. In addition, excessive sand application will increase the frequency and cost of catch basin and leaching pool maintenance.

The Village of Huntington Bay purchases and stores salt and sand in Town of Huntington facilities. There is no storage of salt or sand within the Village boundaries. The Town of Huntington is a participating member of the MS4 program and therefore it is assumed that the materials are properly stored and protected.

The Village does not own or operate salt spreaders, snow plows or sanders. The Village contracts with a vendor/contractor for winter roadway maintenance. The vendor utilizes the Village material stockpile stored at the Town of Huntington facility. The Village purchases the sand and salt from the same vendor utilized by the Town. It is in the best interest of the Village to monitor the amount of salt and sand applied by the contractor. Excessive application/use of sand and salt will increase annual maintenance costs to the Village.

2.1.1 Implementation:

The contractor/vendor selected for the winter maintenance of the roadways within the Village will be required to confirm that he is familiar with the NYSDEC Best Management Practices regarding application of the materials.

The application of the materials to Village roadways will be monitored to determine if excessive salt or sand has been applied by the vendor/contractor.

The MSDS sheets for the salt purchased for application to Village roadways will be reviewed for contaminants of concern.

2.1.2 2018 Reporting Period Goals

Continue to monitor the purchase and application rates of sand and salt in the Village. Request that the contractor provides a summary of application rates with dates and quantity rather than delivery/load tickets to the Village administrator.

2.1.3 2018 Progress

The Village has continued to monitor the purchase of sand and salt and application rates. During the 2018-2019 reporting period the Village purchased 140 cu. yds, 168 tons of material which was stored at the Town of Huntington Facility on Oakwood Road Huntington. The winter of 2018-2019 was mild in comparison to the 2017-2018 period resulting in a significant reduction in application quantity.

The Village continues to monitor salt and sand application rates by the contractor selected for roadway maintenance.

The 2018 goal has been met. The contractor submits tickets to document application rates the dates of application and quantity data.

2.1.4 2019 Goal

Continue to monitor the purchase and application rates of sand and salt in the Village. Request that the contractor provides a summary of application rates with dates and quantity rather than delivery/load tickets to the Village administrator

3.0 Street Sweeping

The removal of accumulated sand and debris from Village Maintained roadways is important to the reduction of the pollutant loading to the catch basins and leaching systems which provide drainage and disposal of runoff. In addition, the removal of the material reduces the potential for sand and silt runoff to the Bay and Harbor Areas.

3.1 Implementation:

The Village of Huntington Bay retains a contractor for the removal of accumulated sand and silt on the roadways. Roadways are visually inspected by the Village Highway Superintendent to determine need for removal. At a minimum all Village roadways are swept once per year.

3.1.2 2018 Goal

Continue to monitor street sweeping and confirm that the 2017 Reporting Period Goal which required an increased level of reporting be completed by the contractor. A list of roadways swept, dates of service, quantity of material removed will be provided by the contractor. A total quantity of material disposed with a disposal ticket shall be provided.

3.1.3 2018 Progress

The contractor provided an invoice for service and reported all roads had been swept. The Village Highway Superintendent confirmed that the roads had been serviced. The requested documentation however was not submitted for the record.

3.1.4 2019 Goal

Continue to implement the reporting requirements (2018 Goal). The Village will withhold payment to the Vendor pending a summary sheet of roads swept, service date, quantity removed and a disposal ticket.

4.0 Village Vehicle Maintenance:

The Village of Huntington Bay Police vehicles are maintained at licensed facilities outside of the Village. On site maintenance of vehicles including car washing does not occur within the Village. The Village does not own or operate additional vehicles.

5.0 Dog Waste Program

The Village has adopted a local law regarding dog waste which requires the removal and disposal of feces by the pet owners. (Section 20-11). It is important to encourage residents to comply with the regulations to reduce the loading of fecal bacteria to Huntington Harbor and Huntington Bay.

5.1.1 2018 Goal

Install a dog waste bag station on East Shore Road and continue to monitor bag use. In addition the Village will offer to purchase and supply bags for (2) additional bag stations in Wincoma Association and Bay Crest Association areas.

5.1.2 2018 Progress

The Village maintains (4) dog waste bag stations. The stations are in proximity to the beaches. The stations have a high rate of use and bags are ordered and replaced on a frequent basis.

5.1.3 2019 Goal

Post a note on the Village Stormwater web site which asks for comments from Village residents regarding the dog waste bag stations within the Village. If residents comment that they would like additional stations installed the Village will consider the request and potentially install the stations during the 2019-2020 reporting period.

6.0 Goose Feeding Prohibition

It is important to limit the quantities of goose feces which are discharged to the Huntington Harbor and Huntington Bay. Runoff which contains goose waste creates additional fecal bacterial loading to the surrounding surface waters.

The Village of Huntington Bay adopted a new local law 12/13/11 (filed with NYS 12/21/11) which prohibits the feeding of geese and other waterfowl within the Village.

It should be noted that the Village does not own or control significant non roadway property. Therefore the control of geese populations within the Village requires actions by private landowners and Associations. In both cases geese droppings adversely impact the ability to utilize/enjoy private yards and Association beaches. The Village will explore successful methods of geese control that have been utilized in Huntington Harbor and Huntington Bay area of adjacent Villages. If the Village can implement the control measure along a ROW area to control geese on adjacent private property it will be considered by the Trustees.

The impact of goose droppings on surface water quality in the Village may be linked to the recent Cyanobacteria (Blue Green Algae) bloom in Willow Pond. On 4/17/17 the Suffolk County notified the Village the algae is present in Willow Pond. Human and domestic pet warning notices were posted around the pond by Suffolk County. Willow Pond is a private surface water surrounded by private property. Geese are utilizing the Pond and private yard areas year round. The droppings from the geese are impacting Pond water quality. The bacteria associated with droppings may also be contributing to the beach closures which occurred in 2016 within the Village.

6.1.1 2018 Reporting Period Goals

As previously noted the Village does not own or maintain property which is significant habitat for geese. The issue is confined to private property within the Village. The Village will continue to research control measures that can be recommended to private property owners.

6.1.2 2018 Progress

The Village assisted the Willow Pond homeowners during the 2018-2019 reporting period with respect to options available for goose population control.

6.1.3 2019 Reporting Period Goal

As previously noted the Village does not own or maintain property which is significant habitat for geese. The issue is confined to private property within the Village. The Village will continue to research control measures that can be recommended to private property owners

7.0 Fertilizer Application

The discharge of stormwater runoff to the tidal and freshwater wetlands and surface waters located within or adjacent to the Village of Huntington Bay can adversely impact the water quality and habitat. It is therefore desirable to reduce overall fertilizer use within the Village of Huntington Bay.

The Village authorized the Cornell Cooperative Exchange IDDE inspection contract proposal which will include discussion of methods to reduce Fertilizer use on Private property. A representative from Cornell will chair a presentation at Village Hall. The Village will invite residents and Association members to the meeting.

During the 2015 reporting period Village authorized the Cornell Cooperative Exchange IDDE inspection contract proposal which includes discussion of methods to reduce Fertilizer use on Private property. A representative from Cornell will chair a presentation at Village Hall. The Village will invite residents and Association members to the meeting. The IDDE portion of the contract was completed in March 2015. The training session will be scheduled during the 2016/2017 reporting period.

7.1.1 2018 Goals

Continue to request a non-fertilizer dependent landscape adjacent to waterfront areas. A minimum of 10 ft will be recommended/required. Post the Suffolk County Healthy Lawns information on the web site and obtain copies of the brochures for distribution at Village hall.

7.1.2 2018 Progress

The Village posted the Suffolk County Healthy Lawns information on the web site. In addition on July 30th 2018 a representative from the Cornell Cooperative Exchange reviewed the impacts of Fertilizer application to groundwater and surface water and provided guidance to residents during the meeting on ways to reduce application rates.

8.0 Illicit Discharge Detection

A comprehensive study was completed on 12/1/09 by the Cornell Cooperative Extension of Suffolk County of potential illicit discharges within the Village of Huntington Bay. The study provides locations of all outfalls within the Village. The results of the study did not identify the presence of an illicit discharge to the surface waters within/adjacent to the Village. It is important to identify and eliminate illicit discharges to the Village owned stormwater system. Discharges of contaminants to leaching pools and drains can potentially result in contamination of the Harbor and Bay.

Cornell Cooperative Exchange completed an update of the IDDE survey in 2015. The results of the study indicate that:

There were 52 outfalls previously reported in the previous IDDE Study

The preliminary results indicate that 20 of the 2009 outfalls have been eliminated. The elimination is based on removal of the outfall or reclassification of the outfall. There were outfalls designated under the previous IDDE which were retaining wall drains which do not qualify as an outfall or potential illicit discharge source.

A total of (6) new outfalls were mapped under the study.

The total number of outfalls mapped in the Village is 38. The study did not identify discharges under dry weather conditions which qualify as an illicit discharge. The discharges appear to be primarily private property stormwater outfalls. It should be noted that the Village has not approved a private discharge to a surface water subsequent to the establishment of the MS4 reporting requirements.

8.1.1 2018 Goals

Complete the training session at the Village. In addition schedule an updated IDDE inspection of the Waterfront for early 2019-2020 Reporting Period.

8.1.2 2018 Progress

The training session was held on July 30th at the Village. A representative of Cornell Cooperative Exchange provided the training to Village staff and residents. During the 2018-2019 reporting period a potential illicit discharge was reported by the Village Building Inspector. A resident was discharging pool water to the curb line which was ultimately discharging to a leaching basin (no surface water discharge occurred). The discharge water did not have a chlorine odor. The Building Inspector notified the homeowner that chlorinated discharges from the pool to the curb are not permitted in the Village and will be considered an illicit discharge if reported.

8.1.3 2019 Goal

During the 2019-2020 reporting period the web site will be updated to include a section regarding pool discharges. In addition the Village will conduct an update of the IDDE survey of the waterfront to determine if there are new/modified discharges that require reporting/removal/monitoring. It is likely that the work will be contracted to Cornell Cooperative Exchange.

9.0 Public Participation and Comment

It is important to inform and educate the Village Residents regarding the MS4 Stormwater Management Program. Residents within the Village of Huntington Bay can assist in the development of program goals which may significantly improve water quality in the Bay and Harbor. In addition, as residents become educated regarding the implementation of best management practices to improve stormwater quality it is likely that contaminant loading to the surrounding surface waters will be reduced.

It is the intent of the Village to organize an IDDE training meeting and invite representatives of each private Association to the meeting. It is hoped that this training session will serve the purpose of increased public participation in the goals of the SWMP.

10.0 On Site Sanitary Systems

The Village of Huntington Bay does not contain sanitary sewers. The sanitary waste generated by residences and beach clubs within the Village discharge sanitary waste to on site septic systems. The on site septic systems are under the direct supervision of the Suffolk County Department of Health Services.

The water quality of Huntington Harbor and Bay is impacted by pathogens. The presence of E coli bacteria above NYSDEC Water Quality and SCDHS standards has resulted in closure of shell fishing and beach uses. The sources of bacteria include stormwater runoff which contains wildfowl and dog waste contamination, illicit discharges of sanitary waste and non compliant poorly operating on site sanitary systems. The Village of Huntington Bay has taken action to reduce the direct discharge of stormwater to the surrounding surface water via the enforcement of a strict on site leaching design criteria. In addition, the Village has installed roadway leaching systems in Village and Association ROWs to reduce roadway discharge to the surface water. New Code sections have been adopted to prohibit feeding of wildfowl and dog waste bag stations have been installed. Discharge mapping and the IDDE program is in place to monitor all direct discharges to the surface waters.

There is a possibility that there are existing poorly functioning on site sanitary systems within the Village which contribute to water quality issues in the surrounding surface waters. The Village requires that applications for Building Permits and Site Plans comply with SCDHS criteria regarding on site sanitary systems. The SCDHS requires

that existing septic systems be inspected and repaired/replaced in accordance with the attached Memorandums. These Memorandums are summarized below:

If the CO for the house/structure was issued prior to 1973 and the applicant is increasing the number of bedrooms a SCDHS approval is required. The definition of bedrooms is provided in the attached memos.

If the CO for the house is post 1973 and the renovation will result in more than 4 bedrooms. The only caveat is a renovation where the applicant can produce a SCDHS approval that shows the system installed was for more than 4 bedrooms.

All apartment applications in our Village require SCDHS approval.

Full house demolition and reconstruction.

The existing system needs to be moved.

These SCDHS requirements however do not address homes/structures having a CO that predates 1973, which are proposing renovations that do not increase the number of bedrooms. There are renovations of homes in the Village which meet the criteria for Site Plan approval review (20%) modification of floor area and/or Waterfront Zone that were constructed over 40 years ago that are not proposing addition of a bedroom and do not meet the SCDHS threshold criteria requiring review. These applicants are not required to establish that their existing on site sanitary system is fully operational and compliant with the current SCDHS regulations. There is a potential that the existing systems are not operating correctly and do not have sufficient capacity for the single family home or structure.

The Village Building Inspector and Administrator will document that each Site Plan applicant has received the Site Plan check list and septic system conditions. A list of properties which have been subject to the Village requirement will be maintained to judge/document the effectiveness of the provision.

A copy of the Site Plan and Steep Slope Check list including the septic provisions will be posted on the web site.

All Site Plan applications submitted to the Village of Huntington Bay must comply with the attached SCDHS Memorandum Requirements which are summarized below:

- *If the CO for the house/structure was issued prior to 1973 and the applicant is increasing the number of bedrooms a SCDHS approval is required. The definition of bedrooms is provided in the attached memos.*
- *If the CO for the house is post 1973 and the renovation will result in more than 4 bedrooms a SCDHS approval is required. The only caveat is a renovation where the applicant can produce a SCDHS approval that shows the system installed was for more than 4 bedrooms.*

- *All apartment applications in our Village require SCDHS approval.*
- *Full house demolition and reconstruction of a new home will require a SCDHS approval.*
- *The relocation of an existing system requires SCDHS approval.*

Site Plan Applications submitted to the Village of Huntington Bay must comply with the following SWMP Criteria:

If your Certificate of Occupancy predates 1973, and your existing septic system is located within 300 ft of surface water including freshwater and tidal wetlands, and you are increasing and/or modifying/constructing sufficient floor area to trigger a Site Plan Review, you must submit a SCDHS “Certification of Existing Surface Subsurface Disposal and Water Supply Facilities for a Single Family Home” Form WWM-072. The Certificate of Inspection must be completed by a qualified professional retained by the applicant.

In the event that the Certificate of Inspection indicates that the existing sanitary system requires modifications, upgrades, repairs and/or replacement the applicant will be required to obtain a “SCDHS Certificate of Constructed Works” approval prior to issuance of a new CO.

This requirement was implemented during the 2014 Reporting Period. Applicants are proactively addressing the requirement and submitting applications for upgrade of their systems as part of the Site Plan review process.

The Village Building Inspector and Engineer have included the review of the existing sanitary systems for properties within the waterfront area. Impacted applicants have agreed to the required upgrade of their sanitary system or provided information which supports that they have a compliant system.

10.1.1 2018 Goals

The Village will continue to enforce the modified requirements regarding septic systems which requires replacement of older systems.

The Village will continue to promote the use of the Advanced Sanitary Systems which reduce nitrogen discharges to ground water by 66%. The following criteria will be utilized:

- The proposed site plan must collect 100% of existing and proposed impervious surfaces in subgrade leaching systems.

- The design standard for drainage systems will be modified from 6 inch rainfall event to a 3 inch rainfall event.
- The applicant must agree to the installation of the new advanced system which must be approved by the Suffolk County Department of Health Services.

The Goal of this provision is to encourage homeowners/applicants to install a new advanced system and provide an incentive cost savings by reducing the stormwater leaching system size and cost.

10.1.2 2018 Progress

During the 2018-2019 reporting period there were (4) applications for Site Plan which were reviewed requiring a replacement of the on site sanitary system. One of the homeowners decided to install the advanced system. The remaining (3) homeowners decided to install standard systems.

10.1.3 2019 Goal

During the 2019-2020 reporting period the Village will continue to promote the installation of advanced systems and insure that the Village requirements regarding the installation of new systems are met.

The Village will consider adopting a new Code Section which requires that all applicants proposing a modification of their residence and/or cottage install an advanced system if the system is within 500 ft of a surface water. The details of the Code section will be discussed and potentially adopted during the reported period.

11.0 Retrofit Program Plan Report

In compliance with the NYR 20A292 Requirements the Village of Huntington Bay prepared and submitted a Retrofit Program Plan to the NYSDEC Division of Water Permits on 9/26/14. The NYSDEC has determined that Huntington Harbor is a Pathogen Impaired Watershed.

The Retrofit Program Provided Information Regarding:

Dog Waste Runoff
Waterfowl and Geese Control
On Site Sanitary Systems
Illicit Discharges
Stormwater Management

The following Data was provided to the NYSDEC

VHB Tributary Area to the Harbor: 144 Acres
Number of Residences within the Tributary Area: 183

Three non- Residential uses identified:

Huntington Bay Yacht Club
Wincoma Association Beach
Wincoma Association Dock

The Report included the required Maps:

Figure 1: Village of Huntington Bay
Figure 2: Illicit Discharge Outfall Study
Figure 3: Aerial Map

The NYSDEC did not issue a corrective action mitigation report.

On a proactive basis the Village will begin retrofitting the (11) inlets located in East Shore Road which discharge to the Harbor. (CB Inlet # 1, 2, 3, 4, 5, 6, 7, 9, 10, 176, 177). Inlet #177 is a roadway overflow basin that will take flow when the intersection basins (#1, #2, & #3 are overwhelmed/flooded) The inlets will be fitted with FABCO pretreatment filter inserts designed to remove pathogens from stormwater. The retrofit program is a multi year commitment and is budget dependent.

The Village authorized the installation of inserts in CB locations #1, #2, #3. The first (3) installations will be monitored to determine if there are adverse operational considerations that will be associated with the inserts.

During 2015 the NYSDEC requested a more accurate GPS location of catch basin inlets within the Village. The data submitted to the NYSDEC was not sufficient for their mapping program.

During the 2015 reporting period the Village installed (3) FABCO catch basin inserts designed to reduce Pathogen discharge to the Harbor. CB #1, #2, #3 were retrofitted with the inserts and are being monitored.

11.1.1 2018 Goals

As previously discussed there are (11) inlets along East Shore Road which discharge to the Harbor. The Village installed (3) filters designed by FABCO to reduce pathogens from stormwater. The filters and basins are maintained by FABCO.

It is the goal of the Village to move forward with additional improvements in the East Shore Road corridor to reduce potential pathogen discharge to the Harbor. The Village has set a 2018 Goal of installing filter inserts at the Kanes Lane intersection with East Shore Road.

Kanes Lane Intersection: (5) Catch Basins: Inventory ID V4, 45, V6, V7 & V176
Install new standard double catch basin
Install (3) inlet Filter (double CB)
Install (4) single filter inserts on remaining CBs

**This work requires the replacement of an existing non standard inlet which receives a major portion of the tributary flow. A standard precast double inlet will be installed and fitted with FABCO filters. There are no construction records at this location and therefore it is likely that the proposed construction work will interfere with existing utilities etc.*

East Shore Road: Remove and Replace collapsed catch basins which have been historically paved over with asphalt. Inventory # V8 and V#185
(2) Install two new catch basins
Adjust/identify discharges to basins
Install FABCO filters in each new Catch Basin

**Based on inspection of the areas it appears that the basins may receive discharges from the Pond located east on private property. The piping may require rerouting to accommodate the replacement of the basin. V8 was included in the inventory of inlets. The second inlet V# was discovered in 2017 via a hole approximately 2 inch diameter in the pavement.*

The Village Engineer provided information to the Village regarding the proposed retrofit at the intersection of Kanesh Lane and East Shore Road

11.1.2 2018 Progress

The Village of Huntington Bay completed the installation of the two replacement catch basins at East Shore Road. The FABCO contract to install new inserts in the two new basins has been authorized and the work is scheduled for June 2019.

11.1.3 2019 Goal

The Village is committed to installation of FABCO inserts at each of the inlets which discharge to the Huntington Harbor. It is anticipated that the Kanesh Lane/East Shore Road inlets will be completed in the 2019-2020 reporting period.

Kanes Lane Intersection: (5) Catch Basins: Inventory ID V4, 45, V6, V7 & V176
Install new standard double catch basin
Install (3) inlet Filter (double CB)
Install (4) single filter inserts on remaining CBs

**This work requires the replacement of an existing non standard inlet which receives a major portion of the tributary flow. A standard precast double inlet will be installed and fitted with FABCO filters. There are no construction records at this location and therefore it is likely that the proposed construction work will interfere with existing utilities etc.*

If money is available in the 2018-2019 period the remaining inlets will be retrofitted with FABCO Filters.

13.0 GIS Mapping of Village Conveyance System

The Village owned/maintained stormwater inlets have been previously located using GPS and establishing the Latitude and Longitude locations. The GPS data was collected for all inlets within the Village regardless of ownership. During the 2015/2016 reporting period it became evident that the GPS locations collected were not sufficiently accurate to utilize in a GIS data base. The location issues were discovered in response to NYSDEC Retrofit Program comments/requests for information. The inlets within the Harbor tributary area were not accurately located for download into the NYSDEC database. The data was updated for the Harbor Tributary Area using survey quality GPS location equipment and the data was released to the NYSDEC. Approximately 33% of the inlets have been located. All discharges were located under the IDDE Program update during the update to GIS accuracy.

13.1.1 2018 Goal

It continues to be the Goal of the Village to survey locate every inlet within the Village. The data will ultimately be useful to the NYSDEC and Suffolk County for download into their GIS systems. There is budgeted money in the 2018-2019 for stormwater inlet improvements along East Shore Road. If the improvement cost is below budget the GIS mapping may be completed.

13.1.2 2018 Progress

The location work was not completed during the reporting period.

13.1.3 2019 Goal

The survey GPS quality location of inlets will be completed in the 2019-2020 reporting period.

14.0 Willow Pond

Willow Pond is a privately owned and maintained freshwater within the Village of Huntington Bay. The 3.5 acre surface area pond is owned by (5) residents. The pond receives stormwater runoff from approximately 25 acres of residential property and during significant storm events receives overflow runoff from Wincoma Association roadways.

On 4/27/17 Suffolk County Department of Health notified the Village that Cyanobacteria (blue green algae) had been detected in the Pond at sufficient concentration to result in a required posting to protect humans and domestic pets. Skin/dermal contact with the water should be avoided and pets should be treated for potential toxic effects if they drink water from the Pond.

14.1.1 2018 Goal

The Village Engineer will continue to provide support on an as needed basis to the homeowners.

14.1.2 2018 Progress

Willow Pond homeowners were in attendance during the July 30th 2019 Cornell Cooperative Exchange IDDE and Fertilizer meeting. The methods to reduce the demand of fertilizer use were discussed.

14.1.3 2019 Goal

The Village Engineer will continue to provide supportive service to the private homeowners which own/about the Pond.