



**STORMWATER MANAGEMENT PLAN
MS4 PERMIT
JULY 2017**

Town of Stratford

STORMWATER MANAGEMENT PLAN

Developed in compliance with CT DEEP MS4 General Permit Requirements



This plan is based on a template originally created by Western Connecticut Council of Governments staff and modified for statewide use by staff from UConn Center for Land use Education and Research (CLEAR).



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Introduction

This Stormwater Management Plan (SMP) was developed by the Town of Stratford to protect water quality and reduce the discharge of pollutants from the municipality's storm sewer system to the maximum extent practicable (MEP). This SMP addresses the requirements established by the CT Department of Energy and Environmental Protection's (DEEP) General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 General Permit). This permit is the local enforcement mechanism of the U.S. Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) Stormwater Phase II Rule.

SMP Structure

The plan outlines a program of best management practices (BMPs), measurable goals, responsible individuals or departments, and implementation schedules for the following six minimum control measures:

- (1) Public education and outreach
- (2) Public involvement and participation
- (3) Illicit discharge detection and elimination
- (4) Construction site stormwater runoff control
- (5) Post-construction stormwater management in new development and redevelopment
- (6) Pollution prevention/good housekeeping

Area Subject to the Plan

The measures identified in this SMP will be applied throughout the boundaries of the Town of Stratford, except as otherwise noted, and are consistent with the MS4 General Permit requirements. Stormwater discharge from municipally-owned maintenance garages, salt sheds and other facilities subject to the DEEP Industrial Stormwater General Permit will continue to be regulated under the conditions of that permit.

SMP Development

A stormwater committee led by the Department of Public Works and including representatives from conservation, engineering, and zoning was assembled to coordinate the development and implementation of the SMP.

Annual Reporting

The SMP's implementation will be tracked and documented in Annual Reports summarizing stormwater management activities carried out by the town and its partners. These reports will be submitted to DEEP on an annual basis no later than April 1.

Description of Municipality

The operator of the MS4 is the Town of Stratford. The Town of Stratford is a public entity located in Fairfield County in southwestern Connecticut, on Long Island Sound. The Town of Stratford covers an area of approximately 19.9 square miles. The Connecticut Department of Transportation (DOT) operates an MS4 on state highways located in Stratford. This system is regulated under the CT DOT's MS4 permit. The MS4s of Shelton, CT, and Bridgeport, CT overlap with Stratford along the Far Mill River/Cranberry Pond, and Bruce Brook, respectively. Implementation of the BMPs identified in this plan will be coordinated between Stratford and the CT DOT, Shelton, and Bridgeport as necessary.

Impaired Waters

In preparing the SMP, the CT DEEP's Water Quality Standards were reviewed in order to determine the Surface Water Quality Classifications for each watercourse in town. Certain BMPs address the watersheds containing watercourses designated as "impaired" by the CT DEEP. Table 1 shows the water quality

classification for each watershed. Table 2 summarizes the water bodies within or that run through the municipality that are listed on the 2014 List of Connecticut Water Bodies not meeting water quality standards and are designated as “impaired”.

TABLE 1			
Water Quality Surface			
Classifications Stratford, CT			
Drainage Basin Number	Name	Surface Water Quality Classification	Impaired per Water Quality Standards
6025-00	Far Mill River	B	YES
6026-03	Cemetery Pond Brook	A	YES
6026-03	Cranberry Pond	A	NO
6000-82 & 6000-83	Freeman Brook Complex	A	NO
6026-00	Beaver Dam Lake	A	NO
6026-00	Pumpkin Ground Brook	A	NO
6026-00	Cooks Pond	A	NO
6026-00	Peck's Mill Pond	A	NO
6000-84	Raven Stream	A	NO
6000-84	Motil Pond	A	NO
6000-88	Brewster Pond	A	YES
6000-88	Long Brook	A	NO
6000-88	Ferry Creek	A	NO
6000-88	Selby Pond	A	NO
7102-00	Bruce Brook	B	YES
7102-00	Wooster Pond	A	NO
7101-00	Frash Pond	A	NO
6000-00	Housatonic River (Upper)	SB	YES
6000-85	Housatonic River (Mouth)	SB	YES
NA	Long Island Sound	SA	YES
7101-00	Lewis Gut	SB	YES

**TABLE 2
Stratford's Impaired Waterbodies**

Waterbody ID	Water Segment Description	Water Segment Length (miles)	Impaired Use	Pollutant	Cause/Potential Source
Far Mill River - Surface Water Quality Classification - B					
CT6025-00_02	From River Road (Route 110) crossing (Wilson Gardens Dog Pond outlet dam), Shelton/Stratford town border, US to confluence with Means Brook (US of Sycamore Drive crossing), Shelton	3.99	E. coli	Bacteria	Permitted sources, illicit discharge, failing septic system, agricultural activity, stormwater runoff, nuisance wildlife/pets, other
Cemetery Pond Brook - Surface Water Quality Classification - A					
CT6026-03_01	Mouth at confluence with Pumpkin Ground Brook at Circle Drive crossing, Stratford, US to HW at OUTLET of Cranberry Pond, just US of James Farm Road crossing, Shelton	2.15	E. coli	Bacteria	Permitted sources, illicit discharge, failing septic system, agricultural activity, stormwater runoff, nuisance wildlife/pets, other
Brewster Pond - Surface Water Quality Classification - A					
CT6000-88-1-L1_01	Stratford, east of Main Street (Rte 113)	4.02 acres	Excess algal growth, Nutrient eutrophication, biological indicators, dissolved oxygen, chlordane	Nutrients, pesticides	Landscaping activity/maintenance, pest control, stormwater runoff

**TABLE 2
Stratford's Impaired Waterbodies**

Bruce Brook – Surface Water Quality Classification – B

7102-00-1-L2/ 7102-00-1	Inlet to Bruce Pond, US1 to Barnum Avenue crossing, Bridgeport/Stratford town line	0.22	E. coli	Bacteria	Permitted sources, illicit discharge, stormwater runoff, nuisance wildlife/pets, CSO/SSO issue from Bridgeport, CT
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Housatonic River (Upper)– Surface Water Quality Classification – SB

CT-C1_021-SB	Central portion of LIS, Inner Estuary, from Route 15 crossing, US to just below Wooster Island (includes Great Flats, and mouth of Farmill River) Orange/Shelton.	0.40 mi ²	dissolved oxygen saturation, nutrient/eutrophication biological indicators; oxygen, dissolved; nonpollutant impairments (dredge mining)	Nutrients	NA
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Housatonic River (Mouth)– Surface Water Quality Classification – SB

CT-C1_019-SB	Central portion of LIS, Inner Estuary, from mouth between Sniffens Point and Milford Point, US to Route 1 crossing (includes Nells Island area, lower Beaver Brook to saltwater limit, Goose Island, Crimbo Point), Milford/Stratford	0.81 mi ²	Metals, chemicals (dioxin, PCBs), fecal coliform	copper, dioxin (including 2,3,7,8-TCDD), polychlorinated biphenyls, zinc, bacteria	Permitted sources, illicit discharge, failing septic system, stormwater runoff, nuisance wildlife/pets, historic industrial runoff
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**TABLE 2
Stratford's Impaired Waterbodies**

Long Island Sound, Lordship (Shore) - Surface Water Quality Classification - SA

CT-W2_001	Western portion of LIS from Point No Point area to SA/SB WQ line at Stratford Point (includes Long Beach (Marnick's), SB water is at mouth of Housatonic River) out approximately 1000 ft offshore, Stratford	0.41 mi ²	Fecal coliform	Bacteria	Permitted sources, illicit discharge, failing septic system, marinas, stormwater runoff, nuisance wildlife/pets, other
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Long Island Sound, Lordship (Midshore) - Surface Water Quality Classification - SA

CT-W3_001	Western portion of LIS from approximately 1000 ft offshore (Point No Point, Lordship), out to 50 ft contour, Stratford. Odd shape due to 50 ft contour	7.92 mi ²	Fecal coliform; dissolved oxygen saturation; Nitrogen (Total); Nutrient / Eutrophication Biological Indicators; Oxygen, Dissolved	Bacteria, nutrients	Permitted sources, illicit discharge, failing septic system, marinas, stormwater runoff, nuisance wildlife/pets, other
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Long Island Sound, Long Beach - Surface Water Quality Classification - SA

CT-W2_002	Western portion of LIS from SA/SB WQ line at Pleasure Beach to Point No Point area (includes Long Beach (Proper), SB water is Bridgeport Harbor) out approximately 1000 ft offshore, Stratford	0.46 mi ²	Fecal coliform	Bacteria	Permitted sources, illicit discharge, failing septic system, marinas, stormwater runoff, nuisance wildlife/pets, other
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**TABLE 2
Stratford's Impaired Waterbodies**

Lewis Gut – Surface Water Quality Classification – SB					
CT-W1_001-SB	Western portion of LIS from SA/SB water quality line at mouth at Pleasure Beach area, US to saltwater limit in Pequonnock River and Lewis Gut (includes Yellow Mill Channel, Johnsons Creek, all SB water of Harbor area), Bridgeport	1.43 mi ²	enterococcus, fecal coliform, dissolved oxygen saturation, nutrient/eutrophication biological indicators; oxygen, dissolved; polychlorinated biphenyls; polycyclic Aromatic Hydrocarbons (PAHs) (Aquatic ecosystems)	Bacteria, nutrients, PCBs, PAHs	Permitted sources, illicit discharge, failing septic system, marinas, stormwater runoff, nuisance wildlife/pets, other

The surface water classifications currently assigned to watercourses in Stratford are defined below.

Class A

Surface water is known or presumed to meet Water Quality Criteria which support designated uses, which may include potential drinking water supply; fish and wildlife habitat; recreational use; agricultural, industrial supply and other legitimate uses, including navigation.

Class B

Designated uses include recreational use, fish and wildlife habitat, agricultural and industrial supply, and other legitimate uses including navigation.

Class SA

Designated uses include marine fish, shellfish and wildlife habitat, shell fish harvesting for direct human consumption, recreation and all other legitimate uses including navigation.

Class SB

Designated uses include marine fish, shellfish and wildlife habitat, shellfish harvesting for transfer to approved areas for purification prior to human consumption, recreation, industrial and other legitimate uses including navigation.

Based on the DEEP Surface Water Quality Classifications, the Housatonic River, Lewis Gut, Long Island Sound, Far Mill River, Cemetery Pond Brook, Bruce Brook, and Brewster Pond are identified as having water quality impairments and will take the highest priority in the Town of Stratford's efforts to address stormwater pollution. Best Management Practices (BMPs) were developed with a focus on these high priority waterbodies and watercourses.

(1) Public Education and Outreach

This minimum control measure outlines a program to communicate common sources of stormwater pollution and the impacts of polluted stormwater to the public. This will be done through distributing educational materials to the community and conducting outreach activities. The following BMPs and implementation schedule serve as Stratford's MS4 Public Education Program.

Goals:

- Raise public awareness that polluted stormwater runoff is the most significant source of water quality problems;
- Motivate residents to use Best Management Practices (BMPs) that reduce polluted stormwater runoff; and
- Reduce polluted stormwater runoff in town as a result of increased awareness and utilization of BMPs.

1.1 Implement public education program

Stratford will collect and distribute stormwater educational materials that, at a minimum, address the impacts of the following on water quality: pet waste, impervious cover, application of fertilizers, pesticides, and herbicides, and illicit discharges and improper disposal of wastes into the MS4.

Stratford will include a link to UConn NEMO's comprehensive online library of stormwater educational material on the Town's stormwater management website (<http://www.townofstratford.com/content/39832/39846/39927/40909/77073/default.aspx>). Availability of these materials will be promoted via a banner on the town homepage when the site is launched, and an article in the local newspaper. Printed educational materials will be available for taking in Town Hall, the public library, and in the town's zoning department, engineering department, building department, and conservation department/inland wetlands agency. Printed materials will provide the URL for the Town's stormwater management website, and UConn NEMO's online library.

Additional targeted outreach efforts will be completed by the Conservation Department to educate students, developers, and homeowners on particular aspects of stormwater management.

1.2 Address education and outreach for pollutants of concern

Stratford will distribute information on common sources of phosphorus, nitrogen, and bacterial pollution and how to prevent or reduce the amount reaching the MS4 and discharging into waterways.

The table below shows additional topics to be covered to address the phosphorus, nitrogen, and bacteria impairments that exist in Stratford.

Phosphorus	Nitrogen	Bacteria
<ul style="list-style-type: none"> • Septic systems • Fertilizer use • Grass clippings and leaf management • Detergent use • Discharge of sediment (binding Phosphorus) from Construction sites • Other erosive surfaces 	<ul style="list-style-type: none"> • Septic systems • Fertilizer use • Grass clippings and leaf management • Discharge of sediment (binding Nitrogen) from Construction sites • Other erosive surfaces 	<ul style="list-style-type: none"> • Septic systems • Sanitary cross connections • Waterfowl • Pet waste • Manure piles associated with livestock and horses

Outreach will also include education of residents, students, town employees and developers on the importance of stormwater management and the town's implementation of the stormwater management plan.

Public outreach and education schedule

BMP	Lead department / individual	Month / year of implementation	Measurable goal
1.1 Implement public education program	Conservation (Tina Senft-Batoh)	July 1, 2018 and continue until permit expires	<ul style="list-style-type: none"> • Update stormwater management website and pertinent links • Design educational materials for distribution to residents and applicant's for permits
1.1 Distribute educational materials to developers	Conservation (Tina Senft-Batoh) Engineering (John Casey) Zoning (Jay Habansky)	July 1, 2017 and continue until permit expires	<ul style="list-style-type: none"> • Continue distributing stormwater management educational materials to developers and contractors visiting various town departments
1.1 Establish a program for stormwater education in schools	Conservation (Tina Senft-Batoh)	September 1, 2018	<ul style="list-style-type: none"> • Conduct outreach activities to schools throughout the town discussing impacts of stormwater discharges on local waterbodies
1.1 Develop a program for employee training	Conservation (Tina Senft-Batoh)	July 1, 2018 and annually until permit expires	<ul style="list-style-type: none"> • Conduct annual training sessions for Public Works employees on the terms and implementation of the stormwater management plan
1.2 Address education/outreach for pollutants of concern	Conservation (Tina Senft-Batoh)	July 1, 2018 and continue until permit expires	<ul style="list-style-type: none"> • Distribute information on common sources of phosphorus, nitrogen, and bacteria and how to reduce these pollutants in runoff (distribute via website and educational materials)

(2) Public Involvement and Participation

This minimum control measure identifies the process for public involvement and participation in the town's stormwater management efforts.

Goals:

- Involve the community in planning and implementing the town's stormwater management activities.
- Provide a minimum 30 day notice to the public for this plan and annual reports.

2.1 Comply with public notice requirements for the Stormwater Management Plan and Annual Reports

Stratford will publish a public notice of the Stormwater Management Plan in the CT Post and/or Stratford Star newspaper. The notice will provide a contact name, phone number, address, and email to whom the public can send comments. Additionally, this plan and the Annual Reports will be publicly accessible on the town website (www.townofstratford.com), in the Stratford Public Library, and in the Engineering Department of Town Hall. The public notice will allow for a minimum 30-day comment period.

2.2 Promote a program to enlist help from Volunteer Organizations

Enlist the help of volunteer groups to distribute brochures, perform stenciling and promote cleanup and restoration projects for citizen organizations, civic clubs, environmental organizations (such as Scouting Organizations), Protect Your Environment, etc. to work on tasks to promote stormwater quality goals.

Public involvement and participation schedule

BMP	Lead department / individual	Month / year of implementation	Measurable goal
2.1 Comply with public notice requirements for the SMP and Annual Reports	Engineering (John Casey)	July 1, 2017 and continue until permit expires	<ul style="list-style-type: none"> • Publication of notice
2.2 Project Greensweep	Conservation/Public Works (Tina Senft-Batoh)	May 2018, and annually through life of permit	<ul style="list-style-type: none"> • Number of volunteers • Total tonnage of material collected
2.2 Regular Cleanups at Parks by Conservation Commission	Conservation/Public Works (Tina Senft-Batoh)	September 2017 and at minimum twice a year thereafter	<ul style="list-style-type: none"> • Number of events • Total number of participants
2.2 Hold a "Household Hazardous Waste Day" Event	Conservation/Public Works (Tina Senft-Batoh)	October 2017, and annually through life of permit, as funding allows	<ul style="list-style-type: none"> • Number of residents participating • Total tonnage of waste collected

(3) Illicit Discharge Detection and Elimination

This minimum control measure outlines a program to detect and eliminate current illicit discharges to the MS4 and prevent further illicit discharges in the future. As the entire Town of Stratford is considered a priority area (i.e. town is completely urbanized), activities for this measure will be implemented town-wide.

Goal:

Find the source of any illicit discharges; eliminate those illicit discharges; and ensure ongoing screening and tracking to prevent and eliminate future illicit discharges.

3.1 Develop written IDDE plan

Stratford will develop a written IDDE plan to detect, locate and eliminate illicit discharges (to the maximum extent practicable) from the MS4 town-wide. The IDDE plan will provide enforceable legal authority to eliminate illicit discharges, assign responsibilities, and develop a citizen reporting program. The plan will also outline the outfall screening and IDDE protocols consistent with Appendix B of the MS4 General Permit to identify, prioritize, and investigate MS4 catchments for suspected illicit discharge of pollutants. Also, the IDDE plan will outline follow-up screening and illicit discharge prevention procedures.

3.2 Develop list and map of all MS4 outfalls and interconnections in priority areas

The Town of Stratford will complete and continue to update a database of all stormwater discharges from a pipe or conduit located within and owned or operated by the municipality and all interconnections with other MS4s. Each entry will include:

- a. Type, material, size, shape and location (identified with a latitude and longitude) of conveyance, outfall or channelized flow (e.g. 24" concrete pipe);
- b. the name, water body ID and Surface Water Quality Classification of the immediate surface waterbody or wetland to which the stormwater runoff discharges;
- c. if the outfall does not discharge directly to a named waterbody, the name and water body ID of the nearest named waterbody to which the outfall eventually discharges;
- d. the name of the watershed, including the subregional drainage basin number (available from CT ECO at www.cteco.uconn.edu) in which the discharge is located;
- e. date of most recent inspection of the outfall, the condition, and any indicators of potential non-stormwater discharges as of most recent inspection;

The database will be exported into excel format for annual reports.

The Engineering Department of the Town of Stratford will update the existing database of all stormwater discharges in town to include the entry information as identified above (items a-e). Should information be lacking for any outfall, an employee of the engineering department, with assistance from the Public Works Department (as necessary), will be responsible for field investigating the outfall, and acquiring and documenting the required information to update the database accordingly.

3.3 Develop citizen reporting program

The Town of Stratford will establish a system to allow for citizen reporting of suspected illicit discharges into the stormwater system. The system will, at minimum, include an email address and phone number for submitting a report. The Town will affirmatively investigate and eliminate any illicit discharges for which a time and location of discharge are provided. The Town will promptly inspect the reported outfall or manhole and proceed according to the requirements of the written IDDE program. All citizen reports and responses will be included in the Town of Stratford's annual report.

3.4 Establish legal authority to prohibit illicit discharges

The Town of Stratford will establish the necessary and enforceable legal authority by statute, ordinance, rules and regulations, permit, easement, contract, order or any other means, to eliminate illicit discharges. The authority will:

- a. prohibit illicit discharges to its storm sewer system and require removal of such discharges consistent with the deadlines outlined in the MS4 general permit; and
- b. authorize the investigation of suspected illicit discharges and elimination of illicit discharge, including from properties not owned or controlled by the MS4 that discharge to the MS4
- c. control the discharge of spills and prohibit the dumping or disposal of materials including, but not limited to, residential, industrial and commercial wastes, trash, used motor vehicle fluids, pesticides, fertilizers, food preparation waste, leaf litter, grass clippings, and animal wastes into its MS4; and
- d. authorize appropriate enforcement procedures and actions;
- e. authorize fines or penalties and/or recoup costs incurred by the permittee from anyone creating an illicit discharge or spilling or dumping in to the MS4.

3.5 Develop record keeping system for IDDE tracking

The Town of Stratford will keep a record of illicit discharge abatement activities including location (i.e. latitude and longitude or address), description of illicit discharge, date(s) of inspection, sampling data (if applicable), action(s) taken, date of abatement/removal or repair and responsible party.

In addition, the Town of Stratford will develop and maintain an SSO inventory that records the location, date and time of occurrence, estimated volume of discharge, a description of known or suspected cause, and details about mitigating measures including dates of implementation.

This inventory will also:

- include all known SSOs to their MS4 in the past 5 years (July 1, 2012 – June 30, 2017);
- continue to be updated to track future SSOs; and
- be included in Annual Reports.

3.6 Address IDDE in areas with pollutants of concern

The Town of Stratford will identify areas in town that are most likely to contribute nitrogen, phosphorus, and bacteria to the MS4. This assessment will consider: historic on-site sanitary system failures, proximity to

bacterial impaired waters, low infiltrative soils, and shallow groundwater. Any areas determined to have a high potential for septic system failure will be reported to the Health Department for corrective action.

3.7 Detailed MS4 infrastructure mapping

The Town of Stratford will update a detailed map of the MS4 to include:

- Components of the MS4 within priority areas (i.e. town-wide):
 - Outfalls & receiving waters;
 - Pipes; open channel conveyances; catch basins; manholes;
 - Interconnections with other MS4s and other storm sewer systems;
 - Municipally-owned stormwater treatment structures (e.g. detention & retention ponds, infiltration systems, bioretention areas, water quality swales, gross particle separators, oil/water separators, or other systems);
 - Catchment delineations for each outfall;
 - Impaired water bodies identified by name and use impairment as defined by the most recent integrated water quality report;
 - Municipal sanitary sewer system (if available).

The Town of Stratford will update the map as new information becomes available and will report on the progress of the development of this map in the annual report.

Illicit discharge detection and elimination schedule

BMP	Lead department / individual	Month / year of implementation	Measurable goal
3.1 Develop written IDDE program	Conservation (Tina Senft-Batoh) Engineering (John Casey) WPCA (Thomas Hyde) Highways (Thomas Albert)	July 1, 2018	• Completion of written document
3.2 Update maps of all MS4 stormwater outfalls throughout municipality	Engineering (John Casey)	July 1, 2020	• Completion of map layers
3.3 Develop citizen reporting program	Conservation (Tina Senft-Batoh) (David Wright) • July (David Wright)	July 1, 2018	• Completion of SOP for program
3.4 Establish legal authority to prohibit illicit discharges	Mayor (John Harkins)	July 1, 2019	• Establishment of authority upon approval of ordinance/regulations by Town Council
3.5 Develop record keeping system for IDDE tracking	IT Department (David Wright)	July 1, 2018	• Development of system/database
3.6 Address IDDE in areas with pollutants of concern	Public Works (Maurice McCarthy) Blight (Richard Fredette)	July 1, 2018 and through life of permit	• Complete and report on IDDE in areas with pollutants of concern
3.7 Update mapping of MS4 infrastructure	Engineering (John Casey)	July 1, 2020	• Completion of map layers

(4) Construction Site Stormwater Runoff Control

This minimum control measure outlines procedures for minimizing polluted stormwater runoff from activities that disturb one or more acres of land. In Stratford, this is determined on a site by site basis OR collectively as part of a larger plan.

Goal:

Minimize polluted stormwater runoff from construction sites and prevent it from carrying sediment into waterways via MS4 infrastructure.

4.1 Implement, upgrade and enforce land use regulations to meet requirements of MS4 general permit

The Town of Stratford will revise its land use regulations to establish the legal authority to control stormwater runoff from construction sites by requiring:

- a. developers, construction site operators, or contractors to maintain consistency with the 2002 Guidelines for Soil Erosion and Sedimentation Control, as amended, the Connecticut Stormwater Quality Manual, and all stormwater discharge permits issued by the DEEP within the municipal or institutional boundary pursuant to CGS 22a-430 and 22a-430b;
- b. the implementation of additional measures to protect/improve water quality (in addition to the above requirements) as deemed necessary by the Town of Stratford;
- c. the Town of Stratford be authorized to carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance with municipal regulations, ordinances or programs or institutional requirements related to the management of Stratford's MS4. Inspections shall be conducted, where allowed, to inventory the number of privately-owned retention ponds, detention ponds and other stormwater basins that discharge to or receive drainage from the permittee's MS4;
- d. the owner of a site seeking development approval from the Town of Stratford shall provide and comply with a long term maintenance plan and schedule to ensure the performance and pollutant removal efficiency of privately-owned retention ponds, detention ponds and other stormwater basins or infrastructure that discharge to or receive discharge from Stratford's MS4. This includes short-term and long-term inspection and maintenance measures to be implemented by the private owner; and
- e. the Town of Stratford will control, through interagency or inter-jurisdictional agreements, the contribution of pollutants between the permittee's MS4 and MS4s owned or operated by others.

4.2 Develop and implement plan for interdepartmental coordination of site plan review and approval

Stratford's plan to coordinate the functions of all the departments and boards involved in the review, permitting, or approval of land disturbance projects is as follows:

- 1) Project applicant submits project plans and all supporting documentation to Department of Planning and Zoning.
 - If project involves development in a delineated wetland or upland review area of a wetland or watercourse, the project is deferred to the Town's Department of Conservation for review by the Inland Wetlands and Watercourses Commission. Upon approval by the Inland Wetlands and Watercourses Commission, the project is eligible for inclusion on the agenda of the Planning and Zoning Commission.
- 2) Upon review by the Zoning Administrator the applications are sent to town departments (i.e. Health, Public Works, Conservation, Engineering, Buildings, WPCA) for review
- 3) Town Departments submit comments on the application to the Zoning Administrator. Engineering and Conservation Departments pay particular attention to sediment and erosion control and stormwater management
- 4) Zoning Administrator compiles comments from Town Departments and presents to the Zoning Commission
- 5) The Zoning Commission uses the comments to inform their approval, denial, or modification of the project plans.

4.3 Review site plans for stormwater quality concerns

The Town of Stratford will continue to conduct site plan reviews that incorporate consideration of stormwater controls or management practices to prevent or minimize impacts to water quality on sites with soil disturbance of one acre or more. Stormwater controls or management practices will also be considered for any site where disturbance (regardless of total area) occurs within a wetland or upland review area of a wetland or watercourse.

4.4 Conduct site inspections

The Town of Stratford will perform construction site inspections and take enforcement actions if necessary to ensure the adequacy of the installation, maintenance, operation, and repair of all construction and post-construction runoff control measures.

4.5 Implement procedure to allow public comment on site development

Stratford's procedure for public involvement in proposed and ongoing development and land disturbance activities is as follows:

Due to project scope or degree of disturbance to sensitive habitats, proposed developments, by state and town regulations may be presented at a Public Hearing. The Public Hearing allows concerned citizens to comment on the potential effects of the proposed activity. Additionally, a Public Forum takes place prior to meetings of the Town Council every month. Town residents may use this forum to voice their concern for any proposed development.

During construction and post-construction, any information submitted by the public to any town department regarding potential violations of a zoning approval (including terms of stormwater management) are forwarded to the Zoning Enforcement Officer. Where potential violations involve runoff or disturbance to wetlands or upland review areas, or where the project has been issued a permit by the Inland Wetlands and Watercourses Commission, the Zoning Enforcement Officer also informs the Town's Inland Wetlands Agent (i.e. Conservation Administrator) to inspect the site and issue violations as appropriate.

4.6 Implement procedure to notify developers about DEEP construction stormwater permit

The Town of Stratford, particularly the Engineering Department and Zoning Department, will continue to notify developers (working within the municipality) that they have a potential obligation to obtain authorization under the DEEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities ("construction general permit") if their development or redevelopment project disturbs five or more acres of land, either individually or collectively, as part of a larger common plan, and results in a point source discharge to the surface waters of the state directly or through the permittee's MS4. The notification shall include a provision informing the developer/contractor of their obligation to provide a copy of the Storm Water Pollution Control Plan (required by the construction general permit) to the permittee upon request.

The notification will also include a statement that the contractor is required at all times to conduct his operations in conformity with all Federal and State permit requirements concerning water, air, noise pollution and the disposal of contaminated, or hazardous materials.

Approvable construction projects with a total disturbed area of one to five acres are not required to register with the DEEP provided that the development plan has been approved by a land use agency of the Town of Stratford and adheres to local erosion and sediment control land use regulations and the CT Guidelines for Soil Erosion and Sediment Control.

Notification is and will continue to be provided to developers as a written description with the application package for zoning, building, and engineering permits.

Construction site stormwater management schedule

BMP	Lead department / individual	Month / year of implementation	Measurable goal
4.1 Implement, upgrade and enforce land use regulations to meet MS4 permit requirements	CAO (Chris Tymniak)	July 1, 2019	<ul style="list-style-type: none"> • Making appropriate changes and updates to land use regulations
4.2 Develop / Implement model for interdepartmental coordination in site plan review and approval	(Jay Habansky)	July 1, 2018	<ul style="list-style-type: none"> • Updated model for interdepartmental coordination in site plan review

4.3 Review site plans for stormwater quality concerns	Zoning (Jay Habansky) Engineering (John Casey) Conservation (Tina Senft-Batoh)	July 1, 2017 and continue through life of permit	• Completion of reviews
4.4 Conduct site inspections to ensure compliance with MS4, stormwater management plan, and sediment and erosion control requirements	Zoning (Jay Habansky) Conservation (Tina Senft-Batoh)	July 1, 2017	• Conduct inspections
4.5 Maintain current opportunities for allowing public comment on site development	Mayor (John Harkins)	July 1, 2017	• Continuance of public hearings and public forums
4.6 Notify developers about DEEP construction stormwater permit	Zoning (Jay Habansky) Buildings (Brian Donovan) Engineering (John Casey)	July 1, 2017	• Continue to provide developers with necessary information in permit application package

(5) Post-construction Stormwater Management in New Development or Redevelopment

This minimum control measure outlines the Town of Stratford's program to address stormwater runoff from new or re-development projects that disturb one or more acres of land.

Goal:

Mitigate the long-term impacts of new and re-development projects on water quality through proper use of low impact development and runoff reduction practices.

5.1 Establish legal authority and guidelines regarding LID and runoff reduction in site development planning

The Town of Stratford will establish the legal authority by ordinance, bylaw, regulation, standard condition of approval, or other means to require, to the maximum extent practical, developers and contractors seeking the town's approval to consider the use of low impact development (LID) and runoff reduction site planning. Practices must meet or exceed those LID and runoff reduction practices in the CT Stormwater Quality Manual prior to other stormwater management practices allowed in Stratford's land use regulations, guidance or construction project requirements.

This legal authority will include the following standards:

- 1) for redevelopment of sites that are currently developed with Directly Connected Impervious Area (DCIA) of forty percent or more, the project must retain half the water quality volume on-site, or
- 2) for new development and redevelopment of sites with less than forty percent DCIA, retain the total water quality volume for the site, or
- 3) if those retention standards cannot be met, the developer will be required to provide a report indicating why the standard could not be met and a mitigation project on another property or pay a fee to fund a DCIA retrofit.

In developing this legal authority, the Town of Stratford will consider the following watershed protection elements to manage the impacts of stormwater on receiving waters:

- a. Minimize the amount of impervious surfaces (roads, parking lots, roofs, etc.) within each municipality by minimizing the creation, extension, and widening of parking lots, roads, and associated development and encourage the use of Low Impact Development or green infrastructure practices.
- b. Preserve, protect, create and restore ecologically sensitive areas that provide water quality benefits and serve critical watershed functions. These areas may include, but are not limited to; riparian corridors, headwaters, floodplains and wetlands.
- c. Implement stormwater management practices that prevent or reduce thermal impacts to streams, including requiring vegetated buffers along waterways, and disconnecting discharges to surface waters from impervious surfaces such as parking lots.
- d. Seek to avoid or prevent hydromodification of streams and other water bodies caused by development, including roads, highways, and bridges.
- e. Implement standards to protect trees, and other vegetation with important evapotranspirative qualities.

- f. Implement policies to protect native soils, prevent topsoil stripping, and prevent compaction of soils.
- g. Coordinate with state or local health officials to ensure no interference with performance of on-site septic systems.
- h. Limit turf areas.

In addition, the Town of Stratford will review its current regulations (site planning requirements, zoning regulations, street design regulations, and infrastructure specifications with minimum size criteria for impervious cover [roads, parking lots, etc.]) to identify and, where appropriate, reduce or eliminate existing regulatory barriers to implementation of LID and runoff reduction practices to the maximum extent practical.

5.2 Implement long-term maintenance plan for stormwater basins and treatment structures

The Town of Stratford will develop a maintenance plan for retention/detention ponds and stormwater treatment structures that it owns or over which it holds an easement or other authority to ensure their long-term effectiveness. This plan will require an annual inspection of those retention/detention ponds and stormwater treatment structures and removal of accumulated sediment and pollutants in excess of 50% design capacity.

5.3 Directly Connected Impervious Area (DCIA) mapping

The Town of Stratford will follow guidance provided by DEEP and UConn CLEAR to calculate the Directly Connected Impervious Area (DCIA) that contributes stormwater runoff to each of its MS4 outfalls. Progress on this task will be documented in each Annual Report until completion.

5.4 Address post-construction issues in areas with pollutants of concern

For areas contributing to waters where **Nitrogen, Phosphorus** or **Bacteria** is a Stormwater Pollutant of Concern and erosion or sedimentation problems are found during the annual inspections conducted under the long-term maintenance plan described in BMP 5.2, the Town of Stratford will prioritize those areas for the DCIA retrofit program under minimum control measure 6 – Pollution Prevention/Good Housekeeping.

Post-construction stormwater management schedule

BMP	Lead department /individual	Month/year of implementation	Measurable goal
5.1 Establish or update legal authority and guidelines regarding LID and runoff reduction in site development planning	Town Attorney (Chris Hodgson)	July 1, 2021	<ul style="list-style-type: none"> • Incorporation of LID in to land use regulatory framework
5.2 Enforce LID/runoff reduction requirements for development and redevelopment projects	Engineering (John Casey) Zoning (Jay Habansky)	July 1, 2019	<ul style="list-style-type: none"> • Inspect developments for LID/runoff compliance

5.3 Implement long-term maintenance plan for stormwater basins and treatment structures

Highways
(Thomas Albert)

July 1, 2019

- Creation of maintenance plan document

5.4 Complete calculations for DCIA contributing to each outfall

Engineering
(John Casey)

July 1, 2018 to
July 1, 2020

- 2018: coordinate effort with MetroCOG
- 2019: compile data
- 2020: complete mapping

5.5 Address post-construction issues in areas with pollutants of concern

Zoning
(Jay Habansky)
Conservation
(Tina Senft-Batoh)

July 1, 2019

- Regulations and reporting procedures in place to ensure initial and long-term compliance

(6) Pollution Prevention / Good Housekeeping

This minimum control measure outlines a program to mitigate the impact of town operations and maintenance on town owned and/or operated properties, and the MS4 itself, to water quality.

Goal:

Prevent or reduce pollutant runoff as a result of municipal operations.

The Town of Stratford will implement an operations and maintenance program to prevent or reduce pollutant runoff from town facilities and protect water quality.

6.1 Develop and implement formal employee training program

The Town of Stratford will establish its MS4 training program for town employees to increase awareness of water quality issues. Training will include:

- Standard operating procedures consistent with the MS4 general permit;
- General goals and objectives of this Stormwater Management Plan;
- Identification and reporting of illicit discharges and improper disposal; and
- Spill response protocols and responsibilities.

These trainings may also include regional or statewide trainings coordinated by UConn CLEAR or others, as such programs are made available.

The training program will be administered by the Town's Conservation Administrator.

6.2 Implement MS4 property and operations maintenance

Town-owned or town-operated properties, parks, and other facilities that are the legal responsibility of the Town will be maintained so as to minimize the discharge of pollutants to its MS4. Such maintenance will include, but not be limited to:

(j) Parks and open space

The Town of Stratford will optimize the application of fertilizers by municipal employees, institutional staff, or private contractors on lands and easements for which it is responsible for maintenance. Optimization practices considered may include:

- conducting soil testing and analysis to determine soil phosphorus levels,
- the reduction or elimination of fertilizers,
- reduction of fertilizer usage by adhering to the manufacturers' instructions,
- use of alternative fertilizers forms (i.e. products with reduced, slow-releasing, or insoluble phosphorus compositions),
- proper storage and application practices (i.e. avoid impervious surfaces),
- application schedule (i.e. appropriate season or month) and timing (i.e. coordinated with climatic conditions to minimize runoff potential);

- standard operating practices for the handling, storage, application, and disposal of pesticides and herbicides in compliance with applicable state and federal laws;
- evaluating reduced mowing frequencies and use of alternative landscaping materials like drought resistant and native plantings;
- establish procedures for management of trash containers at parks (scheduled cleanings; sufficient number).

The Town of Stratford will establish practices for the proper disposal of grass clippings and leaves at town-owned lands. Clippings shall be composted or otherwise appropriately disposed. Clippings will not enter the MS4 system or waters of the state.

(ii) Pet waste management

The Town of Stratford will identify locations where inappropriate pet waste management practices are immediately apparent and pose a threat to receiving water quality due to proximity and potential for direct conveyance of waste to its storm system and waters. In such areas, Stratford will, implement targeted management efforts such as public education and enforcement (e.g. increased patrol for violators).

In town-owned recreational areas where dog walking is allowed, the Town will install educational signage, pet waste baggies, and disposal receptacles (or require carry-out). The Town of Stratford will document these efforts in its annual reports. The report will include information regarding the scope and extent of its education, compliance, and enforcement efforts (including the number of violations pursued and fines levied or other enforcement taken).

(iii) Waterfowl management

Stratford will identify lands where waterfowl congregate and feeding by the public occurs.

To raise awareness regarding water quality impacts, the Town will install signage or use other targeted techniques to educate the public about the detrimental impacts of feeding waterfowl (including the resulting feces deposition) and discourage such feeding practices.

The Town of Stratford will also implement practices that discourage the undesirable congregation of waterfowl in these areas, or otherwise isolate the direct drainage from these areas away from its storm system and waters.

(iv) Town buildings and facilities (i.e. schools under the jurisdiction of Stratford, town offices, police and fire stations, pools, parking garages and other town-owned or operated buildings or utilities)

Stratford will:

- evaluate the use, storage, and disposal of both petroleum and non-petroleum products and ensure, through employee training, that those responsible for handling these products know proper procedures;
- ensure that Spill Prevention Plans are in place, if applicable, and coordinate with the fire department as necessary;
- develop management procedures for dumpsters and other waste management equipment;
- sweep parking lots and keep areas surrounding the facilities clean to minimize runoff of pollutants;
- ensure that all interior building floor drains are not connected to the MS4 and are appropriately permitted.

(v) Vehicles and Equipment

Stratford will:

- establish procedures for the storage of town-owned or -operated vehicles;
- require vehicles with fluid leaks to be stored indoors or in contained areas until repaired;

- evaluate fueling areas owned by the town and used by town-owned or -operated vehicles and if possible, place fueling areas under cover in order to minimize exposure;
- establish procedures to ensure that vehicle wash waters are not discharged to the municipal storm sewer system or to surface waters;
- ensure any interior floor drains are appropriately permitted.

(vi) Leaf Management

The Town of Stratford will establish and implement procedures to minimize or prevent the deposition of leaves in catch basins, streets, parking lots, driveways, sidewalks or other paved surfaces that discharge to the MS4. Such procedures shall also apply to leaves collected by the Town.

6.3 Implement coordination with interconnected MS4s

The Town of Stratford will coordinate with operators of interconnected MS4s (such as neighboring municipalities, institutions and DOT) regarding the contribution of potential pollutants from the storm sewer systems, contributing land use areas and stormwater control measures in the respective MS4s. This same coordination shall be conducted regarding operation and maintenance procedures utilized in the respective systems.

6.4 Develop and implement a program to control other sources of pollutants to the MS4

The Town of Stratford will develop and implement a program to control the contribution of pollutants to its MS4 from commercial, industrial, municipal, institutional or other facilities, not otherwise authorized by a CT DEEP stormwater permit.

6.5 Evaluate additional measures for discharges to impaired waters (with or without a TMDL)

(i) Waters for which **Nitrogen** or **Phosphorus** is a Stormwater Pollutant of Concern:

On Town of Stratford-owned or -operated lands, the town will implement a turf management practices and procedures policy which includes, but is not limited to, procedures for proper fertilizer application and the planting of native plant materials to lessen the amount of turf area requiring mowing and the application of chemicals. Each Annual Report will discuss the actions taken to implement this policy with an estimate of fertilizer and turf reduction.

(ii) For waters for which **Bacteria** is a Stormwater Pollutant of Concern:

On Town of Stratford-owned or -operated lands with a high potential to contribute bacteria (such as dog parks, parks with open water, sites with failing septic systems), the town will develop, fund, implement, and prioritize a retrofit or source management program to correct the problem(s) within a specific timeframe. Each Annual Report will identify problem areas for which a retrofit or source management program were developed, the location of the closest outfall monitored in accordance with Section 6(i), the cost of such retrofit or program, and the anticipated pollutant reduction. On town-owned or -operated lands, prohibit the feeding of geese or waterfowl and implement a program to manage geese and waterfowl populations. Each Annual Report will discuss the actions taken to implement this program.

6.6 Track projects that disconnect DCIA

The Town of Stratford will annually track the total acreage of Directly Connected Impervious Area (DCIA) that is disconnected from the MS4 as a result of redevelopment or retrofit projects within the town. For each retrofit/redevelopment project, the Town will document the amount of existing DCIA that is disconnected. The total amount of disconnected DCIA will be reported each year in the Annual Report. Starting on July 1, 2021, the town's goal will be to reduce 1% of its total DCIA acreage per year to the maximum extent possible. Stratford will provide updates on this goal in its annual report. The town will also incorporate all DCIA disconnections which occurred in the town since July 1, 2012 towards meeting this goal.

6.7 Develop and implement an infrastructure repair, rehabilitation and retrofit program

The Town of Stratford will begin program to identify MS4 structures to repair, rehabilitate, or upgrade to reduce or eliminate the discharge of pollutants into water bodies. This program will be responsive to new information on outfalls discharging pollutants to impaired waters identified via inspections, or observations made during outfall mapping under the IDDE section of this plan.

6.8 Develop and implement plan to identify and prioritize retrofit projects

The Town of Stratford will develop a Retrofit Project Plan to identify and prioritize potential DCIA disconnection projects. Because the entire town is considered urbanized area, projects on sites where DCIA > 11%, or where stormwater discharges to impaired waters, will be prioritized. The Town will include in its annual report for the third year of the permit (2020-2021) its identification and prioritization process, a rationale for the selection of projects to be implemented, and the total acres of DCIA to be disconnected upon implementation. The implementation of projects in this plan will begin by June 30, 2022.

6.9 Develop and implement street sweeping program

The Town of Stratford will continue to update its program for regular inspection and maintenance of town-owned or -operated streets, parking areas and other MS4 infrastructure.

The Town will modify procedures for sweeping town-owned or operated streets and parking lots as required under the terms of the 2017 MS4 General Permit. All streets and parking lots within the MS4 Priority Areas will be inspected, swept and/or cleaned at least once per year (if necessary) in the spring following the cessation of winter maintenance activities (i.e. sanding, deicing, etc.). The procedures shall also include more frequent inspections, cleaning and/or sweeping of targeted areas determined by the Town of Stratford to have increased pollutant potential based on the presence of active construction activity or other potential pollutant sources. The Town will identify such potential pollutant sources based upon surface inspections, catch basin cleaning or inspection results, land use, winter road deicing and/or sand application, impaired or TMDL waters or other relevant factors as determined by the Town. If wet dust suppression is conducted, the use of water will be minimized such that a discharge of excess water to surface waters and/or the storm

sewer system does not occur.

For streets and parking lots outside the MS4 Priority Areas, including any rural uncurbed streets and parking lots with no catch basins, the Town of Stratford will either meet the minimum frequencies above, or develop and implement an inspection, documentation and targeted sweeping and/or cleaning plan for those areas by June 30, 2018 and submit such plan with its year one Annual Report. For new and redeveloped municipal parking lots, the Town will evaluate options for reducing stormwater runoff to surface waters and/or the storm sewer system by the installing pervious pavements and/or other measures to promote sheet flow of stormwater.

- a. The Town of Stratford will ensure the proper disposal of street sweepings in accordance with DEEP policies, guidance and regulations. Sweepings shall not be discharged back into the storm drain system and/or surface waters.
- b. The Town of Stratford will document results of its sweeping program in its annual reports including: a summary of inspection results, curb miles swept, dates of cleaning, volume or mass of material collected, and method(s) of reuse or disposal. Stratford will also include documentation of any alternate sweeping plan for rural uncurbed streets and any runoff reduction measures implemented.

6.10 Develop and implement catch basin cleaning program

The Town of Stratford will continue to conduct routine cleaning of all catch basins and track catch basin inspection observations. Utilizing information compiled through its inventory of catch basins, operational staff, and public complaints, the town will optimize routine cleaning frequencies for particular structures or catchment areas as follows to maintain acceptable sediment removal efficiencies:

- a. Inspect all town-owned catch basins within MS4 Priority Areas at least once by June 30, 2020. As the town is fully urbanized, every town-owned catch basin is located within an MS4 Priority Area and will require inspection.
- b. Prioritize inspection and maintenance for Town of Stratford-owned catch basins located near impaired waters and construction activities (roadway construction, residential, commercial, or industrial development or redevelopment). The town will clean catch basins in such areas more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings.
- c. Establish a schedule such that the frequency of routine cleaning will ensure that no catch basin at any time will be more than fifty (50) percent full. A catch basin sump is more than 50 percent full if the contents within the sump exceed one half the distance between the bottom interior of the catch basin to the invert of the deepest outlet of the catch basin.
- d. If a catch basin sump is more than fifty (50) percent full during two consecutive routine inspections/cleaning events, the town will document that finding, investigate the contributing drainage area for sources of excessive sediment loading, and to the maximum extent practicable, abate contributing sources. The Town of Stratford will describe any actions taken in its Annual Report.
- e. The Town of Stratford will detail its plan for optimizing catch basin cleaning, inspection plans, and its schedule for gathering information to develop the optimization plan in its first annual report. Documentation shall include metrics and other information used to reach the determination that the established plan for cleaning and maintenance is optimal for the MS4. The Town will keep a log of catch basins cleaned or inspected.
- f. The Town of Stratford will report in each Annual Report the total number of catch basins, number inspected, number cleaned, the total volume or mass of material removed from all catch basins and, if

practicable, the volume or mass of material removed from each catch basin draining to water quality limited waters.

6.11 Develop and implement snow management practices

(i) Deicing Material Management

The Town of Stratford will assess and modify standard operating practices for the use, handling, storage, application, and disposal of deicing products such as salt and sand to minimize exposure to stormwater; consider means to minimize the use and optimize the application of chloride-based or other salts or deicing product (while maintaining public safety) and consider opportunities for use of alternative materials; for any exterior containers of liquid deicing materials installed after July 1, 2017, the Town will provide secondary containment of at least 110% of the largest container or 10% of the total volume of all containers, whichever is larger, without overflow from the containment area.

(ii) Snow and Ice Control Practices

The Town of Stratford will refine its standard operating practices regarding its snow and ice control to minimize the discharge of sand, anti-icing or de-icing chemicals and other pollutants (while maintaining public safety).

The Town will establish goals for the optimization of sand and/or chemical application rates through the use, where practicable, of automated application equipment (e.g. zero-velocity spreaders), anti-icing and pre-wetting techniques, implementation of pavement management systems, and alternate chemicals.

The Town will maintain records of the application of sand, anti-icing and/or de-icing chemicals to document the reduction of chemicals to meet established goals.

The Town will ensure the proper training for deicing applications for municipal employees, institutional staff, or private contractors on lands and easements for which it is responsible for maintenance.

The Town will manage and dispose of snow accumulations in accordance with DEEP's Best Management Practices for Disposal of Snow Accumulations from Roadways and Parking Lots, revised 2/4/11 and as amended (see link at: www.ct.gov/deep/stormwater).

In its Annual Report, The Town of Stratford will document results of its snow removal program including, at a minimum: the type of staff training conducted on application methods and equipment, type(s) of deicing materials used; lane-miles treated; total amount of each deicing material used; type(s) of deicing equipment used; any changes in deicing practices (and the reasons for the change); and snow disposal methods.

Pollution prevention/good housekeeping schedule

BMP	Lead department / individual	Month / year of implementation	Measurable goal
6.1 Develop/implement formal employee training program	Conservation (Tina Senft-Batoh)	July 1, 2019 and annually through life of permit	• Training conducted

6.2 Implement MS4 property and operations maintenance	Public Works (Maurice McCarthy)	July 1, 2017 and through the life of the permit	<ul style="list-style-type: none"> • Modification of fertilizer use, management of leaves and grass clippings, management of deicing materials, vehicle maintenance procedures, management of town lots
6.3 Implement coordination with interconnected MS4s	Conservation (Tina Senft-Batoh) Engineering (John Casey) Zoning (Jay Habansky)	July 1, 2021	<ul style="list-style-type: none"> • Meeting with operators of interconnected MS4s and coordinating efforts to achieve BMPs
6.4 Develop/implement program to control other sources of pollutants to MS4	Public Works (Maurice McCarthy)	July 1, 2021	<ul style="list-style-type: none"> • Develop/implement program
6.5 Evaluate additional measures for discharges to impaired waters	Public Works (Maurice McCarthy) Zoning (Jay Habansky)	July 1, 2019	<ul style="list-style-type: none"> • Report on additional measure being undertaken
6.6 Track projects that disconnect DCIA	Zoning (Jay Habansky) Engineering (John Casey)	July 1, 2017	<ul style="list-style-type: none"> • Continuously maintained spreadsheet of disconnect projects
6.7 Develop/implement infrastructure repair/rehab program	Highways (Thomas Albert) Engineering (John Casey)	July 1, 2020	<ul style="list-style-type: none"> • Develop/implement program
6.8 Develop/implement plan to identify/prioritize retrofit projects	Engineering (John Casey) Conservation (Tina Senft-Batoh)	July 1, 2020 to July 1, 2022	<ul style="list-style-type: none"> • 2020: Develop retrofit plan • 2022: Implement retrofit projects
6.9 Assess/modify street sweeping program	Highways (Thomas Albert)	July 1, 2018	<ul style="list-style-type: none"> • Modify program to comply with MS4 General Permit
6.10 Assess/modify catch basin cleaning program	Highways (Thomas Albert)	July 1, 2020	<ul style="list-style-type: none"> • Inspect all town catch basins by 2020
6.11 Assess/modify snow management practices	Highways (Thomas Albert)	July 1, 2019	<ul style="list-style-type: none"> • Modify program to comply with MS4 General Permit

Outfall Monitoring

Town of Stratford will monitor and investigate all MS4 outfalls that discharge to impaired waterbodies by the end of the permit term. Using the outfall inventory developed under the IDDE minimum control measure, the town will identify which outfalls discharge to impaired waters and screen them for the specific impairments.

Once half of all outfalls discharging to impaired waterbodies have been screened, the 6 outfalls contributing the highest level of pollutants will be identified and screened on an annual basis.

Based on the screening results, the Town of Stratford will investigate the drainage areas of outfalls that are contributing to the impairment. The investigations may consider land use or development patterns, business or commercial activities, industrial activities, DCIA, natural contributors, MS4 maintenance issues, residential activities, or anything else potentially contributing to the source of the impairment.

Based on results of the drainage area investigations, the Town of Stratford will implement measures to address sources of the impairments including the specific impaired waters provisions described within the permit control measures.

Monitoring Requirements

BMP	Lead department /individual	Month/year of implementation	Measurable goal
Outfall Screening	Public Works (Maurice McCarthy)	Throughout life of permit	<ul style="list-style-type: none"> • Report on screened outfalls
Inventory and Mapping of Discharges to Impaired Waters	Engineering (John Casey)	July 1, 2020	<ul style="list-style-type: none"> • Completion of map layer
Follow up investigations of drainage areas	Conservation (Tina Senft-Batoh)	Throughout life of permit	<ul style="list-style-type: none"> • Report of investigations
Annual monitoring of priority outfalls	Public Works (Maurice McCarthy)	When half of all outfalls discharging to impaired waters have been screened	<ul style="list-style-type: none"> • Monitor

Plan Amendments

The Town of Stratford will amend the SMP whenever:

- (1) there is a change which has the potential to cause pollution of the waters of the state; or
- (2) the actions required by the Plan fail to prevent pollution of the waters of the state or fail to otherwise comply with any other provision of this general permit; or
- (3) the Commissioner requests modification of the Plan.

Compliance with Relevant Acts

Any projects implemented in accordance with the Best Management Practices identified herein will comply with Connecticut's Coastal Management Act (CCMA), sections 22a-90 through 22a-112 of the Connecticut General Statutes (CGS) as amended, and with the State Endangered Species Act (CGS Section 26-310(a)).

Stormwater Management Plan Signatures

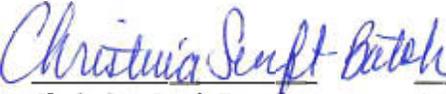
"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."


Chris Tymniak

Chief Administrative Officer
Title

March 31, 2017

Date


Christina Senft-Batoh
Principal plan preparer

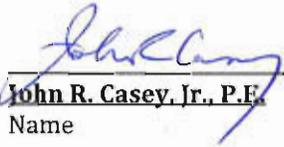
Conservation Administrator
Title

March 31, 2017

Date

Stormwater Management Plan Engineering Certification

"I hereby certify that I am making this certification in connection with a registration under the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems, submitted to the Commissioner by the Town of Stratford for an activity located at or within the Town of Stratford and that all terms and conditions of the general permit are being met for all discharges which have been created, initiated or maintained and such activity is eligible for authorization under such permit. I further certify that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify that I have made an affirmative determination in accordance with Section 3(b)(8)(B) of this general permit. I understand that the registration filed in connection with such general permit is submitted in accordance with and shall comply with the requirements of Section 22a-430b of Connecticut General Statutes, as amended by Public Act 12-172. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."



John R. Casey, Jr., P.E.
Name

Town Engineer
Title

Town of Stratford
Company

March 31, 2017
Date