# **STORMWATER MANAGEMENT PLAN** Town of West Hartford, Connecticut Prepared: July 2017 Effective Date: July 1, 2017 Prepared By

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# List of Abbreviations, Acronyms and Initialisms

BMPs - best management practices

ConnDOT – Connecticut Department of Transportation

CT - Connecticut

CT DEEP - Connecticut Department of Energy and Environmental Protection

DCIA – directly connected impervious area

DPW - department of public works

ID – identification number

USEPA – United States Environmental Protection Agency

IDDE - illicit discharge detection and elimination

LID - low-impact development

MCM – minimum control measure

MS4 – municipal separate storm sewer system

P&Z - planning and zoning

UA - urbanized area

UCONN NEMO - University of Connecticut Nonpoint Education for Municipal Officials

POC – pollutant of concern

SMP – stormwater management plan

SSO – sanitary sewer overflow

TMDL – total maximum daily load



# Stormwater Management Plan

# Town of West Hartford, Connecticut

## Section I: Introduction

This section includes general information on the Town of West Hartford as well as background information on Municipal Separate Storm Sewer System (MS4) permitting. Additionally, contact information, other nearby MS4s, and a summary of the required minimum control measures (MCMs) is presented.

#### **I.1 Town of West Hartford Background**

The Town of West Hartford (Town), estimated population 63,288 according to the *United States Census Bureau 2015 Population Estimates*, resides in Hartford County in the Central portion of the State of Connecticut. The Town covers approximately 22.3 square miles and is located to the west of the state capital.

Bordering town and cities include Newington, Farmington, Avon, Bloomfield, and Hartford. The major roadways which serve the Town include Route 44 and Interstate 84.

#### **I.2 Regulatory Update**

The Connecticut Department of Energy and Environmental Protection (CT DEEP) released the new Small MS4 General Permit on January 20, 2016 with an effective date of July 1, 2017. This document meets the permit requirement for each small MS4 permittee to submit a Stormwater Management Plan (SMP) by April 1, 2017. This new permit expands on the requirements specified in the Town's current MS4 permit that was made effective in January 2004. Specific updates to each of the six MCMs and wet weather monitoring are described in this SMP.

#### **I.3 Permit Registration Requirements**

The following summarizes critical dates and submittal requirements in the new permit.

- The permit is effective from July 1, 2017 to June 30, 2022.
- On April 1, 2017, the SMP, registration form, and electronic copy are due to CT DEEP.
- The SMP will be posted for public review and comment by April 1, 2017. Full development and implementation of the SMP is required within five years, specifically by June 30, 2022.
- Annual reports are due to CT DEEP on April 1st of each year. On January 31st, a draft of each Annual report submission will be made available for public review and comment. After review and finalization, the report will be submitted to CT DEEP and made available to the public.



#### I.4 Area Subject to Plan

The plan will implement designated MCMs throughout the boundaries of the town unless otherwise noted in a MCM in the following sections.

#### 1.5 Contact Information

Duane J. Martin, P.E.
Town Engineer
Town of West Hartford
Department of Community Development:
Engineering Division
50 South Main Street, Room 204
West Hartford CT 06107
t 860.561.7539
f 860.561.7551
DuaneM@WestHartfordCT.gov

John Phillips Director of Public Works t 860.561.8101 JohnP@WestHartfordCT.gov

Todd Dumais
Town Planner
t 860.561.7556
Todd.Dumais@WestHartfordCT.gov

Brian Pudlik Zoning Enforcement Officer t 860.561.7553 Brian.Pudlik@WestHartfordCT.gov

Mark McGovern
Director of Community Development
t 860.561.7535
Mark.McGovern@WestHartfordCT.gov

Renee McCue Public Relations Specialist t 860.561.7521 Renee@WestHartfordCT.gov

Kimberly Boneham
Deputy Corporation Counsel
t 860.561.7420
KimberlyB@WestHartfordCT.gov

#### **I.6 Water Quality Summary**

The Town of West Hartford lies within 19 local drainage basins that can be seen in **Table 1**. Most of the drainage basins flow to the Major water bodies in the Town. These main surface water bodies include North Branch Park River, Piper Brook, South Branch Park River, and Trout Brook. These water bodies generally drain to the Connecticut River. West Hartford is an inland municipality, and does not have direct discharge of stormwater to ocean water bodies.



Table 1: Surface Water Quality Classifications

Drainage Basin Number	Sub Regional Basin Name	Surface Water Body & Classification	Impaired per Water Quality Standards
4300-29	Farmington River	None	N/A
4300-30	Farmington River	Ely Pond -N/A	Not Assessed
4400-01	Park River	South Branch Park River - B	Yes
4401-00	Bass Brook	None	N/A
4401-02	Bass Brook	None	N/A
4402-00	Piper Brook	Piper Brook – A, B	Yes
4402-01	Piper Brook	None	N/A
4403-00	Trout Brook	Beachland Park Pond – N/A  McGovern Pond – N/A  Scarletts Mill Dam – N/A  Trout Brook - A  Williams Pond – N/A  Wood Pond – N/A  Woodridge Lake – N/A	Not Assessed Not Assessed Not Assessed Yes Not Assessed Not Assessed Not Assessed
4403-02	Trout Brook	West Hartford Reservoir No. 3 - AA	No
4403-03	Trout Brook	Dyke Pond - AA West Hartford Reservoir No. 2 - AA West Hartford Reservoir No. 5 - AA	No No No
4403-04	Trout Brook	Sunset Farms Pond – N/A West Hartford Reservoir No. 1 - A	Not Assessed No
4403-05	Trout Brook	Bayberry Lane Pond – N/A Standish Pond – N/A Robotham Pond – N/A	Not Assessed Not Assessed Not Assessed
4403-06	Trout Brook	Hunters Pond – N/A Orchard Road Pond -N/A Steinman Pond – N/A	Not Assessed Not Assessed Not Assessed
4403-07	Trout Brook	South Branch Trout Brook - A	No
4404-00	North Branch Park River	Elizabeth Park Pond – N/A North Branch Park River - A	Not Assessed Yes
4404-04	North Branch Park River	Brainard Pond No. 1 - N/A Brainard Pond No. 2 - N/A Ely Pond – N/A Hartford Reservoir No. 6 - AA Lakeview Lake - N/A Tumble Brook - A Welles Pond - AA	Not Assessed Not Assessed Not Assessed No Not Assessed No No
4404-05	North Branch Park River	None	N/A
4404-07	North Branch Park River	None	N/A
4404-11	North Branch Park River	Hartford Country Club Pond -N/A	Not Assessed



From the 2014 State of Connecticut Integrated Water Quality Report, **Table 2** summarizes water bodies classified as "impaired" in the Town of West Hartford.

Table 2: Impaired Waterbodies in the Town of West Hartford

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Waterbody	Water	Water	Impaired	Pollutant	Cause/
ID	Segment	Segment	Use		Potential
	Description	Length (mi)			Source
CT4404-00_02	North Branch Park	1.2	Habitat for	Cause Unknown	Potential sources include industrial point
	River-02		Fish, Other		source discharges, illicit discharge,
River			Aquatic	Escherichia coli	remediation sites, groundwater
			Life		
			and		Potential sources include permitted and
			Wildlife		nonpermitted stormwater, illicit discharges,
					CSOs/SSOs, insufficient septic systems,
			Recreation		nuisance wildlife/pets
CT4403-00_03	Trout Brook-03	5.8	Habitat for	Cause Unknown	Potential sources industrial point source
			Fish, Other		discharges and illicit discharges
River			Aquatic	Physical	
			Life	substrate habitat	Channelization
			and	Alterations	
			Wildlife		
CT4403-00_01	Trout Brook-01	0.9	Habitat for	Cause Unknown	Potential sources include industrial point
C14403 00_01	Trout Brook of	0.5	Fish, Other	Caase Officiowii	source discharges, illicit discharges,
River			Aquatic	Physical	remediation sites, groundwater
			Life	substrate habitat	contamination
			and	alterations	
			Wildlife		Channelization
CT4403-00_02	Trout Brook-02	1.0	Habitat for	Cause Unknown	Point sources include industrial point
C14403 00_02	Trout Brook 02	1.0	Fish, Other	Caase Officiowii	source discharges
River			Aquatic	Physical	Source discinarges
			Life	substrate habitat	Channelization
			and	alterations	
			Wildlife		
CT4400 01 03	Couth Branch Book	0.5	Recreation	Cauco Halmanus	Channelization
CT4400-01_02	South Branch Park River-02	0.5	Habitat for Fish, Other	Cause Unknown	Chamenzation
River	MVCI-UZ		Aquatic	Physical	
			Life	substrate habitat	
			and	alterations	
			Wildlife		
CT4402-00_02	Piper Brook-02	1.0	Habitat for	Cause Unknown	Potential sources include industrial point
Birran			Fish, Other		source discharge, illicit discharge,
River			Aquatic Life		insufficient septic systems, remediation sites, groundwater
			and		Contamination
			Wildlife		Containination
			vviidille	l	

The CT DEEP has implemented studies of water bodies throughout the state in order to investigate specific pollutant contributions. In general, these waters were primarily screened for



pollutants of concerns: Bacteria, Nitrogen, Mercury and Phosphorus. The publishing of the specific waterbodies effected by these pollutants (and others) and recommended ways to reduce these loads are known as total maximum daily loads (TMDLs). The TMDLs associated with the Town of West Hartford are included in the **Table 3**.

Table 3 - TMDLs Applicable to Town of West Hartford Waterbodies

Name of TMDL	Pollutant	Waterbody
Statewide Bacteria TMDL	Bacteria	Park River / South Branch Park River
Statewide Bacteria TMDL	Bacteria	Piper Brook
Statewide Bacteria TMDL	Bacteria	Trout Brook
Statewide Bacteria TMDL	Bacteria	North Branch Park River
		Farmington River (02) / Minniskunk
Statewide Bacteria TMDL	Bacteria	Brook / Owens Brook / Russell Brook /
		Minister Brook
A TMDL Analysis to Achieve Water Quality Standards for	Nitrogon	Long Island Sound and Contributing
Dissolved Oxygen in Long Island Sound	Nitrogen	Watersheds
Northeast Regional Mercury TMDL	Mercury	All CT Inland Waters

Based on the DEEP Surface Water Classifications and established TMDLs, the South Branch Park River and Piper Brook were identified as the surface waters that should take highest priority in the Town's efforts to address stormwater impacts.

The following descriptions of water quality classifications are from the Connecticut Environmental Conditions On-line Maps and Geospatial Data for Planning, Management, Education and Research Complete Resource Guide.

#### Class AA

This is considered an inland water source of uniform good to excellent quality. These waters are very close to natural quality. Inland surface water with designated uses that include existing or proposed drinking water supply, fish and wildlife habitat, recreational use (may be restricted), agricultural and industrial supply.

#### Class A

This is considered an inland water source of uniform good to excellent quality. Inland 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

This is considered an inland surface water source that may be of good to excellent quality. Uses include fishing, swimming, and recreation, industrial supply, and agricultural use. These water generally have a healthy aquatic habitat, are generally rivers or large streams, and may have point source wastewater discharge.



#### 1.7 Stakeholders

The following list contains possible stakeholders which could play a role in this SMP by providing assistance to the permittee.

- Metropolitan District Commission (MDC)
- Greater Hartford Transit District (GHTD)
- Capital Region Council of Governments (CRCOG)
- Connecticut Department of Transportation and Connecticut Transit (ConnDOT)
- Woodridge Association

#### I.8 Interconnected MS4s

The following list contains other MS4 permittees which are hydraulically connected to the Town of West Hartford. The areas covered by these MS4s will not be covered under this SMP. The Town of West Hartford will coordinate implementation with these other MS4s to ensure compliance with the permit.

- ConnDOT is the permittee for all state highways located within the Town of West Hartford.
- Town of Avon, Connecticut
- Town of Bloomfield, Connecticut
- Town of Farmington, Connecticut
- City of Hartford, Connecticut
- Town of Newington, Connecticut
- University of Connecticut

#### **I.9 Yearly Schedule Definition**

Most permit requirements fall into a yearly schedule and measurable goals are identified in each Best Management Practice (BMP) as to what will be completed during that year. The "year" is not a calendar year, it begins on July 1 and ends on June 30. See **Table 4** for the dates for "year" described in this SMP. Annual reporting follows the calendar year.

Table 4 - Yearly Schedule Definition

Permit Year	Start Date	End Date		
Year 1	July 1, 2017	June 30, 2018		
Year 2	July 1, 2018	June 30, 2019		
Year 3	July 1, 2019	June 30, 2020		
Year 4	July 1, 2020	June 30, 2021		
Year 5	July 1, 2021	June 30, 2022		



#### **I.10 Minimum Control Measures**

Minimum compliance with the MS4 permit is accomplished by executing six MCMs and wet weather monitoring. Within each MCM, BMPs that fulfill the requirements of the permit and respective measures are used to meet the permit.

See **Table 5** for a summary of BMPs that the Town plans to develop and implement over the permit term and the department responsible for implementation of each BMP. These BMPs are discussed in detail in their respective MCM sections.

#### **I.11 Record Keeping**

The Town will maintain a centralized electronic file at the Engineering Department with all documents related to compliance with the MS4 Permit.



Table 5 - Best Management Practices Summary

Minimum Control Measure	Description of Best Management Practice	Responsible Department
	BMP 1-1 Implement public education program	Community Development, Planning & Zoning
Public Education and Outreach	BMP 1-2 Address education/outreach for pollutants of concern	Community Development, Planning & Zoning
Public Involvement/	BMP 2-1 Comply with public notice requirements for the Stormwater Management Plan and Annual Reports	Engineering
involvementy	BMP 3-1 Develop written IDDE program	Planning & Zoning, Public Works, Engineering
	BMP 3-2 Develop list and maps of all MS4 stormwater outfalls in urbanized and priority areas (with conveyance and structure mapping)	Engineering
Illicit Discharge	BMP 3-3 Develop citizen reporting program	Planning & Zoning, Public Works
Detection and Elimination (IDDE)	BMP 3-4 Establish legal authority to eliminate illicit discharges	Planning & Zoning, Corporate Council
	BMP 3-5 Develop record keeping system for IDDE tracking	Planning & Zoning
	BMP 3-6 Address IDDE in areas with pollutants of concern	Planning & Zoning, Engineering
	BMP 3-7 Outfall and interconnection dry weather screening and sampling	Engineering
	BMP 3-8 Sanitary Sewer Overflows (SSOs) inventory	Engineering
	BMP 4-1 Implement, upgrade (as necessary) and enforce land use regulations or other legal authority to meet requirements of MS4 general permit	Planning & Zoning
Construction Site	BMP 4-2 Develop/implement plan for interdepartmental coordination in site plan review and approval	Planning & Zoning
Stormwater Runoff Control	BMP 4-3 Review site plans for stormwater quality concerns	Planning & Zoning
Control	BMP 4-4 Conduct site inspections	Planning & Zoning
	BMP 4-5 Implement procedure to allow public comment on site development	Planning & Zoning
	BMP 4-6 Implement procedure to notify developers about DEEP construction	Planning & Zoning
	BMP 5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	Planning & Zoning
Post-Construction Stormwater in New	BMP 5-2 Enforce Low Impact Development (LID)/ runoff reduction requirements for development and redevelopment projects	Planning & Zoning, Engineering
Development or Redevelopment	BMP 5-3 Implement Long-term Maintenance plan for stormwater basins and treatment structures	Engineering, Public Works
	BMP 5-4 DCIA mapping	Engineering
	BMP 5-5 Address post-construction Issues in areas with pollutants of concern	Planning & Zoning
	BMP 6-1 Develop/implement formal employee training program	Public Works
	BMP 6-2 Implement MS4 property and operations maintenance	Public Works
	BMP 6-3 Implement coordination with interconnected MS4s	Engineering Planning & Zoning,
	BMP 6-4 Develop/implement program to control other sources of pollutants to the MS4	Engineering
Pollution	BMP 6-5 Evaluate additional measures for discharges to impaired waters	Planning & Zoning, Engineering
Prevention/ Good House Keeping	BMP 6-6 Track projects that disconnect DCIA	Planning & Zoning, Engineering
	BMP 6-7 Develop/implement infrastructure repair/rehab program	Engineering, Public Works
	BMP 6-8 Develop/implement plan to identify/prioritize retrofit projects	Planning & Zoning, Engineering
	BMP 6-9 Develop/implement street sweeping program	Public Works
	BMP 6-10 Develop/implement catch basin cleaning program	Public Works
	BMP 6-11 Develop/implement snow management practices	Public Works
Wet Weather	BMP S-1 Outfall screening	Engineering
Monitoring	BMP S-2 Inventory and mapping of discharges to impaired waters	Engineering
	BMP S-3 Follow-up investigations of drainage areas	Engineering
	BMP S-4 Annual monitoring of priority outfalls	Engineering
Annual Reporting	Compile data and prepare annual reports	Engineering



# Stormwater Management Plan

# Town of West Hartford, Connecticut

## Minimum Control Measure 1: Public Education and Outreach

This MCM outlines efforts to promote public awareness through outreach including the distribution of information on how pollutants in stormwater runoff effect general water quality. Raising awareness of stormwater runoff is the primary goal of this MCM, and in turn these efforts will encourage residents to use BMPs that will result in reduced pollutant loadings.

The following BMPs will be used to promote public education. In addition, all requirements of the 2016 CT DEEP Small MS4 permit are met by the practices below.

- BMP 1-1 Implement public education program
- BMP 1-2 Address education/outreach for pollutants of concern

These BMPs will form a comprehensive public education and outreach program that will provide awareness, public utilization, and in turn, aim to reduce pollutant loads from stormwater discharging to Town of West Hartford water bodies.



#### BMP 1-1 Implement public education program

#### Description

The permittee will develop and implement a public education program. At a minimum, the permittee will develop materials for distribution to the public which includes information reproduced from agencies like UCONN NEMO, CT DEEP, and USEPA. This information will also identify specific sources of pollutants of concern, impacts, and methods of reduction as outlined in the MCM summary.

The program will include distributing brochures and fact sheets through targeted mailings and posting informational brochures on the Town's website. The program will include details on the methods and frequency of information distribution. The final activities selected will be determined by the end of the first permit year. Until the program is finalized, the permittee will continue to distribute information developed from the 2004 MS4 permit.

Outreach included in the program will include at a minimum, information on:

- Pet waste management
- Application of fertilizers, herbicides, and pesticides
- Impervious cover
- Impacts of illicit discharge improper waste disposal

#### **Measurable Goals**

- 1. Develop a public education program and all materials selected under the program
- 2. Implement the program and distribute public education materials annually
- 3. Summarize the types, sources, number of, and methods by which materials were disseminated

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 1-1	Develop and implement public education Summarize data	Implement public education program Summarize data			

#### **Responsible Persons**

Director of Community Development, Public Relations Specialist, and Town Planner

#### **Assessment**

Meeting the goal and schedule set forth herein.



#### BMP 1-2 Address education/outreach for pollutants of concern

#### Description

Within the first year of the permit, the permittee will identify the applicable pollutants of concern by evaluating impaired waters as designated by the state and identified in the State of Connecticut Integrated Water Quality Report; total maximum daily load (TMDL) water quality implementation plans established pursuant to the Section 303 of the federal Clean Air Act applicable to the MS4; and other applicable information. Materials developed under BMP 1-1 will be targeted at the identified pollutants of concern, typically in CT the pollutants of concern are phosphorus, nitrogen, bacteria, and mercury.

#### **Measurable Goals**

1. Identify pollutants of concern and incorporate into materials under BMP 1-1

#### Schedule

ВМІ	Year 1	Year 2	Year 3	Year 4	Year 5
BMF 1-2	Identify pollutants of concern and incorporate into materials under BMP 1-1				

#### **Responsible Persons**

Director of Community Development, Public Relations Specialist, and Town Planner

#### **Assessment**

Meeting the goal and schedule set forth herein.



## **Minimum Control Measure 1: Summary Table**

BMP/Goal	Year 1	Year 2	Year 3	Year 4	Year 5				
BMP 1-1 Implement public education program	BMP 1-1 Implement public education program								
Develop public education program	Х								
Implement public education program	Х	Х	Х	Х	Х				
Summarize data		Х	Х	Х	Х				
BMP 1-2 Address education/outreach for pollutants of concern									
Identify pollutants of concern and incorporate into materials under BMP 1-1	Х								



# Stormwater Management Plan

# Town of West Hartford, Connecticut

## Minimum Control Measure 2: Public Involvement/ Participation

This MCM enables community members to become directly involved in the implementation and review of this SMP. Additionally, by developing a quality public participation program it allows for the fostering of public acceptance of the plan and idea exchange.

The following BMPs will be used to promote public involvement/participation. In addition, all requirements of the 2016 CT DEEP Small MS4 permit are met by the practices below.

 BMP 2-1 Comply with public notice requirements for the Stormwater Management Plan and Annual Reports

The overall goal of this program is to use community members as a vital resource in planning, implementing BMPs, and maintaining stormwater systems such that the community assumes some responsibility for the outcome of the permit implementation.



# BMP 2-1 Comply with public notice requirements for the Stormwater Management Plan and Annual Reports

#### Description

The permittee will post the SMP and annual reports to their website and will provide notification to the community that that documents are available for public comment. The notice will include the contact name (with phone number, address, and email) for who to send comments and the URL of the website where the SMP and annual reports are available. The public comment period will be a minimum of 30 days beginning no later than January 31st of each year.

#### **Measurable Goals**

- 1. Make SMP and annual reports publicly available
- 2. Distribute notice for public review and soliciting comments by January 31st each year

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 2-1	Issue public				
	notice for				
	feedback by Jan				
	31st.	31st.	31st.	31st.	31st.

#### **Responsible Persons**

**Town Engineer** 

#### **Assessment**

All comments made during the thirty-day comment period will be reviewed, responded to, and documented with the final versions of the SMP and annual reports. A review of the availability of documents will be performed annually.



# **Minimum Control Measure 2: Summary Table**

BMP/Goal	Year 1	Year 2	Year 3	Year 4	Year 5			
BMP 2-1 Comply with public notice requirements for the Stormwater Management Plan and Annual Reports								
Publish SMP and annual reports to website	Х	Х	Х	Х	Х			
Issue public notice soliciting comments	Х	Х	Х	Х	Х			



# Stormwater Management Plan

# Town of West Hartford, Connecticut

# Minimum Control Measure 3: Illicit Discharge Detection and Elimination (IDDE)

An illicit discharge is any unpermitted discharge to waters of the state that does not consist entirely of: stormwater, uncontaminated ground water, or other allowable non-stormwater discharges found in Section 3 (a)(2) of the 2016 CT DEEP Small MS4 permit.

The purpose of MCM 3 is to detect and eliminate illicit discharges to the MS4 stormwater system. The permittee develops a comprehensive program that will establish legal authority to the permittee to prohibit and eliminate illicit discharges; identify illicit discharge sources through screening, sampling, and other field investigations; and eliminate illicit sources through infrastructure modification and enforcement.

MCM 3 requirements apply to the MS4 "priority" areas, which are defined by the MS4 permit as areas that meet one or more of the following criteria: (1) urbanized areas based on census data; (2) catchment areas with DCIA greater than 11%; and/or (3) catchment areas that discharge into impaired waters. The majority of the Town of West Hartford will be a priority area because it is urbanized, the Town will evaluate the northwest portion of town near the reservoirs to determine the western boundary of the priority area.

The following BMPs will be used to implement and continue the MS4 IDDE requirements.

- BMP 3-1 Develop written IDDE program
- BMP 3-2 Develop list and maps of all MS4 stormwater outfalls in urbanized and priority areas (with conveyance and structure mapping)
- BMP 3-3 Develop citizen reporting program
- BMP 3-4 Establish legal authority to prohibit illicit discharges
- BMP 3-5 Develop record keeping system for IDDE tracking
- BMP 3-6 Address IDDE in areas with pollutants of concern
- BMP 3-7 Outfall and interconnection dry weather screening and sampling
- BMP 3-8 Sanitary sewer overflows (SSOs) inventory

The goal of this program is to eliminate illicit discharges to improve the quality of the receiving waters.



#### BMP 3-1 Develop written IDDE Program

#### Description

The permittee will develop a comprehensive written IDDE Program that outlines how to identify, mitigate, eliminate and control illicit discharges in a systematic way. The following key components will be included in the final IDDE program:

- Legal authority (BMP 3-4)
- Statement of IDDE program responsibilities
- Stormwater system mapping (BMP 3-2)
- Sanitary sewer overflows (SSOs) inventory (BMP 3-8)
- Assessment and priority ranking of catchments
- Outfall and interconnection screening and sampling procedures (BMP 3-7)
- Catchment investigation procedures
- Procedures for removal of illicit discharges
- Employee training
- Progress reporting

#### **Measurable Goals**

- 1. Complete written IDDE Program with implementation schedule
- 2. Follow detailed schedules and requirements in IDDE Program and related BMPs
- 3. Annual review of IDDE Program

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 3-1	Develop IDDE Program with implementation	Implement IDDE Program	Implement IDDE Program	Implement IDDE Program	Implement IDDE Program
	schedule	Program review	Program review	Program review	Program review

#### **Responsible Persons**

Town Planner, Town Engineer, and Director of Public Works

#### **Assessment**

The program performance will be reviewed and documented annually by the Engineering, Planning & Zoning, and Public Works Departments.



# BMP 3-2 Develop list and maps of all MS4 stormwater outfalls in urbanized and priority areas (with conveyance and structure mapping)

#### Description

Within 2 years of the effective date of the new permit, the permittee will develop a stormwater drainage map and spreadsheet or database (excel-compatible) that includes all stormwater outfalls, structures, piping, and other conveyances at a minimum scale 1"=2000' and a maximum scale of 1"=100' within the "priority areas". The following parameters will be included:

- Type, material, size, and location (latitude/longitude) of conveyance, outfall or channelized flow
- Name, water body ID, and surface water classification for the immediate surface waterbody
  or wetland that receives stormwater runoff or the nearest named waterbody as applicable
  or the nearest named waterbody to which the outfall eventually discharges
- Watershed name and sub regional drainage basin number
- Date of most recent outfall inspection, the condition, and indicators of illicit discharges

Within 3 years of the effective date of the new permit, the permittee will further develop the drainage system mapping to include mapping requirements included in the MS4 permit, Appendix B. Key additions will be:

- Interconnects with MS4s and other storm sewer systems
- Municipal-owned stormwater treatment structures or systems
- Catchment delineations for use in priority rankings
- Identification of waterbodies with impairments

Within 5 years of the effective date of the new permit, the permittee will complete mapping townwide.

The Town commenced mapping prior to the effective date of this permit and will aim to finish mapping prior to the deadline specified in the permit.

#### **Measurable Goals**

- 1. Develop stormwater drainage map and database
- 2. Update mapping at a minimum annually
- 3. Export the database into excel format for annual reports

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 3-2	Develop mapping and database for 50% of priority area Excel Summary	Develop mapping and database for 100% of priority area Excel Summary	Develop mapping and database with additional required info and for non- priority areas Excel Summary	Develop mapping for non-priority areas Update mapping and database; Excel Summary	Complete mapping for entire municipality. Update mapping and database; Excel Summary



#### **Responsible Persons**

Town Engineer

#### **Assessment**

Meeting the goals and schedule set forth herein.



#### BMP 3-3 Develop citizen reporting program

#### **Description**

The permittee will develop a citizen reporting program to receive reports from citizens of possible illicit discharges. The permittee will investigate all reports promptly and perform investigations and corrective actions as needed under other BMPs. The program will include clear instructions for the public describing how to submit an illicit discharge report.

All reports and follow up actions will be included in the annual report.

#### **Measurable Goals**

1. Develop citizen reporting program.

#### **Schedule**

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 3-3	Develop citizen reporting program, investigate citizen reports	Investigate citizen reports	Investigate citizen reports	Investigate citizen reports	Investigate citizen reports

#### **Responsible Persons**

Director of Public Works, Town Planner, and Zoning Enforcement Officer

#### **Assessment**

The program performance will be reviewed and documented annually by the Planning & Zoning Department.



#### BMP 3-4 Establish legal authority to eliminate illicit discharges

#### **Description**

The permittee will establish legal authority to prohibit all illicit discharges to the storm sewer system. Legal authority will also require for removal of illicit discharges; investigate and eliminate illicit discharges; control discharge of spills and prohibit dumping; enforce legal authority; and authorized fines, penalties, or recoup costs from anyone creating an illicit discharge or spilling or dumping. The permittee will establish authority within one year of the effective permit start date.

#### **Measurable Goals**

1. Establish legal authority

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 3-4	Establish legal authority	Enforce legal authority	Enforce legal authority	Enforce legal authority	Enforce legal authority

#### **Responsible Persons**

Deputy Corporation Counsel and Town Planner

#### **Assessment**

Meeting the goal and schedule set forth herein.



#### BMP 3-5 Develop record keeping system for IDDE tracking

#### **Description**

The permittee will develop a record keeping system for tracking of information pertinent to IDDE. The IDDE tracking system will be coordinated with the IDDE Program in BMP 3-1. The permittee will, upon identification, remove illicit discharges within 60 days. If 60 days is not feasible then the permittee will create a plan to eliminate the discharge no longer than 180 days from identification to the maximum extent practicable.

Information on potential illicit discharges from the following sources will be tracked:

- Citizen Reporting of potential illicit discharges (see BMP 3-3)
- Outfalls identified as potentially having illicit discharges during dry weather screening and sampling (see BMP 3-7)
- Sanitary Sewer Overflows (see BMP 3-8)
- Signs of illicit discharges identified by staff
- Signs of failing septic system will be report to the West Hartford-Bloomfield Health District

Information being tracked will include:

- Descriptions of the potential illicit discharge, location, date identified
- Actions taken to confirm whether an illicit discharge exists with dates
- Resolution of investigations
- Documentation of illicit discharge removal

#### **Measurable Goals**

1. Develop IDDE tracking system.

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 3-5	Develop IDDE tracking system	Track IDDE	Track IDDE	Track IDDE	Track IDDE
	Track IDDE				

#### **Responsible Persons**

Town Planner

#### **Assessment**

The program performance will be reviewed and documented annually by the Planning & Zoning Department.



#### BMP 3-6 Address IDDE in areas with pollutants of concern

#### Description

For MS4 discharges to impaired waters (with or without a TMDL), for which nitrogen, phosphorus, bacteria, or mercury are pollutants of concern, or waters which have pollution load reductions specified within a TMDL, the Town is required to meet criteria specified in the general permit related to: screening and monitoring; implementation of BMPs to meet Waste Load Allocation, Load Allocation or Water Quality Targets within TMDL; meet requirements for new discharges.

#### **Measurable Goals**

- 1. Review impaired water guidance and TMDLs
- 2. Prioritize illicit discharges in IDDE program (see BMP 3-1)
- 3. Screen for pollutants of concern (POC) during dry weather (see BMP 3-7)
- 4. Implement non-structural BMPs for POC: public education, targeted outreach to potential contributor; employee training (see related BMPs)
- 5. If necessary, implement structural BMPs to achieve Waste Load Allocation, Load Allocation or Water Quality Targets with in TMDL
- 6. For new discharges, the developer/contractor needs to meet stormwater regulations (see BMP 5-1)

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 3-6	Review impaired water guidance and TMDLs	Evaluate/track progress of BMPs for impaired waters	Evaluate/track progress of BMPs for impaired waters	Evaluate/track progress of BMPs for impaired waters	Evaluate/track progress of BMPs for impaired waters

#### **Responsible Persons**

Town Planner, Town Engineer

#### **Assessment**

Meeting the goals and schedule set forth herein.



# BMP 3-7 Outfall and interconnection dry weather screening and sampling Description

The permittee will develop and execute a written screening procedure for outfalls and interconnections. The goal of the program is to identify illicit connections to the drainage system. Items to be developed and acknowledged in the procedure are presented below:

- Dry weather screening and sampling will be performed in dry conditions, when no more than 0.1 inches of rain has occurred in the previous 24-hour period
- Dry weather flow will be analyzed at a minimum for ammonia, chlorine, conductivity, salinity, bacteria, surfactants, temperature, and pollutants of concern
- If no flow is observed, but evidence of dry weather flow exists, the location will be revisited within one week

The permittee will develop screening procedures within 1 year of the permit effective start date and implement such procedures 1 year and 3 months after the effective permit start date. Progress toward these goals will be documented in the annual report. All outfall screening will be completed by the end of the third permit year.

#### **Measurable Goals**

- 1. Develop outfall and interconnection screening procedure that are incorporated in the IDDE Program
- 2. Implement outfall and interconnection screening procedure

#### **Schedule**

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 3-7	Develop outfall screening procedure	Implement outfall screening procedure	Implement outfall screening procedure		

#### **Responsible Persons**

Town Engineer

#### **Assessment**

Meeting the goals and schedule set forth herein.



#### BMP 3-8 Sanitary Sewer Overflows (SSOs) Inventory

#### Description

The MDC currently tracks and reports all SSOs within the Town. To assist with the IDDE program, the Town will request from the MDC an audit of all known locations where SSOs have discharged in the past 5 years. Within a 120-day period of the permit start date the Town request the following characteristics from the MDC for each known SSO and provide the inventory to CT DEEP:

- Location of SSO
- SSO source location (surface water or directly into MS4 system)
- Date and time of SSO discharge
- Estimated volume of SSO discharge
- Description of SSO discharge
- Corrective measure planning
- Corrective measure implementation dates

The MDC will continue to be responsible for reporting all new SSOs to CT DEEP within 5 days of discovery, but the Town will keep an updated list of known SSO locations.

#### **Measurable Goals**

- 1. Develop existing SSO inventory
- 2. Update SSO inventory as new SSOs are reported by the MDC

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 3-8	SSO inventory within 120 days. Update SSO inventory	Update SSO inventory	Update SSO inventory	Update SSO inventory	Update SSO inventory

#### **Responsible Persons**

**Town Engineer** 

#### **Assessment**

The program performance will be reviewed and documented annually by the Engineering Department.



## **Minimum Control Measure 3: Summary Table**

BMP/Goal		Year 2	Year 3	Year 4	Year 5
BMP 3-1 Develop written IDDE program					
Develop IDDE program with implementation schedule	Х				
Implement IDDE program		Х	Х	Х	Х
Perform review of IDDE program		Х	Х	Х	Х
BMP 3-2 Develop list and maps of all MS4 stormwater outfalls in and structure mapping)	urbanized a	and priorit	y areas (w	vith conve	/ance
Develop mapping and database for 50% of priority area	Х				
Develop mapping and database for 100% of priority area		Х			
Develop mapping and database with additional required information			Х		
Develop mapping and database non-priority area			Х	Х	Х
Update mapping and database				Х	Х
Export database to excel summary	Х	Х	Х	Х	Х
BMP 3-3 Develop citizen reporting program	- 1	•	•	•	
Develop citizen reporting program	Х				
Investigate citizen reports	Х	Х	Х	Х	Х
BMP 3-4 Establish legal authority to eliminate illicit discharges	•				
Establish legal authority	Х				
Enforce legal authority		Х	Х	Х	Х
BMP 3-5 Develop record keeping system for IDDE tracking	1	•	•	•	
Develop IDDE tracking system	Х				
Track IDDE	Х	Х	Х	Х	Х
BMP 3-6 Address IDDE in areas with pollutants of concern	1	•	•	•	
Review impaired water guidance and TMDLs	Х				
Evaluate/track progress of BMPs for impaired waters		Х	Х	Х	Х
BMP 3-7 Outfall and interconnection dry weather screening and	sampling	ı	ı	ı	
Develop outfall screening procedure	Х				
Implement outfall screening procedure		Х	Х		
BMP 3-8 Sanitary Sewer Overflows (SSOs) Inventory	•	•	•	•	
Create SSO inventory within 120 days of permit effective date	Х				
Update SSO inventory	Х	Х	Х	Х	Х



# Stormwater Management Plan

# Town of West Hartford, Connecticut

# Minimum Control Measure 4: Construction Site Stormwater Runoff Control

The purpose of this measure is to effectively control stormwater runoff through the implementation and enforcement of Best Management Practices (BMPs) associated with land disturbance and development sites that are collectively equal to or greater than 1 acre of land.

The following BMPs will be used to control stormwater runoff at construction sites. In depth descriptions of how each BMP will be implemented are discussed within this section.

- BMP 4-1 Implement, upgrade (as necessary) and enforce land use regulations or other legal authority to meet requirements of MS4 general permit
- BMP 4-2 Develop/implement a plan for interdepartmental coordination in site plan review and approval
- BMP 4-3 Review site plans for stormwater quality concerns
- BMP 4-4 Conduct site inspections
- BMP 4-5 Implement procedure to allow public comment on site development
- BMP 4-6 Implement procedure to notify developers about DEEP construction stormwater permit

The overall goal of this program is to prevent stormwater runoff from construction sites from polluting nearby receiving waters.



# BMP 4-1 Implement, upgrade (as necessary) and enforce land use regulations or other legal authority to meet requirements of MS4 general permit

#### Description

The permittee will confirm legal authority to include the following items relating to construction site stormwater runoff:

- 1. Requirements for developers, construction site operators, and contractors to maintain consistency with current stormwater regulators and regulations (e.g., 2002 Guidelines for Soil Erosion and the Connecticut Stormwater Manual)
- 2. Authority to carry out inspection, surveillance, and monitoring procedures to maintain developer compliance with the permit and all established legal authority
- 3. Requirement for owner to comply with a long term maintenance plan
- 4. Requirement between permittee and other MS4s to coordinate agreements relating to the contribution of pollutants
- 5. Enforcement mechanisms

The permittee will confirm legal authority within two fiscal years after the permit start date, the fiscal year start date being July 1, 2017.

#### **Measurable Goals**

1. Update legal authority

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 4-1	Update legal authority	Update and enforce legal authority	Enforce legal authority	Enforce legal authority	Enforce legal authority

#### **Responsible Persons**

Town Planner and Zoning Enforcement Officer

#### **Assessment**

Meeting the goal and schedule set forth herein.



# BMP 4-2 Develop/implement plan for interdepartmental coordination in site plan review and approval

#### Description

The permittee will develop and implement an interdepartmental plan for jurisdiction and enforcement over construction permit requirements. This plan will be implemented on the effective date of the permit. Departments will meet at least annually to discuss plan and make changes if needed.

#### **Measurable Goals**

- 1. Develop interdepartmental coordination plan by July 1, 2017
- 2. Implement interdepartmental coordination plan

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
ВМР	Develop and	Implement	Implement	Implement	Implement
4-2	Implement	interdepartmental	interdepartmental	interdepartmental	interdepartmental
	interdepartmental	coordination plan	coordination plan	coordination plan	coordination plan
	coordination plan				

#### **Responsible Persons**

Town Planner

#### Assessment

The program performance will be reviewed and documented annually by the Planning and Zoning Department.



#### BMP 4-3 Review site plans for stormwater quality concerns

#### **Description**

The permittee will perform site plan reviews to minimize impacts to nearby water bodies by incorporating stormwater controls. Site plan reviews will be required for all development and redevelopment projects with more than one half acre of soil disturbance. This BMP will be implemented on the effective date of the permit.

#### **Measurable Goals**

1. Perform site plan reviews

#### **Schedule**

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 4-3	Perform site plan reviews				

#### **Responsible Persons**

Town Planner

#### **Assessment**

The program performance will be reviewed and documented annually by the Planning and Zoning Department.



#### **BMP 4-4** Conduct site inspections

#### Description

The permittee will conduct site inspections to enforce the requirements determined during the site plan reviews. These inspections will enforce the required stormwater controls during construction. This BMP will be implemented on July 1, 2017.

#### **Measurable Goals**

1. Perform site inspections

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 4-4	Perform site inspections				

#### **Responsible Persons**

Town Planner and Zoning Enforcement Officer

#### **Assessment**

The program performance will be reviewed and documented annually by the Planning and Zoning Department.



# BMP 4-5 Implement procedure to allow public comment on site development

#### Description

The permittee will develop and implement a procedure to receive and consider public comments for proposed and ongoing land developments. This BMP will be implemented on the effective date of the permit.

The permittee will post a list of development projects on the Town website with contact information for providing comments.

#### **Measurable Goals**

1. Implement procedure to receive public comments on site development

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 4-5	Develop and Implement procedure to receive public comments on site	Implement procedure to receive public comments on site development	Implement procedure to receive public comments on site development	Implement procedure to receive public comments on site development	Implement procedure to receive public comments on site development
	comments on site development		development	development	development

#### **Responsible Persons**

Town Planner

#### Assessment

The procedure performance will be reviewed and documented annually by the Planning and Zoning Department.



# BMP 4-6 Implement procedure to notify developers about DEEP construction stormwater permit

#### Description

The permittee will develop and implement a procedure to notify developers and contractors of specific requirements including a potential obligation to obtain authorization under the *CT DEEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities*. This permit is also known as the construction general permit and requires the developer or contractor to submit a Storm Water Pollution Control Plan. This BMP will be implemented on the effective date of the permit.

The permittee will update their permit application and include a note of the Town's website that developers may be required to obtain a DEEP construction stormwater permit.

#### **Measurable Goals**

1. Implement a procedure to notify developers of DEEP construction stormwater permit

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 4-6	Implement a procedure to notify developers of DEEP construction stormwater permit	Continue procedure to notify developers of DEEP construction stormwater permit	Continue procedure to notify developers of DEEP construction stormwater permit	Continue procedure to notify developers of DEEP construction stormwater permit	Continue procedure to notify developers of DEEP construction stormwater permit

#### **Responsible Persons**

Town Planner

#### **Assessment**

The procedure performance will be reviewed and documented annually by the Planning and Zoning Department.



## **Minimum Control Measure 4: Summary Table**

BMP/Goal	Year 1	Year 2	Year 3	Year 4	Year 5			
BMP 4-1 Implement, upgrade (as necessary) and enforce land use regulations or other legal authority to meet requirements of MS4 general permit								
Update Legal Authority	Х	Х						
Enforce Legal Authority		Х	Х	Х	Х			
BMP 4-2 Develop/implement plan for interdepartmental coordination	in site pl	an reviev	v and app	roval				
Develop interdepartmental coordination plan	Х							
Implement interdepartmental coordination plan	Х	Х	Х	Х	Х			
BMP 4-3 Review site plans for stormwater quality concerns		•	•	•				
Perform site plan reviews	Х	Х	Х	Х	Х			
BMP 4-4 Conduct site inspections								
Perform site inspections	Х	Х	Х	Х	Х			
BMP 4-5 Implement procedure to allow public comment on site devel	opment	•	•	•				
Develop procedure to receive public comments on site development	Х							
Implement procedure to receive public comments on site development	Х	Х	х	Х	х			
BMP 4-6 Implement procedure to notify developers about DEEP const	ruction st	tormwate	r permit					
Implement a procedure to notify developers of DEEP construction stormwater permit	Х							
Continue procedure to notify developers of DEEP construction stormwater permit	Х	Х	Х	Х	Х			



## Stormwater Management Plan

## Town of West Hartford, Connecticut

# Minimum Control Measure 5: Post-Construction Stormwater in New Development or Redevelopment

The purpose of this MCM is to outline a program to address stormwater runoff from new developments or redevelopment projects. Requirements of this MCM apply to sites with greater than one acre of soil disturbance except for DCIA calculations which apply for all projects.

The BMPs below will be used to control stormwater runoff at locations following construction, upon completion of construction activities. In depth descriptions of how each BMP will be implemented are discussed within this section.

- BMP 5-1 Establish and/or Update Legal Authority and Guidelines Regarding Low Impact Development (LID) and Runoff Reduction in Site Development Planning
- BMP 5-2 Enforce LID/Runoff Reduction Requirements for Development and Redevelopment Projects
- BMP 5-3 Implement Long-term Maintenance Plan for Stormwater Basins and Treatment Structures
- BMP 5-4 DCIA Mapping
- BMP 5-5 Address Post-Construction Issues in Areas with Pollutants of Concern

The overall goal of this program is to prevent stormwater runoff from new development and redevelopment sites from polluting nearby receiving waters.



# BMP 5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning

#### Description

The permittee will establish legal authority relative to developers and contractors using low impact development (LID), runoff practices, and runoff reduction standards that meet or exceed the Connecticut Stormwater Quality Manual to the maximum extent possible. Legal authority will include the following standards described in the MS4 General Permit:

- For redevelopment sites that are currently developed with DCIA ≥ 40%: retain on-site half the water quality volume; or
- For new development and redevelopment sites with <40% DCIA: retain on-site the water quality volume; or
- An alternate retention/treatment standard as outlined in the permit. If the runoff reduction cannot be met, the developer will need to submit a report outlining why the requirement cannot be met and may need to fund a project on another site that reduces site runoff.

The permittee will consider additional factors in establishing legal authority that protect watershed elements that manage impacts of stormwater on receiving waters. The permittee will identify, and where appropriate, reduce or eliminate existing local regulatory barriers that may limit implementation of LID and runoff reduction to the maximum extent possible. If the permittee cannot eliminate the barriers, the annual report will reflect, justify, and contain a revised schedule for implementation.

#### **Measurable Goals**

- 1. Evaluate current regulations to identify status of legal authority and which regulations require revisions
- 2. Develop programs, regulations, ordinances, etc. that provide legal authority to implement

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 5-1	Evaluate current regulations Develop regulations to establish legal authority	Develop regulations that establish legal authority and adopt the regulations	Develop regulations that establish legal authority and adopt the regulations	Develop regulations that establish legal authority and adopt the regulations	

#### **Responsible Persons**

Town Planner

#### **Assessment**



# BMP 5-2 Enforce low impact development (LID)/ runoff reduction requirements for development and redevelopment projects

#### Description

The permittee will implement the requirements in BMP 5-1 when legal authority is obtained by the end of Year 4. In Years 1-4, the permittee will enforce the current regulations.

The permittee will review developer/contractor calculations under BMP 4-3, plans, and as-builts for compliance with current regulations on stormwater management; inspect stormwater structures and measures during construction (adjust based on current regulations); obtain as-built certification (adjust based on current regulations) and track maintenance of stormwater measures (adjust based on current regulations).

#### **Measurable Goals**

- 1. Enforce current regulations
- 2. Issue notice to inform developers of regulation changes
- 3. Enforce new regulations

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 5-2	Enforce current regulations	Enforce current regulations	Enforce current regulations	Enforce current regulations	Enforce new regulations

#### **Responsible Persons**

Town Planner, Town Engineer, and Zoning Enforcement Officer

#### **Assessment**



# BMP 5-3 Implement long-term maintenance plan for stormwater basins and treatment structures

#### Description

Within 2 years of the effective date of this permit, the permittee will develop a long-term maintenance plan for stormwater structures and measures that are owned by the Town, or those for which the Town maintains an easement or legal authority over, and that fall within the "priority" areas (Urbanized Area, DCIA > 11%, or discharge to impaired waters).

The maintenance plan ensures the long-term effectiveness of retention ponds, detention ponds, swirl concentrators, oil/grit separations, water quality wetlands, water quality swales, and other stormwater measures. At a minimum, the Town will inspect all stormwater measures annually if they are found to have sediment or other pollutants (oils, leaves, litter, etc.) that take up more than 50% of design capacity, the stormwater measure will be cleaned to restore full solids capture design capacity.

Long-term maintenance of privately-owned stormwater structures or measures is enforced in BMP 5-2.

#### **Measurable Goals**

- 1. Develop long-term maintenance plan
- 2. Implement long-term maintenance plan

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 5-3	Develop long-term	Develop long-term	Implement	Implement	Implement
	maintenance plan	maintenance plan	long-term	long-term	long-term
			maintenance	maintenance	maintenance
			plan	plan	plan

#### **Responsible Persons**

Town Engineer and Director of Public Works

#### **Assessment**

The program performance will be reviewed and documented annually by the Department of Public Works.



#### BMP 5-4 DCIA Mapping

#### Description

The permittee will calculate the DCIA for each stormwater outfall catchment in the MS4 within three years of the effective date of the new permit. CT DEEP will provide DCIA mapping to use as the basis of this calculation. The MS4 will develop a methodology to create a baseline map that accurately identifies DCIA for each outfall catchment.

Key steps of the process are expected to include:

- Obtain DCIA mapping from CT DEEP and/or UCONN NEMO to use as a starting point. This is expected to be high-level mapping that can be refined by the MS4.
- Update DCIA delineations to account for actual field conditions, including LID measures
  that disconnect impervious areas from the storm drainage system. Field inspections and
  file reviews will likely be performed.

The calculation, methodologies, and assumptions will be presented in the initial annual report with updates in each successive report.

#### **Measurable Goals**

- 1. Develop methodology for DCIA calculation
- 2. Develop map with DCIA calculation for each stormwater catchment
- 3. Calculate DCIA annually to account for all development, redevelopment, or retrofit projects that add or remove DCIA from the MS4

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 5-4	Develop methodology for DCIA calculation	Begin calculating DCIA of each catchment	Finalize DCIA calculation of each catchment	Update DCIA calculation	Update DCIA calculation

#### **Responsible Persons**

**Town Engineer** 

#### **Assessment**



# BMP 5-5 Address post-construction issues in areas with pollutants of concern

#### Description

For development and re-development, consideration for pollutants of concern will be included in post-construction designs. During the review of developer/contractor plans, the permittee will identify if the project is within a stormwater catchment that discharges to impaired waters. If applicable, the Town will require the developer/contractor to implement the necessary non-structural and structural BMPs to meet MS4 permit requirements for discharges to impaired waters.

#### **Measurable Goals**

- 1. Identify projects in catchments that discharge to impaired waters in conjunction with BMP 5-2
- 2. Develop procedures that require the contractor to implement non-structural and structural BMPs

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 5-5	Identify projects				
	in catchments				
	that discharge to				
	impaired waters				

#### **Responsible Persons**

Town Planner

#### **Assessment**



## **Minimum Control Measure 5: Summary Table**

BMP/Goal	Year 1	Year 2	Year 3	Year 4	Year 5			
BMP 5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning  Evaluate current regulations X Develop regulations that establish legal authority and adopt the X X X X regulations  BMP 5-2 Enforce low impact development (LID)/ runoff reduction requirements for development and redevelopment projects								
Evaluate current regulations	Х							
	Х	Х	Х	Х				
BMP 5-2 Enforce low impact development (LID)/ runoff reduction re redevelopment projects	equirement	s for deve	lopment	and				
Enforce current regulations	Х	Х	Х	Х				
Enforce new regulations					Х			
BMP 5-3 Implement long-term maintenance plan for stormwater ba	sins and tre	eatment s	tructures					
Develop long-term maintenance plan	Х	Х						
Implement long-term maintenance plan			Х	Х	Х			
BMP 5-4 DCIA Mapping								
Develop methodology for DCIA calculation	Х							
Begin calculating DCIA of each catchment		Х						
Finalize DCIA calculation of each catchment			Х					
Update DCIA calculation				Х	Х			
BMP 5-5 Address post-construction issues in areas with pollutants of	f concern	•		•	•			
Identify projects in catchments that discharge to impaired waters	Х	Х	Х	Х	Х			



## Stormwater Management Plan

## Town of West Hartford, Connecticut

# Minimum Control Measure 6: Pollution Prevention/Good House Keeping

The purpose of this MCM is to promote efforts for an overall operations and maintenance program of the MS4.

The following Best Management Practices (BMPs) will be used to continue the pollution prevention/good housekeeping operation and maintenance measures of the previous MS4 permit. In depth descriptions of how each BMP will be implemented are discussed later in this section.

- BMP 6-1 Develop/implement formal employee training program
- BMP 6-2 Implement MS4 property and operations maintenance
- BMP 6-3 Implement coordination with interconnected MS4s
- BMP 6-4 Develop/implement program to control other sources of pollutants to the MS4
- BMP 6-5 Evaluate additional measures for discharges to impaired waters
- BMP 6-6 Track projects that reduce and disconnect DCIA
- BMP 6-7 Develop/implement infrastructure repair/rehab program
- BMP 6-8 Develop/implement plan to identify/prioritize retrofit projects
- BMP 6-9 Develop/implement street sweeping program
- BMP 6-10 Develop/implement catch basin cleaning program
- BMP 6-11 Develop/implement snow management practices

The overall goal of this MCM is to prevent and reduce pollutant runoff and protect water quality characteristics of receiving waters by maintain good housekeeping practices.



### BMP 6-1 Develop/implement formal employee training program

#### Description

The permittee will continue an employee training program with the following goals:

- Educate staff of water quality issues
- Integrate aspects and goals of the SMP into trainings including standard operating procedures with the MS4 permit, construction site runoff, IDDE, spill response, impaired waters and staff responsibility
- Work in conjunction with BMP 3-1 (IDDE Program) that also requires Employee Training

The training program will be a continuation of the training program required in the previous permit.

#### **Measurable Goals**

1. Perform annual training

#### **Schedule**

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 6-1	Perform employee				
	training	training	training	training	training

#### **Responsible Persons**

Director of Public Works

#### **Assessment**

The program performance will be reviewed and documented annually by the Department of Public Works.



#### BMP 6-2 Implement MS4 property and operations maintenance

#### **Description**

The permittee will develop or update maintenance procedures for Town owned or operated properties and equipment in order to mitigate pollutant loads on the MS4 and its receiving waters. Maintenance procedures to be implemented include:

- Parks and Open Space Maintenance with fertilizer application procedures
- Pet Waste Management
- Waterfowl Management
- Building and Facility Material Storage and Spill Prevention
- Vehicles and Equipment Maintenance
- Leaf Management The Town currently operates a curb-side collection of bagged leaves for up to 10 weeks during the fall. This program will be continued under this permit.

The annual reports will include documentation of the procedures in effect for each of the topics above.

#### **Measurable Goals**

- 1. Develop and evaluate maintenance procedures
- 2. Implement maintenance procedures

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 6-2	Develop, evaluate, and implement maintenance procedures	Implement maintenance procedures	Implement maintenance procedures	Implement maintenance procedures	Implement maintenance procedures

#### **Responsible Persons**

Director of Public Works

#### **Assessment**

The procedures' effectiveness will be reviewed and documented annually by the Department of Public Works.



### BMP 6-3 Implement coordination with interconnected MS4s

#### Description

The permittee will coordinate with interconnected MS4s regarding pollutant loadings, contributing areas, stormwater controls, and operation and maintenance procedures.

#### **Measurable Goals**

- 1. Identify all interconnected MS4s
- 2. Contact each interconnected MS4 to coordinate SMP goals

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 6-3	Identify and contact interconnected MS4s	Coordinate with interconnected MS4s			

#### **Responsible Persons**

Town Engineer

#### **Assessment**



# BMP 6-4 Develop/implement program to control other sources of pollutants to the MS4

#### Description

The permittee will develop and implement a program to restrict the discharge of pollutants from other sources such as commercial, industrial, municipal, institutional, or other facilities. This program shall meet the requirements of Connecticut General Statues Sections 22a-430 and 22a-430b.

#### **Measurable Goals**

1. Develop and implement pollutant source control program

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 6-4	Develop and implement pollutant source control program	Implement pollutant source control program	Implement pollutant source control program	Implement pollutant source control program	Implement pollutant source control program

#### **Responsible Persons**

Town Engineer and Town Planner

#### **Assessment**

The program performance will be reviewed and documented annually by the Engineering Department.



### BMP 6-5 Evaluate additional measures for discharges to impaired waters Description

For discharges to waters with Nitrogen as a pollutant of concern, the permittee will implement a turf management policy including procedures for fertilizer application and the use of native plants. The permittee will document the actions taken to enforce the policy and will include an estimate of the fertilizer and turf reduction.

For discharges to waters with Bacteria as a pollutant of concern, the permittee will develop, fund, implement, and prioritize a source management program to address bacteria concentrations in stormwater discharges from Town controlled lands. These lands include dog parks, parks with open water, and sites with septic systems. The permittee will also implement a program to prohibit the feeding of waterfowl and to manage the populations of waterfowl. The permittee will document all actions taken to reduce the loadings of bacteria to impaired waters.

#### **Measurable Goals**

- 1. Develop turf management policy and source management program
- 2. Implement turf management policy for discharges to Nitrogen or Phosphorus impaired waters
- 3. Implement source management program and waterfowl program for discharges to Bacteria impaired waters
- 4. In each annual report, document the actions taken to implement these programs and include an estimate of fertilizer and turf reduction

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 6-5	Develop and implement procedures for reducing discharges to impaired waters	Implement procedures for reducing discharges to impaired waters	Implement procedures for reducing discharges to impaired waters	Implement procedures for reducing discharges to impaired waters	Implement procedures for reducing discharges to impaired waters

#### **Responsible Persons**

Town Planner and Town Engineer

#### **Assessment**



### BMP 6-6 Track projects that disconnect DCIA

#### Description

The permittee will develop a system to track changes in DCIA as a result of retrofitting or redevelopment including those changes which can be tracked as far as 5 years prior to the effective permit start date (projects since July 1, 2012). This tracking will begin immediately after the effective date of the new permit and DCIA percentages will be included in every annual report. See BMP 3-2 for baseline DCIA calculation and mapping.

#### **Measurable Goals**

- 1. Track DCIA percentage
- 2. Reduce DCIA by 2% by the end of the permit term (see BMP 6-8)

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 6-6	Track DCIA				
	percentage	percentage	percentage	percentage	percentage

#### **Responsible Persons**

Town Planner and Town Engineer

#### **Assessment**



### BMP 6-7 Develop/implement infrastructure repair/rehab program

#### **Description**

The permittee will develop and implement a program for MS4 infrastructure to encompass repair and rehabilitation. The Town will use known information collected from the previous permit to repair and rehabilitate damaged MS4 infrastructure. Data collected from inspections and mapping will be used to update planned repairs throughout the permit.

#### **Measurable Goals**

- 1. Evaluate MS4 infrastructure and develop a repair/rehab program
- 2. Repair and rehabilitate MS4 infrastructure

#### **Schedule**

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 6-7	Evaluate infrastructure Repair and rehabilitate MS4 infrastructure	Repair and rehabilitate MS4 infrastructure			

#### **Responsible Persons**

Town Engineer and Director of Public Works

#### **Assessment**

The program performance will be reviewed and documented annually by the Department of Public Works.



# BMP 6-8 Develop/implement plan to identify/prioritize retrofit projects Description

The permittee will implement a plan to identify and prioritize retrofit and redevelopment projects. These projects will include any retrofit and redevelopment where the Water Quality Volume will be retained on site with the use of LID. Retrofit projects are defined as modifications for the purpose of retaining the Water Quality Volume on site. Redevelopment projects are defined as modifications to an existing developed site to expand or change its current function. On redevelopment projects, retaining the Water Quality Volume will also be performed, but this is not the primary purpose. The retrofit plan will be developed within three years of the effective permit start date that will identify projects for future DCIA reduction with prioritization by priority area.

A 1% annual removal of DCIA will commence following the completion of the retrofit plan. Projects implemented up to 5 years prior to the effective permit start date may be used toward the 1% removal. A 1% annual removal will also be required for years following the fifth permit year. See BMP 3-2 for baseline DCIA calculation and mapping.

#### **Measurable Goals**

- 1. Develop and implement a retrofit plan to include tracking of DCIA (see BMP 6-6)
- 2. Removal of 1% of DCIA annually (total of 2% in Years 4 and 5)
- 3. Include in the annual report the identification and prioritization process for selecting retrofit projects, the rationale for selection and the total planned DCIA to be disconnected.

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 6- 8	Develop retrofit plan*	Develop retrofit plan*	Develop retrofit plan*	Remove 1% of DCIA	Remove 1% of DCIA

<sup>\*</sup>Once the retrofit plan is complete, the permittee will begin 1% annual DCIA disconnection even if the plan is completed earlier than Year 3.

#### **Responsible Persons**

Town Planner and Town Engineer

#### **Assessment**



#### BMP 6-9 Develop/implement street sweeping program

#### **Description**

The permittee will continue procedures for street sweeping on Town owned or operated streets and parking lots. Specific, priority areas where street sweeping will occur, at a minimum, once a year include:

- Urbanized areas of the MS4
- Non-urbanized areas with the catchment areas of the MS4 that either discharge to impaired waters or contain DCIA greater than 11%

Additional street sweepings have been designated for main roads and four business areas as defined by the Town in order to mitigate the effects of heavy pollutant loads on the MS4. Procedures will be implemented to increase cleaning in other targeted areas based on construction activities or areas with potential pollutant sources as determined from inspections, catch basin cleaning, and/or snow and ice control practices.

For some residential, non-curbed streets, the Town may elect to forego street sweeping if a visual inspection results in there being no accumulated material on the street.

For streets not located within the priority areas, the Town will perform annual sweeping or create a plan to optimize less frequent street sweeping.

All street sweepings will be properly disposed of by the permittee.

Each year's annual report will include a summary of visual inspection results, curb miles swept, dates of cleaning, volume or mass of material collected, methods of reuse or disposal, and alternate sweeping plans for rural uncurbed streets.

#### Measurable Goals

- 1. Perform Annual Street Sweeping (if streets do not require sweeping provide annual inspection documentation)
- 2. Document and track street sweeping as detailed in the BMP description

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 6-9	Annual Street				
	Sweeping	Sweeping	Sweeping	Sweeping	Sweeping

#### **Responsible Persons**

Director of Public Works

#### **Assessment**

The program performance will be reviewed and documented annually by the Department of Public Works.



#### BMP 6-10 Develop/implement catch basin cleaning program

#### Description

The permittee will develop, update, and implement procedures for catch basin cleaning and inspection for all town-owned catch basins.

Specifically catch basins in the "priority" areas (Urbanized Areas, DCIA > 11%, or discharge to impaired waters) will be inspected within three years of the effective permit date. Additionally all other catch basins must be inspected by the end of the five year term. Inspection and maintenance will also be prioritized for catch basins near impaired waters and near construction activities.

The permittee will create a plan for optimizing catch basin cleaning to ensure no catch basin exceeds sediment loading of 50% full. The Town will require the company to continually document cleaning and catch basin condition in order to develop a plan which addresses catch basins that accumulate and exceed the 50% sediment threshold faster than others. This information will also be documented in the first year annual report along with total number of catch basins, number inspected, number cleaned and total mass of material removed. If a catch basin is more than 50% full in two successful inspections or cleanings, the permittee will investigate source of debris and implement abatement to the maximum extent practicable.

#### **Measurable Goals**

- 1. Implement catch basin cleaning and inspection procedures including metrics and details of the optimization plan
- 2. Annual report catch basin tracking as detailed in the BMP description

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 6-10	Develop and	Implement catch	Implement catch	Implement catch	Implement catch
	Implement catch	basin cleaning	basin cleaning	basin cleaning	basin cleaning
	basin cleaning	and inspection	and inspection	and inspection	and inspection
	and inspection	procedures	procedures	procedures	procedures
	procedures				

#### **Responsible Persons**

Director of Public Works

#### Assessment

The program performance will be reviewed and documented annually by the Department of Public Works.



#### BMP 6-11 Develop/implement snow management practices

#### Description

The permittee will update and implement measures for the control of snow related pollutant loadings to the MS4. The following measures will be used to manage snow related practices by the permittee:

- Deicing Material Measures: The permittee will update standard operating procedures for all aspects of salt and sand use to minimize impacts to receiving waters (while maintain public safety), explore alternative deicing materials, and implement secondary containment for all exterior liquid storage.
- Snow and Ice Control Practice: The permittee will update standard operating procedures to minimize discharge of deicing materials by establishing optimization goals for the application of materials. The permittee will maintain records on deicing material usage and provide proper training for application.

All practices will be in accordance with CT DEEP's BMPs for Disposal of Snow Accumulations from Roadways and Parking Lots. In addition, the permittee will include in its annual report the types of staff training conducted for application methods and equipment, type(s) of deicing material used, lane-miles treated, total amount of each deicing material used, types of deicing equipment used, changes in deicing practices and snow disposal methods.

#### **Measurable Goals**

- 1. Develop / update snow management measures and practices
- 2. Implement snow management measures and practices
- 3. Annual tracking of snow management practices as detailed in the BMP description

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 6-11	Update and implement snow management measures and practices	Implement snow management measures and practices	Implement snow management measures and practices	Implement snow management measures and practices	Implement snow management measures and practices

#### **Responsible Persons**

Director of Public Works

#### Assessment

The procedures' effectiveness will be reviewed and documented annually by the Department of Public Works.



## **Minimum Control Measure 6: Summary Table**

BMP/Goal	Year 1	Year 2	Year 3	Year 4	Year 5
BMP 6-1 Develop/implement formal employee training program					
Perform employee training	Х	Х	Х	Х	Х
BMP 6-2 Implement MS4 property and operations maintenance					
Develop and evaluate maintenance procedures	Х				
Implement maintenance procedures	Х	Х	Х	Х	Х
BMP 6-3 Implement coordination with interconnected MS4s					
Identify interconnected MS4s	Х				
Coordinate with interconnected MS4s	Х	Х	Х	Х	Х
BMP 6-4 Develop/implement program to control other sources of pollutar	nts to the	MS4			
Develop pollutant source control program	Х				
Implement pollutant source control program	Х	Х	Х	Х	Х
BMP 6-5 Evaluate additional measures for discharges to impaired waters					
Develop turf management policy and source management program	Х				
Implement turf management policy for discharges to Nitrogen impaired waters	Х	Х	Х	Х	Х
Implement source management program and waterfowl program for discharges to Bacteria impaired waters	Х	Х	Х	Х	Х
BMP 6-6 Track projects that disconnect DCIA					
Track DCIA percentage	Х	Х	Х	Х	Х
BMP 6-7 Develop/implement infrastructure repair/rehab program					
Evaluate MS4 infrastructure and develop program	Х				
Repair and rehabilitate MS4 infrastructure	Х	Х	Х	Х	Х
BMP 6-8 Develop/implement plan to identify/prioritize retrofit projects					
Develop retrofit plan	Х	Х	Х		
Remove 1% of DCIA				Х	Х
BMP 6-9 Develop/implement street sweeping program					
Annual Street Sweeping	Х	Х	Х	Х	Х
BMP 6-10 Develop/implement catch basin cleaning program					
Develop catch basin cleaning and inspection procedures	Х				
Implement catch basin cleaning and inspection procedures	Х	Х	Х	Х	Х
BMP 6-11 Develop/implement snow management practices					
Develop / update snow management measures and practices	Х				
Implement snow management measures and practices	Х	Х	Х	Х	Х



## Stormwater Management Plan

# Town of West Hartford, Connecticut

## Wet Weather Monitoring

The permittee will perform wet weather monitoring for outfalls that discharge into impaired waters in order to investigate pollutants of concern levels in receiving waters. Outfalls discharging into impaired waters will be identified through the Illicit Discharge Detection and Elimination Program (IDDE) mapping (BMPs 3-1 and 3-2). Specific screening and monitoring requirements during wet weather for the pollutants of concern Nitrogen, Bacteria and Mercury that discharge from outfalls into impaired waters are noted in the best management practices (BMPs) below and are described in further detail throughout this section.

- BMP S-1 Outfall screening
- BMP S-2 Inventory and mapping of discharges to impaired waters
- BMP S-3 Follow-up investigations of drainage areas
- BMP S-4 Annual monitoring of priority outfalls

The goal of wet weather monitoring is to identify the greatest point sources of pollutant loads into impaired waters and begin to eliminate or mitigate upstream causes of such pollutants.



#### BMP S-1 Outfall screening

#### Description

The permittee will perform wet weather screening of outfalls that discharge into impaired waters for Nitrogen, Phosphorus, Bacteria, and other pollutants. Mapping from the IDDE program will identify locations of such outfalls. For each pollutant reading that exceeds one or more of the thresholds below, the permittee needs to justify the exceedance and provide recommendations for further investigations.

- 1. Nitrogen Total Nitrogen > 2.5 mg/L
- 2. Phosphorous Total Phosphorous > 0.3 mg/L
- 3. Bacteria E coli > 235 col/100 mL in swimming areas and > 410 col/100 mL for all other waters, or total coliform > 500 col/100 mL, or Fecal Coliform > 31 col/100 mL for Class SA waters and > 260 col/100 mL for class SB waters or Enterococci >104 col/100 mL for swimming areas and >500 col/100 mL for all other waters.
- 4. Other Pollutants Turbidity > 5 NTU

The permittee will perform screening during rainfall events that produce discharge from the outfall within the first six hours of the rain event and at least 48 hours after a previous rainfall event. Snow events alone will not be utilized, however, a rain event with significant amount of snow or ice melt may be utilized. One grab sample will be taken and parameters will be followed for testing as part of Title 40, CFR, Part 136 (1990) for laboratory analyses consistent with Connecticut Reasonable Confidence Protocols.

Screening will commence within one year of the effective permit start date, 50% of the outfalls will be screened within three years and all outfalls will be screened by the end of the permit term.

#### **Measurable Goals**

- 1. Perform screening of 50% of outfalls by the end of the third year
- 2. Perform screening of 100% of outfalls by the end of the fifth year
- 3. Track for reporting a list of all outfalls screened

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
ВМР	Commence wet	Continue wet	Continue wet	Continue wet	Continue wet
S-1	weather	weather screening	weather screening	weather	weather screening
	screening		to meet 50% goal	screening	to meet 100% goal

#### **Responsible Persons**

**Town Engineer** 

#### **Assessment**



### BMP S-2 Inventory and mapping of discharges to impaired waters

#### **Description**

The permittee will create an inventory of all dischargers to impaired waters and prepare mapping of these discharges. This effort will be completed within two years of the effect date of the permit.

#### **Measurable Goals**

1. Complete inventory and mapping of discharges to impaired waters

#### **Schedule**

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP S-2	Begin inventory and mapping of discharges to impaired waters	Finish inventory and mapping of discharges to impaired waters			

#### **Responsible Persons**

Town Engineer

#### **Assessment**



#### BMP S-3 Follow-up investigations of drainage areas

#### Description

The permittee will conduct further investigations for every outfall that exceeds allowable thresholds indicated through the implementation of BMP S-1. Specifically, the permittee will investigate the drainage area contributing to each outfall and implement BMPs denoted in MCMs 1-6 or add additional BMPs in order to mitigate pollutant contributions to impaired waters.

The permittee will perform drainage investigations and implement measures to combat pollutant sources in those areas within two years of the effective date of the new permit.

#### **Measurable Goals**

- 1. Perform drainage investigation for outfalls requiring follow-up and BMP implementation
- 2. Develop a tracking system/reporting list of all outfalls selected for investigation
- 3. Report on the progress of investigation and control measure implementation for the different impairments

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP S-3	Develop tracking system/reporting list of all outfalls selected for investigation	Update tracking system	Perform follow-up investigations	Perform follow-up investigations	Perform follow-up investigations

#### **Responsible Persons**

**Town Engineer** 

#### **Assessment**



### BMP S-4 Annual monitoring of priority outfalls

#### **Description**

The Town will monitor the top six pollutant contributing outfalls that exceed allowable thresholds indicated through the implementation of BMP S-1.

After 50% of the outfalls that discharge to impaired waters have been screened, the Town will select the six outfalls with highest pollutant loadings for annual wet weather monitoring. The selected six outfalls will be updated as additional outfalls are screened.

Storm sampling requirements will be the same as outlined in BMP S-1.

The Town will perform outfall prioritizations and subsequent annual wet weather sampling no later than year four of the permit.

#### **Measurable Goals**

- 1. Prioritize outfalls (that discharge to impaired waters) based on monitoring results
- 2. Annual wet weather sampling of six outfalls
- 3. Reporting of prioritization and sampling results in the annual report

#### Schedule

ВМР	Year 1	Year 2	Year 3	Year 4	Year 5
BMP S-4			Prioritize outfalls and select the top 6 highest pollutant contributing outfalls	Update prioritization of top pollutant outfalls Perform annual monitoring	Update prioritization of top pollutant outfalls Perform annual monitoring

#### **Responsible Persons**

Town Engineer

#### **Assessment**



## **Minimum Control Measure Wet Weather Monitoring: Summary Table**

BMP/Goal	Year 1	Year 2	Year 3	Year 4	Year 5
BMP S-1 Outfall Screening	•				
Perform wet weather screening		Х	Х	Х	Х
Complete 50% completion of wet weather screening			Х		
Complete 100% completion of wet weather screening					Х
BMP S-2 Inventory and mapping of discharges to impaired waters					
Complete inventory and mapping of discharges to impaired waters	Х	Х			
BMP S-3 Follow-up investigations of drainage areas					
Develop tracking system/reporting list of all outfalls selected for investigation	Х				
Update tracking system		Х			
Perform follow-up investigations			Х	Х	Х
BMP S-4 Annual monitoring of priority outfalls					
Prioritized outfalls and select top 6 highest pollutant contributing outfalls			Х		
Update prioritization of top pollutant outfalls				Х	Х
Perform annual monitoring				Х	Х



# Stormwater Management Plan

# Town of West Hartford, Connecticut

### Reporting

The Town Engineer will perform all reporting as required by the permit. Each year, by April 1st, the permittee will electronically submit an Annual Report to CT DEEP for the previous calendar year. The annual report will be made available for public review and comment on January 31st. Each annual report will include the municipal review fee and summary of the progress made on the BMPS for each of the six MCM's; including monitoring data, IDDE data, and a written report that includes the following components:

- A description of each BMP.
- All specific reporting requirements as detailed with the MCMs and BMPs of this SMP.
- A schedule of BMPs implementation including a discussion on the current status of implementation for each BMP to be fully or partially completed in that year.
- A discussion on the reasons and a modified BMP schedule for all BMPs which were not completed as scheduled.
- The overall status of each MCM.
- Changes to the responsible persons for any BMP.
- All new or modified BMPs including all details similar to those presented in this SMP.
- A discussion on the status of the permittee's IDDE program including field monitoring results, number and type of illicit discharges detected, and number of illicit discharges eliminated.
- A discussion on the status of the permittee's stormwater monitoring program including the overall status of the monitoring program, a summary of the findings, any significant observations regarding the results, and any modifications to the Plan as a result of the monitoring results.
- A discussion on the control of discharges to impaired waters including applicable BMPs and their respective progress as well as an evaluation of their effectiveness and any modifications made to improve the effectiveness.
- A summary of BMPs planned for the coming year.

### Recordkeeping

All documents relating to this permit, including this SMP, will be kept for a minimum of five years following the expiration of the permit. This requirement may be extended by the Commissioner.



# Stormwater Management Plan Certification

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.

Chi Da	Acting Town Manager
Chief Elected Official/Principal Executive Officer Signature	Title
Peter Privitera  Chief Elected Official/Principal Executive Officer Printed Name	7/6/2017 Date
Cyrific a form  Preparer (if different than above)  Signature	Senior Project Manager, CDM Smith
Cynthia Baumann, P.E.  Preparer (if different than above)  Printed Name	7/6/2017 Date

