

**STORMWATER MANAGEMENT PLAN
2016 ANNUAL REPORT**

**TOWN OF CHESHIRE, CONNECTICUT
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM
MS4 PERMIT NO. GSM000021**



Prepared by: Town of Cheshire
84 South Main Street
Cheshire, Connecticut 06410

Submitted to: Stormwater Permit Coordinator
Bureau of Materials Management & Compliance Assurance
Department of Energy & Environmental Protection
79 Elm Street
Hartford, Connecticut 06106

Report Date: January 25, 2017

**STORMWATER MANAGEMENT PLAN
2016 ANNUAL REPORT
TOWN OF CHESHIRE, CONNECTICUT
MS4 PERMIT NO. GSM000021**

TABLE OF CONTENTS

	Page
1.0 Introduction	1
2.0 Minimum Control Measure #1 – Public Education and Outreach	2
3.0 Minimum Control Measure #2 – Public Involvement and Participation	4
4.0 Minimum Control Measure #3 – Illicit Discharge Detection and Elimination	5
5.0 Minimum Control Measure #4 – Construction Site Stormwater Runoff Control	6
6.0 Minimum Control Measure #5 – Post-Construction Stormwater Management	7
7.0 Minimum Control Measure #6 – Pollution Prevention and Good Housekeeping	8
8.0 Total Maximum Daily Load (TMDL)	10
9.0 Annual Stormwater Monitoring	11
10.0 Certification	12

APPENDICES

- Appendix A Summary of Minimum Control Measures
- Appendix B Stormwater Insert, Sump Pump Insert, 2016 Town Budget

1.0 INTRODUCTION

This 2016 annual report (Year 13) has been prepared by the Town of Cheshire (Town) to meet the reporting requirements of the Connecticut Department of Energy & Environmental Protection (CT DEEP) *General Permit for the Discharge of Stormwater from Municipal Separate Storm Sewer Systems* (MS4 General Permit), under which the Town is registered. The CT DEEP issued Permit No. GSM000021 to the Town.

Cheshire is located in south central Connecticut in New Haven County. The Town covers approximately 33 square miles with a population of approximately 30,000. The Town was incorporated in 1780 when land use was primarily rural and agricultural. By the 1950s, the land use had transitioned to residential and suburban. Current land use includes residential, agricultural, industrial, commercial, and preserved land.

The Town is completely or partially located within a Connecticut designated Urbanized Area (based on the 2010 US Census Bureau data) and the Town owns or operates a municipal separate storm sewer system which conveys stormwater to surface waters of the state of Connecticut. Based on this designation, the Town filed a registration with the CT DEEP for coverage under the CT DEEP *General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems*, issued on January 9, 2004, and reissued without modifications on January 12, 2009 and January 9, 2013 (General Permit). The current General Permit expires June 30, 2017.

As part of the MS4 General Permit requirements, the Town submitted a Stormwater Management Plan (*Town of Cheshire Stormwater Management Plan*, prepared by Milone and MacBroom, Inc. dated July 22, 2004) to the CT DEEP. The Stormwater Management Plan identifies Best Management Practices (BMPs) for each of the six Minimum Control Measures (MCMs) which the Town strives to comply with, as required by the MS4 General Permit.

The purpose of this annual report is to document the compliance with the general permit, compliance with the Total Maximum Daily Load (TMDL) implementation plan, and summarize a self-assessment of the appropriateness of the BMPs and actions conducted by the Town during the 2016 calendar year to comply with the six MCMs. Table 1 includes a summary of the BMPs completed for the six MCMs from 2004 through 2016 and is included in Appendix A.

In preparation of this report, with Town reviewed documents from the Regional Health Department and Town agencies and commissions and newspaper articles. This report was prepared by Walter Gancarz, Operations Manager/Town Engineer.

2.0 MINIMUM CONTROL MEASURE #1 – PUBLIC EDUCATION AND OUTREACH

The Town has implemented a public education program to distribute educational materials to the public and to conduct outreach activities to educate the public on the impacts of stormwater discharges on waterbodies, and the steps the public can take to reduce pollutants in stormwater runoff. The public includes citizens, businesses and industries. It appears that these BMPs are appropriate. The Town has contributed the following public education and outreach efforts during this year:

Publications:

The Town included an insert in the December 2016 Sewer Use Bills which addressed ways to help manage stormwater runoff. Five thousand (5,000) copies were distributed in this fashion. A copy of the publication is included in Appendix B.

The following publications are generally available through the offices of Planning & Zoning, Inland Wetlands, and Town Engineer/Department of Public Works, and/or the regional health department office located in Cheshire (Chesprocott Health District):

- Copies of CT DEEP permits and instructions
- Publications by Non-point Education for Municipal Officials (NEMO)
- Publications by Quinnipiac River Watershed Association (QRWA)

A copy of the 2004 Town Stormwater Management Plan and Annual Reports are available at the Town Hall.

The Town Environment Commission is scheduled to hold monthly meetings, open to the public. The Commission's goal is to conserve local natural resources and promote the responsible use of publicly owned open space areas.

The Environmental Planner maintains or has access to publically available information on the identification and removal of non-native invasive plant species most common in Cheshire.

The Town seeks input from the USDA regarding the best management practices for the keeping of horses, particularly on property containing wetlands and watercourses. This information is available to the public.

An Organic Lawn DVD, produced by the Town, is available to the public on a lending basis.

The Environmental Planner works with the Reference Library in selecting environmental titles annually.

Website:

The Town maintains a website providing current information on issues such as leaf collection scheduled, planned road work and/or drainage repairs, snow removal schedules, recycling, and household hazardous waste collection. The Town website also includes links to information sources including the town wide GIS mapping, Chesprocott Health District, and CT DEEP.

The Town maintains an online GIS system (<http://cheshire.mapxpress.net/>) which provides access to town parcel mapping and includes information such as storm and sanitary catch basins and piping, open space, aquifer protection areas, areas provided with solid waste and recycling pick-up, and FEMA flood zones.

Outreach Events:

The Town conducted both mattress and electronics recycling events to help avoid these materials from being discarded on roadsides and in open spaces, thereby reducing stormwater contamination.

The Town Environment Commission periodically hosts clean-ups, walks, and hikes at ecological places of interest and open spaces. It also hosts exhibits at community events.

The Town promotes participation in the Whitney Water Center educational programs, operated by the South Central CT Regional Water Authority (RWA). The RWA provides a program available to 6th, 7th, and 8th graders entitled W.A.T.E.R., which includes classroom and field activities such as a field trip to the local water bodies to test pH, dissolved oxygen and nitrate levels to assess the impact that human activities have on water quality.

When appropriate, stormwater poster boards/kiosks were displayed at local Town events. The educational programs offered by the Southwest Conservation District (SCD) are posted at the Town Hall. The Town also posts environmental and nature information at kiosks on open space property, such as Quinnipiac Park, Boulder Knoll, the DeDominicis property, and the Farmington Canal Greenway.

3.0 MINIMUM CONTROL MEASURE #2 – PUBLIC INVOLVEMENT AND PARTICIPATION

The Town implements a public involvement and participation program that includes the public in developing, implementing, and reviewing the Town Stormwater Management Plan. It appears that these BMPs are appropriate.

The Stormwater Management Plan was prepared in 2004. The Town has implemented the following public involvement and participation program elements this year, which continue efforts made in previous years.

- The Town Council has been made aware of the potential upcoming changes in the MS4 permit and related increased costs, and invited state representatives to provide input during their regular meetings. The draft 2017-2018 budget has significant increases designated to meet these requirements.
- The Town Planning and Zoning Commission, Environment Commission, and Inland Wetlands and Watercourse Commission hold regular meetings which are open to the public. These meetings provide an opportunity for the public to comment on permit applications, Town events and other related topics.
- Public hearings are held as part of the application process for new and redevelopment projects.
- Town road and drainage construction projects are presented to the Inland Wetlands and Watercourse Commission and/or Planning and Zoning Commission for review and approval prior to implementation.
- The Town Stormwater Management Plan and Annual Reports are maintained for public view at the Town Engineer/Department of Public Works office.

4.0 MINIMUM CONTROL MEASURE #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION

Illicit discharges are discharges to the storm sewer system that are not entirely composed of stormwater. The Town has addressed the detection and elimination of illicit discharges by reviewing the Town ordinances, educating the public regarding illicit discharge, identifying and mapping outfalls greater than 12 inches and 15 inches in diameter, and developing and enforced a plan to eliminate illicit discharges. It appears that these BMPs are appropriate. The Town has implemented the following elements this year:

- Important information regarding sump pump discharges to the sanitary sewer was mailed to 5,000 households in December 2016. A copy of the insert is included in Appendix B.
- The storm drain and outfall mapping is available through the Town GIS system. The mapping is available to the public online and is updated with new data is collected.
- The Town has already begun field locating pipe connections and stormwater outfalls that had not already been located on our GIS system utilizing a new “Tough Tablet.” The work was conducted in the summer of 2016 and December 2016. More field mapping is planned for the summer of 2017.
- The Town Public Works Department uses the management software program, iWorQ. This web based program is generally used as a catalog of work and is used to facilitate tracking of comments or complaints from the public and the status of the Town’s response. This system is used to track and log inspections, maintenance work, and the location of illegal dumping and spills.
- The Public Works Department continues to conduct dry weather inspections and illicit discharge inspections.
- The Town conducts a quarterly groundwater sampling and testing program of surface water, monitoring wells, and potable wells in areas surrounding the Town landfill, to evaluate water quality that may impact surrounding surface waters. This information is summarized in an Annual Report which is submitted to CT DEEP and kept on file in the Engineering office.
- The Town performs annual stormwater sampling and testing at six (6) town wide residential and industrial locations, the Town DPW garage, and the Water Pollution Control Plant, in accordance with CT DEEP permits. Unfortunately, in 2016, the consultant who had been performing this work for the town for years erroneously believed the Town would be performing sampling without the need of their services. The Town was not made aware of this assumption until January 2017, making it physically impossible to obtain these samples.
- Food service establishments are required to be permitted through the regional Health Department (Chesprocott). The WPCA provides notice of these requirements to food establishments and works with them to comply.

During a meeting on December 1, 2015 between the Town of Cheshire, CT DEEP stormwater personnel, and New England Interstate Water Pollution Control Commission (NEIWPCC), it was recommended that the Town evaluate regulations governing the management of identified illicit discharges. This will be undertaken as part of the new MS4 program.

5.0 MINIMUM CONTROL MEASURE #4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

The Town has a program in place to reduce potential pollutants from construction activities that result in land disturbance of greater than or equal to one acre or less than one acre if they are part of a larger development. It appears that these BMPs are appropriate. The following measurable goals have been completed this year.

- The Town constructed a new bridge over the Quinnipiac River on East Johnson Avenue. As part of this work a large hydrodynamic separator was installed that treated the flow from 18 catch basins west of the bridge that previously discharged untreated into the Quinnipiac River. This structure is located at 41-32-58N and 72-52-15W.
- The Town continues to perform engineering reviews of applications submitted to Planning & Zoning and Inland Wetlands (including residential subdivisions, commercial and industrial site plans) to ensure proper stormwater management, according to NEMO guidelines, the 2004 Connecticut Stormwater Quality Manual, and the 2002 Connecticut Guidelines for Erosion and Sediment Control, as amended.
- The Town Public Works Department maintains an electronic database for public phone calls regarding comments or complaints to construction projects.
- The Town Public Works Department has developed a notification system with the Inland Wetlands and Watercourses Commission to authorize the regular maintenance of stormwater basins and the removal of sediment in waterbodies.
- The Town Planning & Zoning Department, Building Department, and Wetlands Commission coordinate to conduct periodic inspections on roadway construction, development projects, and residential subdivisions, to evaluate compliance with their erosion and sedimentation control plan. A control measure in place is the requirement that erosion and sedimentation controls be in place prior to the Town issuing a Certificate of Occupancy.
- The Environmental Planner and Zoning Enforcement Officer conduct sediment and erosion control inspections prior to the issuance of a zoning/building permit for construction projects associated with land use permits. These sites are inspected throughout the construction phase and corrective orders and notice of violations for insufficient erosion controls are issued and followed until corrected.

6.0 MINIMUM CONTROL MEASURE #5 – POST-CONSTRUCTION STORMWATER MANAGEMENT

The Town is in the process of developing, implementing, and enforcing a program and ordinance or other mechanism to address stormwater runoff from new development and redevelopment projects that disturb greater than one acres of land. The following measurable goals have been completed this year.

- The Town maintains an inventory of detention basins, retention basins, particle separators, storm drains and outfalls. The inventory database is maintained electronically within the Town's GIS system by the Public Works Department. The Town continues to update this information on a regular basis.
- The Town continues to design and implement Town road construction and building improvement projects to best address stormwater issues and in accordance with the 2004 Connecticut Stormwater Quality Manual, as amended. The Town Public Works projects are permitted through the Town and undergo necessary Planning & Zoning approval.
- Various Town Departments and/or agencies provide periodic site inspections of residential subdivisions, construction, commercial and industrial developments to ensure compliance to their erosion and sedimentation control plan.
- The Environmental Planner and Zoning Enforcement Officer conduct sediment and erosion control inspections prior to the issuance of a zoning/building permit for construction projects associated with land use permits. These sites are inspected throughout the construction phase and corrective orders and notice of violations for insufficient erosion controls are issued and followed until corrected.
- In 2016, the Engineering Department updated the maps associated with both of the Town industrial stormwater sites (Public Works Garage, Water Pollution Control Plant.)

7.0 MINIMUM CONTROL MEASURE #6 – POLLUTION PREVENTION AND GOOD HOUSEKEEPING

The Town has implemented a variety of practices to minimize pollutants entering surface waters in Town. The following measurable goals have been completed this year.

Records/Training:

The Town Public Works Department has implemented the use of the management software program, iWorQ. This web based program is used to track the status of stormwater related activities.

The Town conducts annual training of Public Works Department and Water Pollution Control Division (WPCD) employees on BMPs for stormwater management and spill response.

The Town maintains material safety data sheets (MSDS) for materials used by Town Garage and Wastewater Treatment Plant. This information is maintained and is available to the public.

Street Sweeping:

The Town conducts street sweeping of Town owned roads and parking lots. The Town uses a municipally owned street sweeper. A new street sweeper was purchased in 2016 which has increased solids removal while creating less dust.

The Town Public Works Department regularly clears roadside litter and clears brush in the Ten Mile River, Quinnipiac River, and Broad Brook watersheds.

The Town Public Works Department has eliminated the reliance on herbicides by performing roadside grass and brush clearing via mowers and weed whackers.

Catch Basin/Stormwater Structure Cleaning:

The Town Department of Public Works utilizes the iWorQ management system to manage maintenance of catch basins and stormwater structure cleanings to remove debris, sediment, and organics (leaves/grass). The mapping of the structures on the Town GIS system has improved efficiency in locating and tracking maintenance and repairs. The Town maintains the approximately 6,000 catch basin structures over 150 miles in Town. The frequency of cleanings are approximately 8 miles per year, including 22 gross particle separators.

Evaluation of Snow Removal Practices:

The Town has implemented a winter storm response program to include storm water control measures, including limiting the use of sand used, using more salt, using a salt treated with magnesium to be effective at lower temperatures, and the use of liquid deicers. In 2016, new double walled tanks were purchased and installed to provide secondary containment for this material.

The Town maintains a sand/salt storage shed at the Public Works Garage. Permanent doors were custom made for the shed.

Waste Minimization Practices:

The Town provides weekly curbside residential municipal solid waste collection and single stream recycling collection to all residential properties (approximately 10,000).

The Town encourages residents to participate in the household hazardous waste collection provided by the Regional Water Authority. The collection is available weekly from May through October.

The Town provides a collection point for used cell phones and recyclable batteries at the Town Library for disposal through the National Rechargeable Battery and Cell Phone Recycling Program. The Town properly disposes of Town Government electronics via local vendor.

The Town collects leaves, bagged in biodegradable bags, and small brush, bundled. Storage of leaves and brush in bags and bundles reduces the potential of leaves entering the stormwater system.

The Town utilizes organic fertilizer at Town buildings, Town parks, and school properties, with the intent of reducing chemicals discharged to watercourses.

The Town utilizes spill proof plastic containers with funnels for gasoline mixes used in chainsaws, other hand tools. Additionally, the Town utilizes containment pallets for storage of all potentially hazardous liquids.

The street sweeping and catch basin cleaning materials are managed in accordance with the CT DEEP Guideline for Municipal Management Practices for Street Sweepings and Catch Basin Cleanings, dated January 2005, and are stockpiled at the landfill.

Stormwater Monitoring Program:

The Town conducts a quarterly groundwater sampling and testing program of surface water, monitoring wells, and potable wells in areas surrounding the Town landfill, to evaluate water quality that may impact surrounding surface waters.

Stormwater sampling and testing was not conducted at six (6) town wide residential and industrial locations in accordance with the CT DEEP General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems.

Stormwater sampling and testing was also not conducted at the Public Works Garage (Permit No. GSI001174) and the Water Pollution Control Plant (Permit No. GSI001172) in accordance with the CT DEEP General Permit for the Discharge of Stormwater associated with Industrial Activity.

The reason for not collecting samples described above was strictly a misunderstanding. For at least the past five years, Blue River Engineering performed this task and completed the Town's Annual Report. Due to a misunderstanding, Blue River assumed the Town had made other arrangements to conduct that sampling. Unfortunately, the Town was not made aware of this until January 2017.

The Town has always complied with this requirement (see past reports) and had budgeted to have it completed in 2016 (see Appendix B).

In order to address this oversight, the Town is willing, for 2017, to collect and analyze an additional six (6) town wide samples and an extra round of samples from our two (2) industrial facilities (Public Works Garage and Water Pollution Control Plant.)

8.0 TOTAL MAXIMUM DAILY LOAD (TMDL)

A Total Maximum Daily Load (TMDL) is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet its water quality standards, and an allocation of that amount to the pollutant's sources. Section 303(d) of the Federal Clean Water Act requires that states develop lists of waters that are not meeting water quality standards (impaired waters), and develop TMDLs for these waters. The TMDL analysis can be used as a management tool to restore impaired waters by establishing the maximum amount of a pollutant that a waterbody can receive without adverse impacts to fish, wildlife, recreation, or other public uses.

The Town of Cheshire lies within the Quinnipiac River Regional Basin, which includes the following waterbodies: Harbor Brook, Misery Brook, Quinnipiac River, and Sodom Brook. These waterbodies have been included on the CT Impaired Waters List due to exceedances of the indicator bacteria criteria in the CT Water Quality Standards.

On June 8, 2008, TMDLs were developed and finalized for the Quinnipiac River Regional Basin. The pollutants with TMDLs include bacteria, nitrogen, mercury, and phosphorus and they apply to the Ten Mile River, Mixville Pond, Mill River, Mad River, Harbor Brook, Misery Brook, Quinnipiac River, and Sodom Brook in addition to watersheds contributing to the Long Island Sound and other CT inland waters. TMDLs are required to be implemented through the Town specific Stormwater Management Plan, which will be included in the new plan submitted prior to April 1, 2017.

9.0 ANNUAL STORMWATER MONITORING

As explained in Section 7.0, the Town did not conduct stormwater sampling during 2016, as required by the CT DEEP Phase II General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems for three industrial and three residential locations. The CT DEEP had previously granted the Town a variance for the three commercial locations.

10.0 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.

Signature of Chief Elected Official or designee, Title

Walter Gancarz, Operations Manager/Town Engineer
Name of Chief Elected Official or designee, Title

7/27/16
Date

APPENDIX A

- Summary of Minimum Control Measures

**Table 1: Minimum Control Measures
Town of Cheshire Stormwater Management Plan
2016 Annual Report**

Minimum Control Measure															
<i>Public Education and Outreach on stormwater impacts</i>															
Best Management Practice	Measurable Goals	Responsible Party	Year of Implementation												
			'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16
A. Educate citizens about the importance of stormwater management	1. Maintain copies of selected NEMO and QRWA brochures in Town Hall. Rotate brochure content semi-annually. New display in 2016.	Environmental Planner		x	x	x	x	x	x	x	x	x	x	x	x
	2. Evaluate feasibility of updating Town's website to include links to stormwater related sites.	Town Engineer		x	x	x	x	x	x	x	x				x
	3. Coordinate with local schools to promote use of educational programs offered by Whitney Water Center.	Town Engineer			x	x	x	x	x	x	x	x	x	x	x
	4. Assess feasibility of mailing stormwater-related education materials with tax bills.	Town Engineer	x	x	x	x	x	x	x	x					x
	5. Based on the outcome of Goal A.4., send materials with tax bills.	Town Engineer	x	x	x	x	x	x	x	x					x
	6. Post notifications of education programs offered by the Southwest Conservations District at the Town Hall.	Environmental Planner		x	x	x	x	x	x	x	x	x	x	x	x
	7. Assess feasibility of having the Town's Environment Commission coordinate the Town's public education program.	Environmental Planner	x	x	x	x	x	x	x	x	x	x			
	8. Place copies of "Caring for Your Septic System" in the Planning Department for free distribution.	Environmental Planner		x	x	x	x	x	x	x	x	x	x	x	x
	9. Establish contact with QRWA and identify avenues Town staff can use to provide public notice of QRWA activities.	Environmental Planner		x	x	x	x	x	x	x	x	x	x	x	x
	10 Present information on stormwater management at school programs as appropriate. Town engineering staff present stormwater information at Career Day, Arbor Day activities, Girl Scout meetings, Touch a Truck event, and Take a Child to Work Day.	Town Engineer		x	x	x	x	x	x	x	x	x	x	x	x

**Table 1: Minimum Control Measures
Town of Cheshire Stormwater Management Plan
2016 Annual Report**

Minimum Control Measure		Public Education and Outreach on stormwater impacts														
Best Management Practice	Measurable Goals	Responsible Party	Year of Implementation													
			'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	
B. Educate industries of the need for proper stormwater management	1. Develop mailing list of local industries.	Town Engineer with Chamber of Commerce		x												
	2. Develop or identify from other source(s) education materials targeted to industries, with at least one material being targeted to agricultural uses or bedding plant growers.	Town Engineer					x	x	x	x	x					
	3. Mail materials identified in Goal B.2. to list of local industries developed in Goal B.1.	Town Engineer					x	x	x	x						
	4. Provide notice of need for CT DEEP's General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities to developers and engineers.	Environmental Planner		x	x	x	x	x	x	x	x	x	x	x	x	
	5. Send letter to local dentists to ensure compliance with mercury removal equipment.	Town Engineer													x	
C. Educate municipal officials and land use commissions on proper stormwater management	1. Coordinate one NEMO or Southwest Conservation district or knowledgeable technical staff to present to Town staff and land use commissions.	Town Planner		x	x	x	x	x	x	x	x	x	x	x	x	

**Table 1: Minimum Control Measures
Town of Cheshire Stormwater Management Plan
2016 Annual Report**

Minimum Control Measure															
Public Involvement/Participation Plan															
Best Management Practice	Measurable Goals	Responsible Party	Year of Implementation												
			'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16
B. Allow public participation in developing and reviewing the stormwater management plan	1. Place draft copy of plan in Town Engineer's Office on or before June 1, 2004	Town Engineer	x												
	2. Place draft copy of annual report at Town Engineer's Office on or before December 1 of each year.	Town Engineer	x	x	x	x	x	x	x	x					
	3. Provide notice to the QRWA and MRWA that the draft plan is available for public comment.	Town Engineer	x	x	x	x	x	x	x	x	x	x	x	x	x
C. Involve the public in watershed activities	1. Evaluate feasibility of updating Town's website to include links to stormwater related sites	Environmental Planner		x	x	x	x	x	x	x	x				x
	2. Identify local groups to assist in storm drain marking program.	Town Engineer	x												
	3. Coordinate marking of catch basins	Town Engineer	x	x	x	x									
	4. Volunteer clean-up of Ten Mile River –coordinated by QRWA	Town Engineer	x			x	x	x	x	x	x		x	x	

**Table 1: Minimum Control Measures
Town of Cheshire Stormwater Management Plan
2016 Annual Report**

Minimum Control Measure															
<i>Illicit Discharge Detection and Elimination Plan</i>															
Best Management Practice	Measurable Goals	Responsible Party	Year of Implementation												
			'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16
A. Prohibit non-stormwater discharges from the storm drainage system	1. Review town ordinances and draft modifications to prohibit the discharge of non-stormwater to storm drains.	Town Engineer					x								
	2. Assess feasibility of modifying Section 21.9 of the Zoning Regulations to expressly prohibit the discharge of non-stormwater discharges, except those allowed under the CT DEEP permit.	Town Engineer/ Town Attorney					x								
B. Educate businesspeople, public employees and the general public on hazards associated with illicit discharge.	1. Identify or develop literature for educating residents on the hazards of illicit discharges.	Environmental Planner		x	x	x	x	x	x	x	x	x	x	x	x
	2. Maintain copies of literature referenced in Task B.1. at Town Hall	Town Engineer		x	x	x	x	x	x	x	x	x	x	x	x
	3. Mail materials identified in Goal B.1. to residents in sewer utility bills	Town Engineer/ WPCA	x	x	x	x	x	x	x	x	x				x
	4. Develop, or identify from other sources, fact sheets on stormwater management for municipal employees	Town Engineer		x	x	x	x	x	x	x	x	x	x	x	x
	5. Make fact sheets identified in Tasks B.5. available to municipal employees	Town Engineer		x	x	x	x	x	x	x	x	x	x	x	x
C. Develop and implement ongoing illicit discharge detection program	1. Verify mapping of storm drainage system and number outfalls.	Town Engineer	x	x	x	x	x	x	x	x	x	x	x	x	x
	2. Perform dry weather inspections of outfalls with outfall mapping.	Town Engineer	x	x	x	x	x	x	x	x	x	x	x	x	x
	3. Attempt to identify source of illicit discharges sampled in Goal C.3.	Town Engineer				x	x	x	x	x	x	x	x	x	x
	4. Develop and maintain a log and map location of reports of illicit discharges and illegal dumping that are called into the Public Works Department, Chesprocott, and the Wastewater Treatment Plant.	Town Engineer		x	x	x	x	x	x	x	x	x	x	x	x

**Table 1: Minimum Control Measures
Town of Cheshire Stormwater Management Plan
2016 Annual Report**

Minimum Control Measure														
Construction Site Stormwater Runoff Control Plan														
Best Management Practice	Measurable Goals	Responsible Party	Year of Implementation											
			'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15
A. Develop program to notify contractors of CT DEEP stormwater permits	1. Revise Zoning Permit application forms (site Plan, Special Exception) to advise contractors of stormwater related permits.	Town Planner	x											
	2. Assess feasibility of amending Sector 20 of the Cheshire Zoning Regulations to include language stating that the disturbance of more than once acre of land may necessitate a permit from the CT DEEP.	Town Planner/ Town Attorney	x	x	x	x	x	x	x	x	x			x
	3. Assess feasibility of amending Subdivision Regulations to include language stating that the disturbance of more than one acre of land may necessitate a permit from the CT DEEP.	Town Planner/ Town Attorney					x	x	x	x	x	x	x	x
	4. Adopt modification to wetland regulations so that information on Section 404 Army Corps Permit requirements is included	Town Planner/ Town Attorney		x										
B. Develop requirements that construction site operators control wastes such as building materials, concrete, truck washout, chemicals, litter and sanitary wastes	1. Assess feasibility of amending Section 21 of the Zoning Regulations to expressly require construction site operators to control discarded wastes, concrete truck washout, litter, chemicals and sanitary wastes.	Town Planner/ Town Attorney				x	x	x	x	x	x	x	x	x
	2. Adopt proposed changes developed in Goal B. 1.	Town Planner/ Town Attorney												
C. Track and act on, as needed, information provided by the public relating to construction site maintenance in town	1. Develop log for tracking construction site inspection (and public complaints, if any).	Town Engineer		x	x	x	x	x	x	x	x	x	x	x
	2. Document inspections of construction sites that complaints are logged against.	Town Engineer		x	x	x	x	x	x	x	x	x	x	x
D. Develop and implement program for inspection of construction sites	1. Develop site inspection checklist for sediment and erosion control related to items that include a maintenance schedule for inspection	Town Engineer	x	x	x	x	x	x	x	x	x	x	x	x
	2. Develop and maintain master log to record date of inspection	Town Engineer					x	x	x	x	x	x	x	x

**Table 1: Minimum Control Measures
Town of Cheshire Stormwater Management Plan
2016 Annual Report**

Minimum Control Measure														
Post Construction Stormwater Management in New Development and Redevelopment Plan														
Best Management Practice	Measurable Goals	Responsible Party	Year of Implementation											
			'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15
A. Promote the use of design techniques to protect water quality	1. Assess water quality best management practices to identify which are appropriate for town. These may include LID methods, modified design requirements, and the use of infiltration. Selected practices should be based on the CT Stormwater Quality Manual..	Town Engineer/ Town Planner		x	x	x	x	x	x	x	x	x	x	x
	2. Review subdivision regulations for stormwater management criteria and assess feasibility of revising regulations to promote use of infiltration and LID techniques in areas of town other than Aquifer Protection District. May include adopting the CT Stormwater Quality Manual. Avoidance of untreated direct discharges to the Mill River and its tributaries should be included in this.	Town Engineer/ Town Planner					x	x	x	x	x	x	x	x
	3. Review Zoning regulations and revise language to require management of both stormwater quality and quantity for new developments and redevelopments.	Town Engineer/ Town Planner					x							
	4. Review Inland Wetlands regulations for consistency with revised zoning and subdivision regulations. Revise Inland Wetlands regulations as needed.	Town Engineer/ Town Planner					x							
B. Develop a mechanism to ensure long-term operation and maintenance of BMPs	1. Develop inventory of existing detention and retention basins and other drainage structures.	Town Engineer		x								x	x	x
	2. Develop ongoing inspection program for drainage structures (i.e. inspect 25% each quarter.)	Town Engineer		x								x	x	x
	3. Implement inspection program developed in Goal B. 2.	Town Engineer			x	x	x	x	x	x	x	x	x	x

**Table 1: Minimum Control Measures
Town of Cheshire Stormwater Management Plan
2016 Annual Report**

Minimum Control Measure			Pollution Prevention/Good Housekeeping for Municipal Operations Plan												
Best Management Practice	Measurable Goals	Responsible Party	Year of Implementation												
			'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16
A. Continue to train employees on the proper handling of water materials and the hazard of improper handling	1. Review town ordinances and draft modifications to prohibit the discharge of non-stormwater to storm drains.	Town Engineer					x								
	2. Expand existing training programs for the PW Garage and Wastewater Treatment Plant to address park facilities and other municipal buildings. Training should address handling of chemicals (such as pool chlorine) as well as application of fertilizers and pesticides.	Town Engineer/ Director of Parks & Recreation					x								
	3. Perform stormwater training annually.	Town Engineer/ Director of Parks & Recreation	x	x	x	x	x	x	x	x	x				x
	4. Identify public resources such as CT DEEP that would provide public education on stormwater management for municipal employees.	Town Engineer		x	x	x	x	x	x	x	x	x	x	x	x
	5. Distribute materials identified in Goal A.5.	Town Engineer			x	x	x	x	x	x	x	x	x	x	x
	6. Converted operations at schools and Town athletic fields to use organic fertilizer	Town Engineer		x	x	x	x	x	x	x	x	x	x	x	x

**Table 1: Minimum Control Measures
Town of Cheshire Stormwater Management Plan
2016 Annual Report**

Minimum Control Measure			Pollution Prevention/Good Housekeeping for Municipal Operations Plan													
Best Management Practice	Measurable Goals	Responsible Party	Year of Implementation													
			'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	
B. Optimize maintenance of town-owned discharge facilities	1. Review street sweeping program and identify streets to be swept more than once a year. Emphasis should be on areas that discharge to the Mill River.	Town Engineer		x									x	x	x	x
	2. Document catch basin inspections and cleaning performed annually.	Town Engineer		x	x	x	x	x	x	x	x	x	x	x	x	x
	3. Train employees on proper handling and disposal of catch basin sediments and road sweeping wastes.	Town Engineer/			x	x	x	x	x	x	x	x	x	x	x	x
	4. Develop inventory of town detection basins and other storm drainage structures that need to be maintained (excluding catch basins.)	Town Engineer		x									x	x	x	x
	5. Develop program to inspect and clean, as needed, 25% of inventoried structures each year.	Town Engineer		x									x	x	x	
	6. Implement inspection program	Town Engineer		x	x	x	x	x	x	x	x	x	x	x	x	x
	7. Complete up to 10% of retrofits of repairs identified in the inspection program.	Town Engineer		x	x	x	x	x	x	x	x	x	x	x	x	x
C. Evaluate snow removal practices to reduce sediment accumulation in drainage facilities	1. Decrease use of sand in winter operations.	Town Engineer		x	x	x	x	x	x	x	x	x	x	x	x	x
	2. Optimize application of sand/salt to road through training and education of public works employees.	Town Engineer		x	x	x	x	x	x	x	x	x	x	x	x	x
	3. Implement "pre-wet" systems in 15% of plow routes to decrease amount of sand/salt applied.	Town Engineer		x	x	x	x	x	x	x	x	x	x	x	x	x
	4. Evaluate possibility of increasing program in Goal C.3. to additional routes	Town Engineer				x	x	x	x	x	x	x	x	x	x	x

APPENDIX B

- Stormwater Insert
- Sump Pump Insert
- 2016 Town Budget

TOWN OF CHESHIRE

www.cheshirect.org

HELP MANAGE STORM WATER RUNOFF

Storm water runoff can lead to serious erosion and pollution in waterways, threatening wildlife, vegetation, and human health. Large areas of paved surfaces and buildings worsen the problem. You can help reduce pollution and the quantity of runoff.

PLEASE:

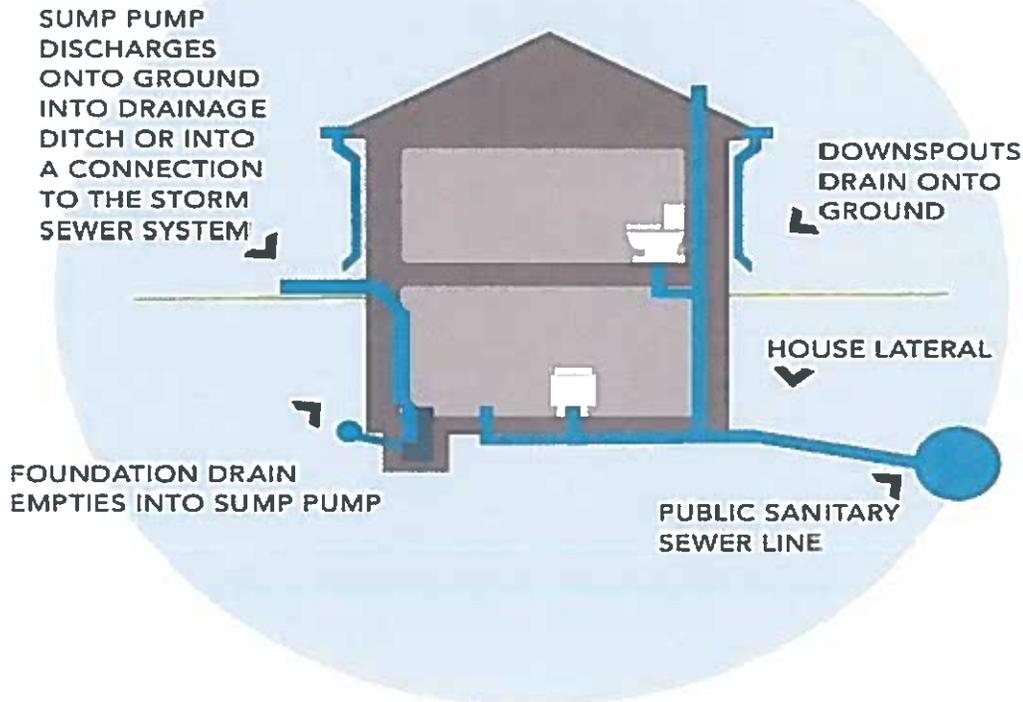
- ✓ Use fertilizers sparingly
- ✓ Sweep driveways and sidewalks rather than using a hose
- ✓ Use native vegetation and mulch instead of high maintenance grass lawns
- ✓ Check cars for oil and antifreeze leaks
- ✓ Pick up pet waste
- ✓ Compost yard waste
- ✓ Use car wash facilities that don't generate runoff
- ✓ Use porous materials for driveways and sidewalks
- ✓ Have septic systems inspected and pumped every three to five years
- ✓ Support low impact development
- ✓ Don't ever dump in storm drains

For the EPA homeowner's guide and more information, go to www.epa/nps

IMPORTANT INFORMATION REGARDING SUMP PUMPS

Do you have a sump pump in your basement or home? If so, you could be fined for an improper connection. Per the Town's sewer use regulations, "no person shall discharge or cause to be discharged any unpolluted waters such as storm water, groundwater, roof runoff, subsurface drainage, or cooling water to any sanitary sewer."

PROPER CONNECTIONS



What is the penalty for discharging your sump pump into the sewer system? Residents can be fined up to **\$100 per day** for illegally connecting a sump pump to the sanitary sewer system. A sump pump is most likely illegal if it is connected to a drain or sink in your basement, and a licensed plumber or home inspector can confirm an improper connection. If you suspect you may have an illegal connection and need advice as to how to properly discharge water from your sump pump, the Town of Cheshire will waive any penalties provided the issue is remedied within 90 days of discovery. Call the Town Engineer's office at 203 271-6650 to schedule a free inspection.

Why are sump pumps connected to the sewer system a problem? An eight inch sewer pipe can accommodate up to 200 homes, but even just five sump pumps can quickly overload this same line. As few as 100 sump pumps can quickly overwhelm the sewer treatment plant with millions of gallons of excess clean water. Illegal sump pumps drive up the cost of operating the waste water treatment plant by about \$150,000 per year, and can cause backups into our streets, our buildings, and your basement.

What is the solution? To help prevent basement flooding, the solution is often as simple and inexpensive as connecting a sump pump discharge hose to discharge water away from your home, or extending a downspout away from the foundation.

Be a good neighbor. A properly functioning sanitary sewer system is essential to every Cheshire resident. Each household or business that properly redirects storm water or roof runoff away from the sewer system helps to prevent sewage backups into basements, streets, and waterways. And that makes for a better Cheshire!

TOWN OF CHESHIRE PROPOSED 2016-2017 BUDGET

GENERAL FUND - PUBLIC WORKS DEPARTMENT - 260

	FY 2015 Actual	FY 2016 Appropriation	FY 2016 Est Exp	FY 2017 Department Request	FY 2017 Manager Recommended	Detail	\$	% Increase (Decrease)				
HIGHWAYS, SIDEWALKS, DRAINAGE - 10263												
52 SUPPLIES & SERVICES												
5201 OFF SUPPL	\$1,309	\$850	\$950	\$950	\$950	OFFICE SUPPLIES AND FORMS	\$950	11.76%				
5203 A/E SUPPLI	\$163,981	\$155,000	\$165,000	\$165,000	\$162,000	TIRES OTHER MAINT AND REPAIR PARTS BRAKES, SPRINGS AND SUSPENSION TRANSMISSION AND DRIVETRAIN TOWN MANAGER ADJUSTMENT	\$25,000 \$110,000 \$18,000 \$12,000 \$(3,000)	2.22% 1.82% -16.67% 0.00% -25.00%				
5204 PRG MAT	\$128,006	\$105,000	\$105,000	\$108,000	\$108,000	GRAVEL AND STONE PIPE CATCH BASIN MATERIALS MISCELLANEOUS MATERIALS ASPHALT PATCH	\$21,000 \$19,000 \$15,000 \$30,000 \$23,000	2.86% -10.53% -33.33% 0.00% -17.39%				
5206 ADVERT	\$64	\$500	\$250	\$500	\$500	JOB OPENINGS	\$500	10.00%				
5207 PRINTING	\$0	\$500	\$500	\$500	\$500	PRINTING	\$500	0.00%				
5208 GAS & DIES	\$83,036	\$60,498	\$72,520	\$52,680	\$52,680	GAS DIESEL PUMP MAINTENANCE	\$12,180 \$39,000 \$1,500	15.22% -35.27% -75.00%				
5209 PER SERV	\$18,450	\$19,000	\$19,000	\$22,500	\$21,000	UNIFORMS, SAFETY GEAR, HEARING TESTS, DRUG SCREENING	\$21,000	10.84%				
5210 TRAIN EXP	\$925	\$1,000	\$1,000	\$1,000	\$1,000	TRAINING EXPENSE	\$1,000	0.00%				
5212 OTHER	\$834	\$500	\$750	\$750	\$750	OTHER	\$750	90.00%				
SUBTOTAL 52							\$396,606	\$342,848	\$362,970	\$351,880	\$347,380	12.51%
54 CONTRACTUAL SERVICES												
5401 CONSULT	\$10,018	\$8,820	\$8,820	\$15,300	\$15,300	STORMWATER TESTING OF TOWN GARAGE AND REPORT TOWNWIDE STORMWATER SAMPLE TESTING AND REPORT UNDERGROUND STORAGE TANK MONITORING HAZARDOUS WASTE DISPOSAL	\$6,000 \$3,100 \$4,200 \$2,000	70.00% 64.52% 100.00% 100.00%				
5402 CONSTRUCT	\$145,814	\$135,000	\$100,000	\$340,000	\$335,000	ROAD AND DRAINAGE CONSTRUCTION, REPAIRING & CURBING	\$335,000	23.33%				