

TOWN OF MANSFIELD, CONNECTICUT



2023 ANNUAL REPORT

PERMIT NUMBER: GSM000116

February 14, 2024

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1.0 Introduction

This Annual Report provides the public and regulators with the Town’s efforts to comply with the conditions of the Connecticut Department of Energy and Environmental Protection’s General Permit for the Discharge of Stormwater from Small Municipal Storm Sewer Systems (General Permit). In the following sections the Town will provide updates on activities performed associated with the 6 Minimum Control Measures (MCM). It should be noted, the General Permit expired on June 30, 2022 but that the Town has elected to include work and measures completed through the 2022 calendar year.

Stormwater Program Permit Information	
1. Permitting Authority: State of CT Department of Energy & Environmental Protection	
2. Permit Number: GSM000116	3. Permit Type: General
4. Permit Name: General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems	
5. Date Issue: September 29, 2023	6. Date Expire: September 30, 2025

General Information for MS4 Operator	
1. Operator Name:	Town of Mansfield Department of Public Works
2. Represented Entity:	
3. Mailing Address:	4 South Eagleville Road
4. Mail City, State, Zip:	Mansfield, CT 06268
5. Phone Number:	(860)-429-3331
6. Email Address:	PublicWorks@mansfieldct.org
7. Population: 25,853	8. Area (sq. mi): 45.5
9. Official Website:	http://www.mansfieldct.gov

General Information for Primary Contact Person	
1. Name:	Derek M. Dilaj, P.E.
2. Title:	Assistant Town Engineer
3. Phone Number:	860-429-3334
4. E-Mail Address:	Derek.Dilaj@mansfieldct.org

General Information for Secondary Contact Person	
1. Name:	John C. Carrington, P.E.
2. Title:	Public Works Director
3. Phone Number:	860-429-3332
4. E-Mail Address:	John.Carrington@mansfieldct.org

2.0 Part I - Summary of Minimum Control Measure Activities

The Town currently has many practices and programs in place relating to stormwater management and pollution prevention. This annual report provides an update on the program outlined in the Stormwater Management Plan (Plan) drafted by the Town in March 2017. The Plan identified best management practices (BMPs) and measurable goals for the following six minimum control measures:

- Public education and outreach
- Public involvement / participation
- Illicit discharge detection and elimination
- Construction site stormwater runoff control
- Post-construction stormwater management
- Pollution prevention/good housekeeping

For each minimum control measure, the Town will define appropriate BMP's, designate a person(s) and job title responsible for each BMP, define a time frame for implementation for each BMP, and define measurable goals for each BMP.

2.1 MCM #1 - Public Education and Outreach

The Town initiated a program for educating a wide range of individuals, from elementary school children to developers. Programs included a tabletop demonstration for elementary school children to see how rainfall collects pollutants through various land uses and how it impacts the water bodies. This program is completed each year by the Town Sustainability Coordinator.

The Town publishes a Quarterly Newsletter in which departments write articles covering various topics. Historically, the Public Works writes articles and updates its website indicating why untreated stormwater is problematic. The Town has continued replacing catch basin tops with new tops indicating “Drains to Waterway” reminding residents that anything entering the catch basin drains to a stream.

2.1.1 MCM #1 - BMP Summary

BMP	Activities in current reporting period	Sources Used (if applicable)	Method of Distribution	Audience (and number of people reached)	Measurable goal	Department / Person Responsible	Additional Details
1-1 Launch of Webpage	Completed			Residents and Students with Web Access (13,000+)	Completion	Asst. Town Engineer/ IT	
1-2 Update Website as Appropriate	Updated Website to include Septic System Guidelines & Pet Waste	NEMO Website and EPA MS4	Online, Paper and Electronic Newsletters		Update twice per year	Asst. Town Engineer/ IT	
1-3 Accumulate Educational Materials	Identified potential ordinance for LID Maintenance	NEMO Website and EPA MS4			Accumulate 5 materials per year	Asst. Town Engineer / Inland Wetlands Agent	
1-4 Begin Public Education Program	Stormwater Education Program for School Children Rain Garden Installation Brochure Water Quality Demonstration Projects Quarterly Newsletter	Eastern Conservation District (ECD) P&Z Applicants ECD, EPA, CTDEEP ECD	In-Person, Virtual, Physical and digital pamphlets	Students (30+) Developers, Homeowners (100+) Residents, Visitors (500+) Residents (13,000+)	Complete 2 Educational Programs per Year	Asst. Town Engineer / Inland Wetlands Agent / EHHD Outreach	
1-5 Address Education for Pollutants of Special Concern	Quarterly Newsletter	EPA, ECD, Chesapeake Bay Program	Online, e-mail, social media, paper	Residents and Students with Web Access (13,000+)		Asst. Town Engineer / Sustainability Coordinator / Inland Wetlands Agent	

2.1.2 Planned Public Education and Outreach Activities Planned

The Town will continue publishing the Quarterly Newsletter which will provide the Department an opportunity to further explain septic system maintenance and cleaning up after pets all of which impact stormwater quality. These actions will assist in reducing bacteria loads to surface water bodies.

2.2 MCM #2 – Public Involvement / Participation

The Town posted the Plan by March 31, 2017 for public comment and this annual report on January 31, 2024 to provide adequate time for public comment. The Plan was presented to various commissions and committees for feedback. The annual report was made available through the Town’s website and Town Hall.

2.2.1 MCM #2 - BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Date Completed or Projected Completion	Posted	Additional Details
2-1 Provide Notification and Obtain Public Comment for SWMP	Complete	Provide a Minimum 60 day Notice to the Public and Obtain Public Comment for SWMP	Completion	Public Works Specialist	April 3, 2017	DPW Office / https://www.mansfieldct.gov/2015/Stormwater	
2-2 Provide Notification and Obtain Public Comment for Annual Reports	Complete	Noticed	Completion	Public Works Specialist	February 15, 2024	DPW Office / https://www.mansfieldct.gov/2017/MS4-Annual-Reports	

2.2.2 Public Involvement / Participation Activities Planned

The Town continues working with the Town’s Conservation Commission to actions for the MS4 permit and stormwater concerns.

2.3 MCM #3 – Illicit Discharge Detection and Elimination

This minimum control measure is critical to the success of the stormwater management program as it will identify and reduce untreated discharges that contribute high levels of pollutants, including heavy metals, toxic materials, oil and grease, solvents, nutrients, viruses and bacteria to receiving water bodies and prevent further illicit discharges in the future. The Town has initiated an IDDE tracking system to receive Citizen Concerns and monitor the status of known illicit discharges. For the upcoming year, the Town will be reviewing existing ordinances to verify that legal authority has been established over illicit discharges and utilize the IDDE plan template provided by CTDEEP to draft a written IDDE plan. In addition, the Town has initiated a program to map the MS4.

2.3.1 MCM #3 – BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Date completed or projected completion date	Additional Details
3-1 Develop record keeping system for IDDE tracking	Complete	Utilizing Mobile311	-	Asst. Town Engineer / EHHD Director of Health	April 25, 2017	
3-2 Develop Citizen Reporting Program	Complete	Mobile 311 has now taken place of Q-Notify allowing for Public Works to be directly notified	Initiate response to citizen concerns within 72 hours 95% of the time.	Department of Public Works	June 30, 2018	
3-3 Develop written IDDE	Complete	Plan is in use and being refined	Completion	Asst. Town Engineer / EHHD Director of Health	June 30, 2019	
3-4 Establish legal authority to prohibit illicit discharges	Complete	Public Hearing and Approval at June 10, 2019	Completion	Town Council / Town Manager / Public Works Department	June 30, 2019	
3-5 Initial Illicit Discharge Assessment and Prioritization	Complete	Completed Prioritization	Completion	Asst. Town Engineer / EHHD Director of Health	June 30, 2019	
3-6 Address IDDE in areas with pollutants of concern	Ongoing	Sampling is being conducted with priority to Impacted Water Bodies	Completion	Asst. Town Engineer / EHHD Director of Health	June 30, 2019	
3-7 Develop list and maps of all MS4 stormwater outfalls in priority areas	Complete	Town has completed mapping	Completion	Department of Public Works	June 30, 2020	

3-8 Complete MS4 Mapping	On-Going with updates	Town has mapped approximately 100% of the stormwater system and updates as portions are repaired / replaced	Inspect 30 miles of road per year	Department of Public Works	June 20, 2022	
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2.3.2 List of Citizen Reports

Date of Report	Location / suspected source	Response taken
10/25/2017	24" RCP outfall on eastern edge of Cedar Swamp Brook at Route 44	Requested photo from citizen, Citizen indicated cloudy appearance, conducted field visit (water running clear), discussed with UConn since this outfall was replaced under the Discovery Drive Construction.
3/26/2018	18" CMP outfall to unnamed stream to Sawmill Brook	A white discharge was observed by a resident. The Town investigated upstream and noted a white discharge from a hose that was laid into a Town catch basin. The hose conveyed wash water from the milking parlor of the dairy farm. This was due to a collapsed pipe in their system which was subsequently repaired.
10/14/2018	6" PVC Pipe Discharging to Eagleville Brook adjacent to North Eagleville Road on UConn Property	UConn was contacted for an odor complaint. UConn contacted the Town indicating they obtained samples from a 6" PVC pipe that discharges to a headwall with positive results of E-Coli and Coliform. Upon recommendation from EHHD samples for Phosphorous, Ammonia, and Surfactants were to be obtained however, when sample was attempted flow had ceased from the pipe. Follow ups by UConn will occur.
12/27/2022	Catch Basin at Corner of Route 195 & Route 320 / Swale from Cumberland Farms	EHHD completed inspection of the site based upon information from CTDOT. Additional work documented below.

2.3.3 Summary of Illicit Discharges and SSOs

Location (Lat long/ street crossing /address and receiving water)	Date and duration of occurrence	Discharge to MS4 or surface water	Estimated volume discharged	Known or suspected cause / Responsible party	Corrective measures planned and completed (include dates)	Sampling data (if applicable)
74°14'16"/41°48'16"	Identified 4/18/15 (7 Days)	MS4	Unknown	Plumbing Contractor	Ceased use of station and completed re-plumbing of hand wash station.	
72°12'08"/41°44'10"	Identified 7/25/17	Private	Unknown	Property Owner	Ceased use of facilities and replaced failed pump	
72°13'55"/41°45'01"	Identified 3/26/2018 (1 Day)	MS4	Unknown	Property Owner	Repaired failed facility	
72°16'01"/41°49'42"	Identified 12/27/2022 (6 Days)	MS4	Unknown	Property Owner	Leaching Field is failing and property owner is moving to connect to public sanitary sewer however, EHHD is requiring regular pumping of septic tank which is being used as holding tank	

2.3.4 Tracking Methodology

The Town utilizes the Mobile 311 application to provide a mechanism to track IDDE based on location and eventual outfall location. Citizens are able to add specific work items (or requests) that specifically get routed to the Engineering Division. This allows for that division to coordinate with Eastern Highlands Health District and if necessary, the Building Department. The Public Works Department will be transitioning in 2023, from Mobile 311 to Asset Essentials, which will continue to allow citizens and the public.

2.3.5 Failing Septic Systems

Location and nature of structure with failing septic systems	Actions taken to respond to and address the failures	Impacted waterbody or watershed, if known
1660 Storrs Road, Cumberland Farms Gas Station, Leaching Field is Failing	EHHD investigated the complaint, required the owner to investigate the septic system which determined a failing Septic Field. The Owner is pumping routinely until a permanent repair is made	3100-17-1, Cedar Swamp Brook

2.3.6 IDDE Reporting Metrics

Metrics	
Estimated number of MS4 outfalls	254
Estimated number of interconnections	26
Outfall mapping complete	100%
Interconnection mapping complete	100%
System-wide mapping complete (detailed MS4 infrastructure)	100%
Outfall assessment and priority ranking	100%
Dry weather screening of all High and Low priority outfalls complete	8
Catchment investigations complete	1
Estimated percentage of MS4 catchment area investigated	15%

2.3.7 IDDE Training

The Town conducts regular training of Facilities crews on a yearly basis about safe handling and disposal of materials, which could lead to illicit discharges. The Department of Public Works provided training for the Operations Division to identify and report illicit discharges and operating procedures for activities at parks, buildings, and roadways in Winter 2020. Further, the Department continuously trains employees on the objectives of the Stormwater Management Plan including catch basin cleaning, sweeping, green infrastructure, spill response protocols, and addressing erosion prone areas. A new training will be scheduled for this coming year to assist with newly hired employees.

2.4 MCM #4 – Construction Site Stormwater Runoff Control

This minimum control measure is a component of this SWMP because stormwater runoff from construction sites often flows to storm sewer systems and ultimately is discharged into local rivers and streams. Sediment is typically the main pollutant of concern but other pollutants include solid and sanitary wastes, phosphorous (fertilizer), pesticides, nitrogen (fertilizer), oil and grease, concrete truck washout, construction chemicals and construction debris. The goal of this minimum control measure is to reduce pollutants in stormwater runoff from construction activities. The Town has integrated four of the five BMPs this year. The remaining BMP is being introduced into the Town’s Zoning Regulations and Engineering Standards.

2.4.1 MCM #4 – BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Date completed or projected completion date	Additional Details
4-1 State Permit Notification	Ongoing	Working with Permitting Vendor to add this as standard condition as required.	Inform 100% of Permits with Greater than 1.0 acre of requirements	Zoning Enforcement Officer	July 1, 2017	
4-2 Public Involvement	Ongoing	Zoning Enforcement Officer investigates or involves individuals necessary to address public concerns.	Respond to public comment within 72 hours 95% of the time	Zoning Enforcement Officer	July 1, 2017	
4-3 Conduct Site Inspections	Ongoing	Zoning Enforcement Officer conducts site visits as required.	Inspect all sites that meet applicable threshold	Zoning Enforcement Officer	July 1, 2017	
4-4 Site Plan Review/Interdepartmental Coordination	Ongoing	The review team meets during the application process.	Complete update to zoning permit	Public Works Director / Director of Planning	July 1, 2017	
4-5 Legal Authority	Complete	Reviewing Zoning regulations and Engineering Standards as necessary.	Completion	Planning and Zoning Commission / Director of Planning	June 30, 2020	

2.5 MCM #5 – Post-Construction Stormwater Management

Stormwater runoff from developed sites often flows to stormwater management systems, to MS4s, and ultimately is discharged into local rivers and streams. Runoff from these developments and/or redevelopment areas have been shown to significantly affect receiving water bodies. In accordance with the Plan, the Town updated its Zoning regulations to require LID be used a preferred means to address stormwater quality and quantity. This year, the Town through the mapping program identified additional stormwater management features. Operation and Maintenance plans are being developed and implemented for the bio-swales, wet-detention basins and bio-filters.

2.5.1 MCM #5 – BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date
5-1 Enforce LID/runoff reduction requirements for development and redevelopment projects	On-Going	LID is considered in all permit reviews.	Completion	Director of Planning / Department of Public Works	July 1, 2022	June 30, 2020
5-2 Implement long-term maintenance plan for stormwater basins and treatment structures	On-Going	Consolidating Operation & Maintenance Plans for Publically Owned Facilities & Evaluating Use of Private Service Agreements	Complete routine maintenance on 3 stormwater basins	Department of Public Works	July 1, 2020	June 30, 2020
5-3 DCIA mapping	Complete	DCIA is mapped for the smallest HUC publically available	Completion	Department of Public Works	July 1, 2020	June 30, 2020
5-4 Address post-construction issues in areas with pollutants of concern.	On-Going	Revised intersections of minor roadways to reduce impervious coverage when resurfacing	Complete at least 1 retrofit of issue areas per year	Department of Public Works	July 1, 2020	June 30, 2020
5-5 Update legal authority and guidelines regarding LID and runoff reduction in site development planning	Complete	LID measures are required for most projects and encouraged for small scale projects	Completion	Planning & Zoning Commission	July 1, 2022	June 15, 2020

2.5.2 Post-Construction Stormwater Management Reporting Metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	286.1 ac / 1.08%
DCIA disconnected (redevelopment plus retrofits)	8.60 acres this year / 23.5 acres total
Retrofits completed (since 2012)	16
DCIA disconnected	0.03% this year / 1.6% total since 2012
Estimated cost of retrofits	\$5,000 / Town
Detention or retention ponds identified	16 total

2.5.3 DCIA Baseline

The Town utilized the Connecticut Watershed Response Plan for Impervious Cover Appendix 3 referenced on the CTDEEP Municipal Stormwater Page. This document further references the USEPA document “Estimating Change in Impervious Area (IA) and Directly Connected Impervious Areas (DCIA) for Massachusetts Small MS4 Permit. (updated April 2014).” The Town’s newer roadways are a combination of curb and gutter and sheet flow from the roadway. Several curb and gutter subdivisions constructed after 2004 were constructed with water quality components, namely retention basins, filtration basins, and bio-filters. Older roadways drain with sheet flow to the road edges. Lot sizes in the Town are mostly over 2 acres in size resulting in setbacks that minimize the number of roofs directly connected to the MS4. As a result, the DCIA is estimated utilizing Option 2 with a designation of “Average”. Where “Average” is mostly storm sewered with curb and gutter, no dry wells or infiltration, residential rooftops not directly connected.

The Town area without the area associated with the UConn MS4 is 26,540 acres. Based upon the 2012 Impervious area layer provided by CT Eco, within the Town MS4 borders and Connecticut DOT MS4, there are 1,295 acres of impervious area resulting in 4.88% impervious area. Utilizing the “partially connected” equation from UConn CLEAR the Directly connected percentage is 0.59% or 286.1 acres of directly connected impervious area.

2.6 MCM #6 – Pollution Prevention / Good Housekeeping

This measure requires the Town to examine and subsequently alter its own actions to help ensure a reduction in the amount and type of pollution that collects on roadways, parking lots, open spaces, storage and vehicle maintenance areas, and all Town maintained facilities, and any other Town owned or leased operation which ultimately discharge into local waterways. The Town conducted several activities this year including a tracking system for DCIA and implementing a street sweeping program. In 2017 and 2021, the Town and the Eastern Conservation District applied for and were notified of an award for the project located in the Saw Mill Brook and Conantville Brook Watersheds.

The Town is budgeting for improved sidewalk maintenance equipment that can more accurately disperse and pace de-icing product onto the sidewalks and multi-use paths as these have been observed to have too much product applied. The Public Works Department routinely calibrates spreaders on large and medium trucks so operators can be assured they are placing the amount of product they are expecting. Further, the Road Foreman and Operations Manager routinely monitor and discuss application rates with drivers to ensure the application of de-icing product is optimized.

2.6.1 MCM #6 – BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date
6-1 Track projects that disconnect DCIA	Complete	Spreadsheet developed identifying project and methods	Completion	Asst. Town Engineer	July 1, 2017	July 1, 2017
6-2 Develop/implement street sweeping program	Complete	Implemented Standard Operating Procedure	Completion	Operations Manager	July 1, 2018	July 1, 2017
6-3 MS4 property and operations maintenance	Complete	Reviewing draft Standard Operating Procedure	Completion	Operations Manager	July 1, 2018	June 30, 2018
6-4 Employee training program	Complete	Investigating alternatives for providing training in concurrence with IDDE	Completion	Public Works Director / Facilities Director	July 1, 2019	June 30, 2019

6-5 Develop/implement plan to identify/prioritize retrofit projects	On-Going	Applying for 319 grant funding for retrofit projects	Completion	Public Works Director	July 1, 2020	April 1, 2020
6-6 Develop/implement catch basin cleaning program	On-Going	On-going annual cleaning of catch basins	Inspect all Catch Basins within UA	Operations Manager	July 1, 2020	June 30, 2020
6-7 Implement coordination with interconnected MS4s	On-Going	The Town meets with UConn periodically to discuss stormwater	Completion	Public Works Director	Not specified	June 30, 2020
6-8 Develop/implement program to control other sources of pollutants to the MS4	In Progress		Completion	Public Works Director	Not specified	June 30, 2022
6-9 Evaluate additional measures for discharges to impaired waters	In Progress		Completion	Public Works Director	Not specified	June 30, 2022
6-10 Develop/implement snow management practices	On-Going	Continually monitoring application rates from each plow route	Reduce Salt Usage (Ton per Lane-Mile per Storm) by 1% by end of permit	Operations Manager	July 1, 2022	June 30, 2022
6-11 Implement infrastructure repair/rehab program	On-Going					
6-12 Implement retrofit projects to disconnect 2% of DCIA	Complete	The Town continues to plan projects to reduce DCIA as Town projects are completed				

2.6.2 Pollution Prevention / Good Housekeeping Metrics

Metrics	
Employee Training Provided for Key Staff	FY 2020/2021
Street Sweeping	
Curb Miles Swept	232
Volume (or mass) of material collected	690 cy
Catch Basin Cleaning	
Total catch basins in priority areas	420
Total catch basins in MS4	1,375
Catch Basins Inspected	1,375
Catch Basins Cleaned	1,375
Volume (or mass) of material removed from all catch basins	226 cy
Volume removed from catch basins to impaired waters (if known)	72 cy
Snow Management	
Type(s) of deicing material used	Treated Salt
Total Amount of each deicing material applied	1,332
Type(s) of deicing equipment used	Sander Spreader
Lane-miles treated	228 (14 Lane-Miles Gravel)
Snow disposal location	Transfer Station
Staff training provided on application methods & equipment	Yes – 2023
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic)	
Cost of mitigation actions / retrofits	\$2,000

2.6.3 Catch Basin Cleaning Program

The Town has routinely cleaned catch basins throughout Town for several years because the Town historically has utilized sand/salt mix for snow removal operations on the Town's right-of-way. The Town in 2016 moved to a treated salt only method of snow management. The DPW has continued a catch basin cleaning program that has identified several locations in Town that require increased cleaning frequency. The Town has identified areas that require additional attention during the cleaning process and periodically will clean those basins an additional time. The increased frequency locations are often from undeveloped areas however, there have been two instances where homeowners were completing DIY projects that needed education to reduce sediment. This past

year the Town had large rainstorms in November and December which presented challenges as the growing season was over resulting in additional sediment in those increased frequency locations. The Town continues to maintain approximately 14 miles of gravel road which are considered Scenic Roads. The Town is implementing increased cross slopes on these roadways and improving gutters. There are approximately 1,450 catch basins in the Town of Mansfield. This year the Town utilized its own forces and a subcontractor to clean these basins.

2.6.4 Retrofit Program

The Town has begun planning for the Retrofit Program by inventorying Town properties that currently do not have disconnected stormwater components. Through this inventory data is being collected on total impervious area, total connected impervious area, available on-site soils, and expected long term use of the facility. Concurrently with the inventory of Town facilities, grant funding opportunities that allow for stormwater and/or water quality improvements to be made are investigated.

The Town has completed two stormwater retrofits at the Bicentennial Pond Park. These retrofits were two Rain Gardens partially funded with the Eastern Conservation District and Town resources. The Town routinely utilizes a strobe system to disturb waterfowl that sleep on the pond surface to discourage their presence with moderate luck. Further research is needed to identify additional measures that can be implemented to discourage them.

The Southeast Elementary School was razed in 2022 for a new Net-Zero Elementary School. In 2023, the new Mansfield Elementary School was constructed utilizing low impact development practices. These practices include bioretention, hydrodynamic separators, gravel diaphragms and sub-surface infiltration systems. The Town has included these new practices into the yearly maintenance schedule.

An expansion of the Mansfield Public Library Parking Lot in 2023 allowed for the treatment and infiltration of the existing impervious cover and additional coverage. In 2023, the Town and Eastern Conservation District installed new rain gardens at the Sunny Acres Park to address sediment and pollutant loadings from people walking dogs and impervious coverages.

With construction of pickleball courts at the Town Hall Complex, a portion of the driveway was removed to accommodate the new courts. Runoff from these courts is directed to an infiltration trench where the runoff is treated before treatment.

The Retrofit program will continue by identifying specific Municipal Properties that are currently discharging without treating the Water Quality Volume. As these are completed additional sites along the Town's Right-of-Way will be identified by overlaying the USDA websoil survey, Town owned open space, impervious coverage, existing infrastructure, five paving plan and topography.

Year	Project Description	Potential DCIA Disconnected (ac)
2024	Hydrodynamic Separator - Spring Hill Road Outfall	~1.2 ac
2025	Mansfield Discovery Depot Parking Lot Improvements	~2.6 ac
2026	Maple Road Reconstruction – LOTCIP Project	~2.4 ac
2027	Hydrodynamic Separator – Puddin Lane Outfall	~0.9 ac
2028	Hydrodynamic Separator – North Eagleville Road Outfall	~0.7 ac

3.0 Impaired Waters Investigation and Monitoring

3.1 Impaired Waters Investigation and Monitoring Program

Indicate which stormwater pollutants (s) of concern occur(s) in your municipality of institution

Nitrogen/ Phosphorus Bacteria Mercury Other Pollutant of Concern

Program Status:

The Town is comprised of five sub-regional watersheds, the Willimantic River, Fenton River, Mount Hope River, Natchaug River and Sawmill Brook. The Fenton River, Mount Hope River and portions of the Natchaug River are Surface Water Classification A and the remaining being Classification AA. For waterbodies impaired by Bacteria screening was conducted for E.Coli and Total Coliforms with Classification AA and only E.Coli for waterbodies with Surface Water Classification A.

Follow-up investigation is required if the following pollutant thresholds are exceeded:

- E. coli > 235 col/100ml for swimming areas or 410 col/100ml for all others
- Total Coliform > 500 col/100ml

3.2 Screening Data for Outfalls to Impaired Waterbodies

Outfall ID	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other Pollutant of concern)	Results	Name of Laboratory	Follow-up required?
NEAGLERD-OT-001	4/26/19	Bacteria, Other Pollutant of Concern	E. coli 213 col /100 ml	Phoenix Environmental	No
SEPARTSTRD-OT-001	4/26/19	Bacteria, Other Pollutant of Concern	E. coli 256 col /100 ml	Phoenix Environmental	No
HILLYNRD-OT-007	4/26/19	Bacteria, Other Pollutant of Concern	E. coli 63 col /100 ml	Phoenix Environmental	No
HILLYNRD-OT-001	6/13/19	Bacteria, Other Pollutant of Concern	E. coli 279 col /100 ml	Phoenix Environmental	No
HILLYNRD-OT-002	6/13/19	Bacteria, Other Pollutant of Concern	E. coli 1,350 col /100 ml	Phoenix Environmental	Yes
HILLYNRD-OT-004	6/13/19	Bacteria, Other Pollutant of Concern	E. coli 3,450 col /100 ml	Phoenix Environmental	Yes
HILLYNRD-OT-005	6/13/19	Bacteria, Other Pollutant of Concern	E. coli 794 col /100 ml	Phoenix Environmental	Yes
HILLYNRD-OT-006	6/13/19	Bacteria, Other Pollutant of Concern	E. coli <10 col /100 ml	Phoenix Environmental	No
HUNTINGRD-OT-001	6/13/19	Bacteria, Other Pollutant of Concern	E. coli 17,300 col /100 ml	Phoenix Environmental	Yes
CONTVILLRD-OT-001	11/23/20	Bacteria	E. coli 10 col /100 ml	Phoenix Environmental	No
TIMBERDR-OT-001	11/23/20	Bacteria	E. coli 85 col /100 ml	Phoenix Environmental	No
THOMASDR-OT-002	11/23/20	Bacteria	E. coli 153 col /100 ml	Phoenix Environmental	No
BIRCHRD-OT-001	6/14/21	Bacteria	E. Coli 456 col / 100 ml	Phoenix Environmental	Yes
MANSFLD-OT-003	9/1/21	Bacteria	E. Coli 906 col / 100 ml	Phoenix Environmental	Yes
DAVISRD-OT-004	9/1/21	Bacteria	E. Coli 11,200 col / 100 ml	Phoenix Environmental	Yes
SPRINGRD-OT-001	9/1/21	Bacteria	E. Coli >24,200 col / 100 ml	Phoenix Environmental	Yes
SPRINGRD-OT-002	9/1/21	Bacteria	E. Coli 1,040 col / 100 ml	Phoenix Environmental	Yes
BRITONYDR-OT-001	10/17/22	Bacteria	E. Coli 10 col / 100 ml	Phoenix Environmental	No
BRITONYDR-OT-002	10/17/22	Bacteria	E. Coli 556 col / 100 ml	Phoenix Environmental	Yes
PINERDGLN-OT-001	10/17/22	Bacteria	E. Coli 816 col / 100 ml	Phoenix Environmental	Yes
PUDDINLN-OT-004	10/17/22	Bacteria	E. Coli >24,200 col / 100 ml	Phoenix Environmental	Yes
PUDDINLN-OT-003	10/17/22	Bacteria	E. Coli >6,130 col / 100 ml	Phoenix Environmental	Yes
PUDDINLN-OT-001	10/17/22	Bacteria	E. Coli >203 col / 100 ml	Phoenix Environmental	Yes
JACOBSRD-OT-001	10/17/22	Bacteria	E. Coli >97 col / 100 ml	Phoenix Environmental	No

3.3 Follow-up Investigations

Outfall ID	Status of drainage area investigation	Control measure implementation to address impairment
HILLYNRD-OT-002	Single Family Homes on Septic Systems with significant infestation of Gypsy Moths, Stormwater System was replaced in 2020	Follow up testing in 2024
HILLYNRD-OT-004	Single Family Homes on Septic Systems with significant infestation of Gypsy Moths, Stormwater System was replaced in 2020	Follow up testing in 2024
HILLYNRD-OT-005	Single Family Homes on Septic Systems with significant infestation of Gypsy Moths, Stormwater System was replaced in 2020	Follow up testing in 2024
HUNTINGRD-OT-001	Single Family Homes on Septic Systems, Sanitary Sewer Force Main and Gravity Wastewater Treatment Facility Discharge	Follow up testing in 2024
BIRCHRD-OT-001		Follow up testing in 2024
MANSFLD-OT-003		Follow up testing in 2024
DAVISRD-OT-004		Follow up testing in 2024
SPRINGRD-OT-001		Follow up testing in 2024
SPRINGRD-OT-002		Follow up testing in 2024

3.4 Prioritized Outfall Monitoring

Once outfall screening has been completed for at least 50% of outfalls to impaired waters, identify 6 of the highest contributors of any pollutants of concern. These outfalls will be tested annually starting in 2024.

Outfall ID	Sample date	Parameter(s)	Results	Name of Laboratory (if used)
HUNTINGRD-OT-001	2024	Bacteria		
SPRINGRD-OT-001	2024	Bacteria		
PUDDINLN-OT-004	2024	Bacteria		
DAVISRD-OT-004	2024	Bacteria		
PUDDINLN-OT-003	2024	Bacteria		
HILLYNRD-OT-004	2024	Bacteria		

Additional IDDE Program Data

Following a public hearing on June 10, 2019, the town enacted a MS4 IDDE ordinance on July 11, 2019. This ordinance allows the Town to regulate the introduction of pollutants into the storm drainage system through stormwater by any user, as well as prohibit illicit connections and discharges to the storm drainage system. The town is legally authorized to carry out inspection, surveillance, and monitoring procedures in compliance with this ordinance.

3.5 Assessment and Priority Ranking of Catchments

Provide a list of all catchments with ranking results (DEEP basins may be used instead of manual catchment delineations). The Town has not identified any problematic watersheds or excluded watersheds to date. As additional data is aggregated from testing it will be applied against existing GIS data identifying land use and infrastructure to assess and rank catchments.

Catchment ID (DEEP Basin ID)	Category	Rank	Catchment ID (DEEP Basin ID)	Category	Rank
3207-12-1	High Priority	1	3206-12-1-L2	High Priority	27
3208-01-1	High Priority	2	3206-13-1	High Priority	28
3208-00-1	High Priority	3	3206-13-1-L1	High Priority	29
3207-09-1	High Priority	4	3207-00-2-L4	High Priority	30
3207-10-1	High Priority	5	3207-00-2-L5	High Priority	31
3100-17-1	High Priority	6	3207-00-2-R10	High Priority	32
3200-00-4-L3	High Priority	7	3207-00-2-R11	High Priority	33
3206-00-3-R8	High Priority	8	3207-00-2-R12	High Priority	34
3208-03-1	High Priority	9	3207-00-2-R13	High Priority	35
3206-00-3-R7	High Priority	10	3207-00-2-R14	High Priority	36
3207-12-1-L1	High Priority	11	3207-00-2-R6	High Priority	37
3207-13-1	High Priority	12	3207-00-2-R7	High Priority	38
3208-02-2-R1	High Priority	13	3207-00-2-R8	High Priority	39
3206-11-1	High Priority	14	3207-00-2-R9	High Priority	40
3206-12-1	High Priority	15	3207-14-1	High Priority	41
3207-11-1	High Priority	16	3207-14-1-L1	High Priority	42

Catchment ID (DEEP Basin ID)	Category	Rank	Catchment ID (DEEP Basin ID)	Category	Rank
3100-18-1-L1	High Priority	17	3207-15-1	High Priority	43
3200-00-4-L1	High Priority	18	3207-15-1-L1	High Priority	44
3200-00-4-L2	High Priority	19	3100-16-1-L1	High Priority	45
3200-00-4-R11	High Priority	20	3100-19-1	High Priority	46
3200-00-4-R12	High Priority	21	3100-26-1	High Priority	47
3204-00-2-R1	High Priority	22	3208-00-2-R1	High Priority	48
3206-00-3-L3	High Priority	23	3208-02-1*	High Priority	49
3206-00-3-R6	High Priority	24	3208-02-1-L1	High Priority	50
3206-00-3-R9	High Priority	25	3100-00-3-R15	Low Priority	51
3206-12-1-L1	High Priority	26	3100-00-3-R16	Low Priority	52
3100-00-3-R17	Low Priority	53	3100-22-1	Low Priority	66
3100-00-3-R19	Low Priority	54	3100-22-1-L1	Low Priority	67
3100-00-3-R2	Low Priority	55	3100-23-1	Low Priority	68
3100-00-3-R20	Low Priority	56	3100-24-1	Low Priority	69
3100-00-3-R3	Low Priority	57	3100-26-1-L1	Low Priority	70
3100-00-3-R4	Low Priority	58	3200-00-4-R13	Low Priority	71
3100-00-3-R5	Low Priority	59	3100-19-1-L1	Low Priority	72
3100-00-3-R6	Low Priority	60	3100-19-2-R1	Low Priority	73
3100-00-3-R7	Low Priority	61	3100-16-1	Low Priority	74
3100-17-1-L1	Low Priority	62	3207-16-1	Low Priority	75
3100-18-1	Low Priority	63	3100-00-3-R18	Low Priority	76
3100-20-1	Low Priority	64	3100-17-2-R1	Low Priority	77
3100-20-1-L1	Low Priority	65			

3.6 Outfall and Interconnection Screening and Sampling Data

3.6.1 Dry Weather Screening and Sampling Data from Outfalls and Interconnections

The following table contains screening and sampling data from the highest priority watersheds indicated by

Outfall / Interconnection ID	Screening / sample date	Ammonia (mg / ml)	Chlorine (mg / ml)	Conductivity (mg / ml)	Salinity (mg / ml)	E. Coli (col / ml)	Surfactants (mg/ml)	Water Temp	Pollutant of Concern	If required, follow-up actions taken
GURLYVLRD-OT-001	11/14/23	<0.05	<0.02	237	<0.5	10	<0.05			
GURLYVLRD-OT-004	11/14/23	<0.05	<0.02	291	<0.5	<10	<0.05			
GURLYVLRD-OT-006	11/14/23	<0.05	<0.02	183	<0.5	<10	<0.05			
STEARNSRD-OT-001	12/01/23	<0.05	<0.02	276	<0.5	<10	<0.05		Bacteria	
STEARNSRD-OT-002	12/01/23	0.85	<0.02	404	<0.5	2,610	<0.05		Bacteria	Investigation Required
PUPPINLN-OT-001	12/01/23	<0.05	<0.02	114	<0.5	10	<0.05		Bacteria	

3.6.2 Wet Weather Sample and Inspection Data

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor.

Outfall / Interconnection ID	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. Coli or enterococcus	Surfactants	Water Temp	Pollutant of Concern	If required, follow-up actions taken
None										

3.7 Catchment Investigation Data

3.7.1 System Vulnerability Factor Summary

For those catchments being investigated for illicit discharges (i.e. categorized as high priority, low priority, or problem) document the presence or absence of System Vulnerability Factors (SVF). If present, report which SVF's were identified. An example is provided below.

Catchment ID	Receiving Water	System Vulnerability Factors
3207-12-1 / GURLYVLRD-OT-001	Roberts Brook	Sanitary Sewer Pumping Stations, Sanitary Sewer >40 years old, Agriculture
3208-01-1 / STEARNSRD-OT-002	Conantville Brook	Drainage Systems >40 years old, Agriculture

4.0 Certification

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."

Chief Elected Official or Principal Executive Officer

Print name:

Ryan J. Aylesworth

Document Prepared by

Print name:

Derek M Dilaj, PE

Signature / Date



Signature / Date:

