

Stormwater Management Program (SWMP)

Town of Stratham

Updated August 2024

EPA NPDES Permit Number NHR041000

Certification

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Printed Name: David Moore, Town Administrator

Signature:  Date: 8/14/2024

Background

Stormwater Regulation

The Stormwater Phase II Final Rule was promulgated in 1999 and was the next step after the 1987 Phase I Rule in EPA's effort to preserve, protect, and improve the Nation's water resources from polluted stormwater runoff. The Phase II program expands the Phase I program by requiring additional operators of MS4s in urbanized areas and operators of small construction sites, through the use of NPDES permits, to implement programs and practices to control polluted stormwater runoff. Phase II is intended to further reduce adverse impacts to water quality and aquatic habitat by instituting the use of controls on the unregulated sources of stormwater discharges that have the greatest likelihood of causing continued environmental degradation. Under the Phase II rule all MS4s with stormwater discharges from Census designated Urbanized Area are required to seek NPDES permit coverage for those stormwater discharges.

Permit Program Background

On May 1, 2003, EPA Region 1 issued its Final General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (2003 small MS4 permit) consistent with the Phase II rule. The 2003 small MS4 permit covered "traditional" (i.e., cities and towns) and "non-traditional" (i.e., Federal and state agencies) MS4 Operators located in the states of Massachusetts and New Hampshire. This permit expired on May 1, 2008 but remained in effect until operators were authorized under the 2016 MS4 general permit, which became effective on July 1, 2018.

Stormwater Management Program (SWMP)

The SWMP describes and details the activities and measures that have been and will be implemented to meet the terms and conditions of the permit. The SWMP accurately describes the permittees plans and activities. The document should be updated and/or modified during the permit term as the permittee's activities are modified, changed, or updated to meet permit conditions during the permit term. The main elements of the stormwater management program are (1) a public education program in order to affect public behavior causing stormwater pollution, (2) an opportunity for the public to participate and provide comments on the stormwater program (3) a program to effectively find and eliminate illicit discharges within the MS4 (4) a program to effectively control construction site stormwater discharges to the MS4 (5) a program to ensure that stormwater from development projects entering the MS4 is adequately controlled by the construction of stormwater controls, and (6) a good housekeeping program to ensure that stormwater pollution sources on municipal properties and from municipal operations are minimized.

Small MS4 Authorization

The NOI was submitted on: September 28, 2018

The NOI can be found at the following web address:

<https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit>

Authorization to Discharge under the 2017 NH Small MS4 General Permit was granted on June 14, 2019.

The Authorization Letter can be found at the following web address:

<https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit>

Stormwater Management Program Team

SWMP Team Coordinator:

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SWMP Team:

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Position/Title:	Planning Project Assistant
Name:	Susan Connors
Department:	Planning Department
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Receiving Waters

The list of receiving waters, impairments, and number of outfalls discharging to each waterbody segment in Stratham's MS4 area was updated in Year 6. The information is presented on the "Outfall Map with Catchments" on the Town of Stratham's website at <https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit> and on the outfall ranking available at <https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit>.

Waterbody Segment	# of outfalls	Chloride	Chlorophyll-a	Dissolved Oxygen/ DO Saturation	Nitrogen	Oil & Grease/ PAH	Solids/TSS/Turbidity	E. coli	Enterococcus	Other pollutant(s) causing impairments
Great Bay Prohibited Safety Zone 1 NHEST600030904-02	0	X			X				X	EB ¹ , LAC ² , pH, Mercury, PCBs, Dioxin
Squamscott River North NHEST600030806-01-02	0	X	X	X					X	EB ¹ , LAC ² , pH, Mercury, PCBs, Dioxin
Squamscott River South NHEST600030806-01-01	0	X	X	X	X				X	Mercury, PCBs, Dioxin, and see footnote ³
Parkman Brook NHRIV600030806-04	0	X						X		N/A
Winnicutt River-Barton Brook-Marsh Brook-Thompson Brook NHRIV600030901-02	0				X			X		N/A
Winnicutt River-Unnamed Brook-Cornelius Brook NHRIV600030901-01	0				X			X		pH, Benthic Macroinvertebrate
Winnicutt River-Unnamed Brook NHRIV600030901-07	0				X					pH
Stuart Dairy Farm Brook NHRIV600030806-14	0							X		N/A
Winding Brook NHRIV600030806-27	1	No impairments								

¹EB = Estuarine Bioassessments

²LAC = light attenuation coefficient

³Acenaphthene, Acenaphthylene, Aluminum, Anthracene, Arsenic, Benzo(a)pyrene (PAHs), Benzo[a]anthracene, Cadmium, Chrysene (C1-C4), Copper, Dibenz[a,h]anthracene, Fluoranthene

Fluorene, Lead, Mercury, Nickel, Phenanthrene, Pyrene, Zinc, trans-Nonachlor

Eligibility: Endangered Species and Historic Properties

Stratham has updated its eligibility from what was filed with the Notice of Intent.

Endangered Species Notice of Intent Guidance Criteria:

Use Fish and Wildlife Service IPAC Tool - <https://ecos.fws.gov/ipac/>

Select the applicable finding:

- Criteria A – Are there any Endangered Species? If No, Select A
- Criteria B – Does your MS4 area have a dwarf wedge mussel, northeast bulrush, Piping Plover, Roseate Tern, Jessup Milk-vetch? If Yes, will your discharge activities likely to affect listed species?
- Criteria C – Does your MS4 area have a Northern long-eared bat or Small whorled Pogonia and not any species listed in Criteria B OR did you contact EPA and they agree that your discharge activities will have no affect?

The following species were identified within Stratham's MS4 area using the US Fish and Wildlife IPaC mapping tool:

Northern Long-eared Bat (Endangered), Tricolored Bat (Proposed Endangered), Roseate Tern (Endangered), Monarch Butterfly (Candidate), and Small Whorled Pogonia (Threatened).

Stratham is Criteria B due to the presence of Roseate Tern habitat along the shore of Great Bay. However, the habitat area within the Town of Stratham includes properties owned by the State of New Hampshire and the Town of Stratham with no development plans. Additional properties were minimally developed as residential prior to issuance of the MS4 Permit to the Town of Stratham.

National Historic Preservation Act Notice of Intent Guidance Criteria:

- Criteria A – Were you subject to the 2003 MS4 Permit? If so, you are considered a previously authorized facility. Select Criteria A.
- Criteria B – If you were not subject to the 2003 MS4 Permit, are there any permit activities planned that will disturb less than 1 acre? If No, select Criteria A. If Yes, is the property listed on the National Register of Historic Places or otherwise a historic property? If No, Select Criteria B. If Yes Select Criteria C.
- Criteria C – Contact the NH Division of Historical Resources to discuss any potential impacts planned permit activities may have on historic resources. If impact is likely, working with the NH Division of Historical Resources will require selecting Criteria D.

Stratham is Criteria B. Stratham has an active Heritage Commission that retains a list of Properties on the National Register of Historic Places and on the NH State Register of Historic Places. Stratham has a Historic Demolition Review Ordinance (Section 16.1) that reviews proposed demolition projects greater than 500 square feet of gross floor area in buildings more than 50 years old. Stratham will consult with the NHDHR on any stormwater control measures proposed for sites listed on the National Register or State Register prior to construction.

MCM 1

Public Education and Outreach

Permit Part 2.3.2

BMP 1-1: Pet Waste Disposal	
Description:	Link to pet waste education brochure on Stratham's MS4 webpage: https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit
Targeted Audience:	Registered Dog Owners
Responsible Departments:	Planning and Town Clerk's Office
Measurable Goal(s):	Direct email to all registered dog owners included the link.
Message Date:	1-1-2024

BMP 1-2: Pet Waste Disposal	
Description:	Electronic Select Board Newsletter with link to pet waste education brochure and Stratham's MS4 webpage along with information on the Regulation of Dogs Ordinance.
Targeted Audience:	Residents and Businesses
Responsible Department:	Planning
Measurable Goal(s):	Reached 1,878 newsletter subscribers
Message Date:	7-12-2024

BMP 1-3: Pet Waste Disposal	
Description:	Dog waste bag dispensers
Targeted Audience:	Stratham Hill Park
Responsible Departments:	Parks & Recreation and Public Works
Measurable Goal(s):	Number of dog waste bags distributed
Message Date:	Year-round

BMP 1-4: Septic System Maintenance	
Description:	Electronic Select Board Newsletter during National Septic Smart Week included info on what is flushable, tree and shrub impact on septic systems, and septic pumping.
Targeted Audience:	Residents and Businesses
Responsible Department:	Planning
Measurable Goal(s):	Reached 1,878 newsletter subscribers
Message Date:	9-22-2023

BMP 1-5: Leaf Litter and Yard Waste	
Description:	Electronic Select Board Newsletter included info on free yard waste and leaf litter disposal and included links to BMPs and composting.
Targeted Audience:	Residents and Businesses
Responsible Department:	Planning
Measurable Goal(s):	Reached 1,878 newsletter subscribers
Message Date:	10-20-2023

BMP 1-6: Grass and Fertilizer	
Description:	Electronic Select Board Newsletter with lawn care tips about fertilization, soil testing, and mowing.
Targeted Audience:	Residents and Businesses
Responsible Department:	Planning
Measurable Goal(s):	Reached 1,878 newsletter subscribers
Message Date:	4-19-2024

BMP 1-7: Construction Site Stormwater Runoff Control	
Description:	EPA CGP Fact Sheet and Construction Site Erosion and Sediment BMPs Fact Sheet
Targeted Audience:	Developers
Responsible Department:	Planning
Measurable Goal(s):	Fact Sheets are on Stratham's MS4 web page and attached to individual Notices of Decision, as applicable.
Message Date:	April 2024 and attached to individual NODs.

MCM 2

Public Involvement and Participation

Permit Part 2.3.3

BMP 2-1: Public Review of Stormwater Management Program	
Web Address of Plan:	https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit
Responsible Departments:	Town Administration, DPW, and Planning
Measurable Goal(s):	The Town of Stratham's Stormwater Management Plan is available on the website for public comment. Comments will be addressed and updates included in the SWMP as needed.

BMP 2-2: Public Participation in Stormwater Management Program Development	
Description:	Instructions are posted on Stratham's MS4 website for submitting comments on the SWMP.
Responsible Department:	Town Administration, DPW, and Planning
Measurable Goal(s):	The Town of Stratham's Stormwater Management Plan is available on the website for public comment. Comments will be addressed and updates included in the SWMP as needed.

BMP 2-3: Hazardous Waste Collection Day	
Description:	Stratham participates in Exeter's Household Hazardous Waste Collection Day.
Targeted Audience:	Residents and Businesses
Responsible Department:	Select Board and DPW
Measurable Goal(s):	132 households participated in event held 10/21/2023.
Message Date:	10/21/2023

BMP 2-4: Open Space and Connectivity Plan Public Outreach Event	
Description:	Public presentation of the draft Open Space and Connectivity Plan. The Plan is intended to provide Stratham a blueprint to guide long-range planning to help preserve open spaces, provide a better connected and more pedestrian- and cyclist-friendly community, and provide guidance to help balance goals related to habitat and ecological protection, recreation, and other needs.
Targeted Audience:	Residents and Businesses
Responsible Departments	Planning and Conservation Commission
Measurable Goal(s):	Approximately 25 residents attended the event held 2/12/2024.
Message Date:	2/9/2024

BMP 2-5: Spring Clean-up Day	
Description:	Volunteers receive trash bags, gloves, and safety vests to pick up trash throughout the town.
Targeted Audience:	Residents and Businesses
Responsible Department:	Conservation Commission
Measurable Goal(s):	20 persons participated in the event held May 14, 2024.
Message Date:	4/19/2024 and 5/3/2024

BMP 2-6: DPW Open House	
Description:	Stratham residents were educated on equipment, participated in a truck naming contest, and could ask questions to Casella Waste Management regarding trash and recycling.
Targeted Audience:	Residents
Responsible Department:	DPW
Measurable Goal(s):	Approximately 100 people participated in the event held May 22, 2024.
Message Date:	3/22/2024, 5/3/2024, 5/17/2024 and 5/31/2024

MCM 3

Illicit Discharge Detection and Elimination Program

Permit Part 2.3.4

BMP 3-1: IDDE Legal Authority

Town Ordinance, Chapter 9-01

Responsible Departments: Select Board and DPW

BMP 3-2: Sanitary Sewer Overflow (SSO) Inventory

There is no sanitary sewer system owned or operated by the Town of Stratham.

BMP 3-3: Map of Storm Sewer System

See Outfall Map with Catchments on the Town of Stratham's MS4 webpage under "MCM # 3".
<https://www.strathamnh.gov/planning-board/pages/stormwater-and-strathams-ms4-permit>

BMP 3-4: IDDE Program

See Illicit Discharge Detection and Elimination (IDDE) Plan on the Town of Stratham's MS4 webpage under "MCM # 3".

<https://www.strathamnh.gov/planning-board/pages/stormwater-and-strathams-ms4-permit>

Measurable Goals:

- Conduct 100% of outfall screening on High and Low Priority Outfalls by June 30, 2024.
- Complete catchment investigations for 100% of the Problem Outfalls by June 30, 2028.
- Complete 100% of all catchment investigations by June 30, 2031.

In Year 6 the Town of Stratham screened 25 of 28 identified outfalls in the MS4 area. Access to three outfalls was prohibited by vegetation. The Town of Stratham plans to obtain access to the remaining three outfalls in the fall of 2024 and is continually working to identify, categorize, and inspect additional outfalls.

BMP 3-5: Employee Training

See Illicit Discharge Detection and Elimination (IDDE) Plan on the Town of Stratham's MS4 webpage under "MCM # 3".

<https://www.strathamnh.gov/planning-board/pages/stormwater-and-strathams-ms4-permit>

Measurable Goals: Complete annual training.

Responsible Department: DPW

MCM 4

Construction Site Stormwater Runoff Control

Permit Part 2.3.5

BMP 4-1: Sediment and Erosion Control Ordinance

Completed? Yes No

Regulatory Reference: Site Plan Review Regulations, Addendum A

<https://www.strathamnh.gov/planning-zoning-department/pages/rules-regulations>

Responsible Department: Planning

Description: Existing regulations require the installation of sediment and erosion control measures but do not specifically address demolition debris, litter, and sanitary wastes

Measurable Goal(s): Modify the existing regulations to meet the requirements of Section 2.3.5.3.a of the permit to include demolition debris, litter, and sanitary wastes.

BMP 4-2: Site Plan Review, Site Inspections, and Enforcement of Sediment and Erosion Control Measures Procedures

Written procedures completed? Yes No

Document Name and/or Web Address: In development

Responsible Department: Planning

Description: Develop written procedures for site plan review, site inspections, and enforcement of sediment and erosion control measures.

Measurable Goal(s): Development of a regulatory mechanism as required in Section 2.3.5.3.b of the permit and conduct site plan reviews and construction inspections of 100% of applicable projects according to the procedures developed.

MCM 5

Post Construction Stormwater Management in New Development and Redevelopment

Permit Part 2.3.6

BMP 5-1: Post-Construction Ordinance

Completed? Yes No

Town Ordinances Link or Reference: Amendments in development

Department Responsible for Enforcement: Planning

Measurable Goal(s): Modify existing regulations to meet the pollutant removal requirements in Section 2.3.6.a.i, and to meet as-built drawing submittal deadlines and requirements, and long-term operation and maintenance requirements in Section 2.3.6.b.

BMP 5-2: Street Design and Parking Lot Guidelines Report

Completed? Yes No

Document Name and/or Web Address: “New Hampshire Small MS4 Regulation Assessment Report, Stratham” available under MCM #5 at: <https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit>

Department Responsible for Enforcement: Planning

Measurable Goal(s): Recommendations to be reviewed by June 30, 2025 for possible implementation by June 30, 2026.

BMP 5-3: Green Infrastructure Report

Completed? Yes No

Document Name and/or Web Address: “New Hampshire Small MS4 Regulation Assessment Report, Stratham” available under MCM #5 at: <https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit>

Department Responsible for Enforcement: Planning

Measurable Goal(s): Recommendations to be reviewed by June 30, 2025 for possible implementation for possible implementation by June 30, 2026.

BMP 5-4: List of Municipal Retrofit Opportunities

Completed? Yes No

Document Name and/or Web Address: “Municipal Inventory and Priority Ranking for stormwater BMP retrofit” available under MCM #5 at: <https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit>

Department Responsible for Enforcement: Planning

Measurable Goal(s): Construct one demonstration BMP by June 30, 2025

MCM 6

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

Permit Part 2.3.7

PERMITTEE OWNED FACILITIES

BMP 6-1: Parks and Open Spaces Operations and Maintenance Procedures

Written Document Completed? Yes No

Document Name and/or Web Address: "Town of Stratham Good Housekeeping and Pollution Prevention for Permittee-Owned Operations and Procedures" drafted, in final review.

Responsible Departments: Planning (documentation) and DPW (implementation)

Description: In accordance with Section 2.3.7.1.a of the MS4 permit establish the following procedures: 1) to address the proper use, storage, and disposal of pesticides, herbicides, and fertilizers including minimizing the use of these products; 2) for the management of trash containers at parks and for placing signage in areas concerning the proper disposal of pet wastes; 3) to address waterfowl congregation areas where appropriate to reduce waterfowl droppings from entering the MS4; and 4) to address erosion or poor vegetative cover when the permittee becomes aware of it.

Measurable Goal(s): Finalize the procedures and implement the procedures at municipally owned parks and open spaces within the MS4 area.

BMP 6-2: Buildings and Facilities Operations and Maintenance Procedures

Written Document Completed? Yes No

Document Name and/or Web Address: "Town of Stratham Good Housekeeping and Pollution Prevention for Permittee-Owned Operations and Procedures" drafted, in final review.

Responsible Departments: Planning (documentation) and DPW (implementation)

Description: In accordance with Section 2.3.7.1 b. of the MS4 permit, evaluate the use, storage, and disposal of petroleum products and other potential stormwater pollutants. Provide employee training as necessary. Ensure that Spill Prevention Plans are in place. Develop management procedures for dumpsters and other waste management equipment. Sweep lots and areas surrounding the facilities clean to reduce runoff of pollutants.

Measurable Goal(s): Finalize the procedures and implement the procedures at municipally owned buildings and facilities in the MS4 area.

BMP 6-3: Vehicles and Equipment Operations and Maintenance Procedures

Written Document Completed? Yes No

Document Name and/or Web Address: "Town of Stratham Good Housekeeping and Pollution Prevention for Permittee-Owned Operations and Procedures" drafted, in final review.

Responsible Departments: Planning (documentation) and DPW (implementation)

Description: Establish procedures for the storage of permittee vehicles. Evaluate fueling areas

owned by the permittee or used by permittee vehicles. Establish procedures to ensure that vehicle wash waters are not discharged to municipal stormdrains or surface waters.

Measurable Goal(s): Finalize the procedures and implement the procedures on 100% of vehicles and equipment.

INFRASTRUCTURE

BMP 6-4: Catch Basin Cleaning Program

Written Document Completed? Yes No

Document Name and/or Web Address: "Town of Stratham Good Housekeeping and Pollution Prevention for Permittee-Owned Operations and Procedures" drafted, in final review.

Responsible Departments: Planning (documentation) and DPW (implementation)

Description: Establish a schedule for routine inspections, cleaning, and maintenance of the catch basins that are located within the MS4 regulated area annually to reduce the discharge of pollutants from the MS4.

Measurable Goal(s): The Town of Stratham will implement the catch basin inspection and cleaning procedures outlined in the "Town of Stratham Good Housekeeping and Pollution Prevention for Permittee-Owned Operations and Procedures" document. All catch basins will be cleaned in accordance with the procedures in the document so that no catch basin is more than 50% full at any given time.

BMP 6-5: Street Sweeping Program

Written Document Completed? Yes No

Document Name and/or Web Address: "Town of Stratham Good Housekeeping and Pollution Prevention for Permittee-Owned Operations and Procedures" drafted, in final review.

Responsible Departments: Planning (documentation) and DPW (implementation)

Description: Establish and implement procedures for sweeping all municipal parking lots and provide for free leaf litter drop off.

Measurable Goal(s): Annually implement the Street Sweeping Program as described in the "Town of Stratham Good Housekeeping and Pollution Prevention for Permittee-Owned Operations and Procedures" document.

BMP 6-6: Winter Road Maintenance Program

Written Document Completed? Yes No

Document Name and/or Web Address: "Town of Stratham Good Housekeeping and Pollution Prevention for Permittee-Owned Operations and Procedures" drafted, in final review and "Salt Reduction Plan".

Responsible Departments: Planning (documentation) and DPW (implementation)

Description: Establish and implement procedures for winter road maintenance including the use and storage of salt and sand; minimizing the use of sodium chloride and other salts, and evaluating opportunities for use of alternative materials; and ensuring that snow disposal activities do not result in disposal of snow into waters of the United States.

Measurable Goal(s): Annually implement the Winter Road Maintenance procedures as described in the “Town of Stratham Good Housekeeping and Pollution Prevention for Permittee-Owned Operations and Procedures” document. Evaluate at least one salt/chloride alternative for use in the municipality.

BMP 6-7: Stormwater Treatment Structures Inspection and Maintenance Procedures

Written Document Completed? Yes No

Document Name and/or Web Address: “Town of Stratham Good Housekeeping and Pollution Prevention for Permittee-Owned Operations and Procedures” drafted, in final review.

Responsible Departments: Planning (documentation) and DPW (implementation)

Description: Establish and implement inspection and maintenance frequencies and procedures for the storm drain systems and for all stormwater treatment structures such as water quality swales, retention/detention basins, infiltration structures, proprietary treatment devices or other similar structures. All permittee-owned stormwater treatment structures (excluding catch basins) shall be inspected annually at a minimum.

Measurable Goal(s): Inspect and maintain municipally owned treatment structures to ensure proper function. Structural stormwater BMPs will be inspected annually at a minimum and maintained as needed.

BMP 6-8: SWPPP (Transfer Station, DPW Facility, and Stratham Hill Park)

Written Documents Completed? Yes No

Document Name and/or Web Address:

<https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit>

Responsible Department: DPW

Description: SWPPPs have been developed for the Stratham Transfer Station, the DPW Facility, and Stratham Hill Park.

Measurable Goal(s): Implement the SWPPP's for the above referenced facilities and conduct quarterly inspections.

Annual Evaluation

Year 1 Annual Report

Document Name and/or Web Address:

<https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit>

Year 2 Annual Report

Document Name and/or Web Address:

<https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit>

Year 3 Annual Report

Document Name and/or Web Address:

<https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit>

Year 4 Annual Report

Document Name and/or Web Address:

<https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit>

Year 5 Annual Report

Document Name and/or Web Address:

<https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit>

Year 6 Annual Report

Document Name and/or Web Address:

<https://www.strathamnh.gov/planning-zoning-department/pages/stormwater-and-strathams-ms4-permit>

TMDLs and Water Quality Limited Waters

Bacteria/Pathogens

Per the 2020-2022 303d list the following waterbodies are water quality limited where Bacteria is the cause of impairment:

Waterbody	Impairment	TMDL?
Great Bay Prohibited Safety Zone 1	Enterococcus	Yes
Squamscott River North	Enterococcus	Yes
Squamscott River South	Enterococcus	Yes
Winnicutt River-Barton Brook-Marsh Brook-Thompson Brook	Escherichia coli	Yes
Winnicutt River-Unnamed Brook-Cornelius Brook	Escherichia coli	No
Tributary to Squamscott River (Stuart Dairy Farm Brook)	Escherichia coli	Yes
Wheelwright Creek-Parkman Brook	Escherichia coli	Yes

Annual Requirements Beginning Year 3:

- Rank outfalls to these receiving waters as high priority for IDDE implementation in the initial outfall ranking. See IDDE Plan for ranking.
- Annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate. See BMPs 1-1, 1-2, and 1-3 in this SWMP.
- Annual message that provides information to owners of septic systems about the proper maintenance of septic systems. See BMP 1-4 in this SWMP.

Nitrogen Impairment

Per the 2020-2022 303d list the following waterbodies are water quality limited where Nitrogen is the cause of impairment:

Waterbody	Impairment	TMDL?
Great Bay Prohibited Safety Zone 1	Nitrogen (Total)	No
Squamscott River North	Nitrogen (Total)	No
Squamscott River South	Nitrogen (Total)	No

Annual Requirements Beginning Year 3:

- Rank outfalls to these receiving waters as high priority for IDDE implementation in the initial outfall ranking. See IDDE Plan for ranking.
- Distribute an annual message in the spring (April/May) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers. See BMP 1-6 in this SWMP.
- Distribute an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances. See BMPs 1-2 and 1-3 in this SWMP.
- Distribute an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter. See BMP 1-5 in this SWMP.
- Establish requirements for the use of slow release fertilizers on permittee owned property currently using fertilizer, in addition to reducing and managing fertilizer use as provided in part 2.3.7.1.
- Establish procedures to properly manage grass cuttings and leaf litter on permittee property, including prohibiting blowing organic waste materials onto adjacent impervious surfaces. See BMP 1-6 in this SWMP.
- Increase street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall) as included in this SWMP. See “Town of Stratham Street Sweeping Schedule”.
- Any structural BMPs listed in Table 3 of Attachment 1 to Appendix H already existing or installed in the regulated area by the permittee or its agents shall be tracked and the permittee shall estimate the nitrogen removal by the BMP consistent with Attachment 1 to Appendix H. The Town of Stratham is receiving training on the NHDES Pollutant Tracking and Account Project database to meet this requirement.

Requirements Due by Year 4:

- The requirement for adoption/amendment of the permittee's ordinance or other regulatory mechanism shall include a requirement that new development and redevelopment stormwater management BMPs be optimized for nitrogen removal.

Requirements Due by Year 6:

- Complete a Nitrogen Source Identification Report.
- Retrofit inventory and priority ranking under 2.3.6.1.b. shall include consideration of BMPs to reduce nitrogen discharges.

Requirements Due by Year 7:

- Evaluate all permittee-owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under Permit part 2.3.6.d.ii or identified in the Nitrogen Source Identification Report that are within the drainage area of the impaired water or its tributaries.
- Complete a listing of planned structural BMPs and a plan and schedule for implementation.

Solids, Oil and Grease (Hydrocarbons), or Metals Impairments

Per the 2020-2022 303d list the following waterbodies are water quality limited where Solids, Oil and Grease, or Metals are the cause of impairment:

Waterbody	Impairments
Squamscott River South NHEST600030806-01-01	Benzo(a)pyrene (PAHs) and cadmium, copper, lead and zinc

Annual Requirements Beginning Year 3:

- Increase street sweeping frequency of all municipal parking lots to a schedule to target areas with potential for high pollutant loads. There are no curbed public streets in the Town of Stratham's MS4 area.
- Prioritize inspection and maintenance for catch basins to ensure that no sump shall be more than 50 percent full. Clean catch basins more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings as prescribed by this SWMP.

Requirements Due by Year 4:

- Stormwater management systems designed on commercial and industrial land use area draining to the water quality limited water body shall incorporate designs that allow for shutdown and containment where appropriate to isolate the system in the event of an emergency spill or other unexpected event. The Town of Stratham is in the process of modifying its stormwater regulations to meet this requirement.

Chloride Impairment

Per the 2020-2022 303d list the following waterbody is water quality limited where Chloride is the cause of impairment: Parkman Brook, NHRIV600030806-04

Annual Requirement Beginning Year 5:

Distribute an annual message to private parking lot owners and operators and private street owners and operators regarding training and certification on salt application in accordance with Env-Wq 2203. The message may include information on the proper storage and application rates of winter deicing material, along with the steps that can be taken to minimize salt use and protect local waterbodies. Thirty-nine letters were mailed to targeted landowners on January 11, 2024 and will continue annually.

Requirement Due by Year 5:

A Salt Reduction Plan was developed in Year 5 and will be updated prior to the 2024/2025 winter season.

Requirement Due by Year 6:

Continue implementation of the Salt Reduction Plan.

Requirement Due by Year 7:

Fully implement the Salt Reduction Plan.

Chloride TMDL

This section is not applicable. A TMDL has not been prepared for Parkman Brook.