

Stormwater Management Program (SWMP)

TOWN OF WINDHAM, NEW HAMPSHIRE

4 North Lowell Road, Windham, New Hampshire 03087



Permit Year 6-7

Most Recent Update: September 2024

Prepared By:

**Town of Windham, Seacoast Stormwater Coalition &
New Hampshire Lower Merrimack Valley Stormwater Coalition**

EPA NPDES Permit Number NHR041035

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Certification

Authorized Representative:

The authorization letter is:

Attached to this document (document name listed below):

Letter_of_TA_SWMP_Authorization

Publicly available at the website:

"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:

Brian McCarthy, Town Administrator



9/27/24

Signature:

Date:

1.0 Introduction / Overview

1.1 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 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.

1.2 Small MS4 Authorization

The NOI was submitted on **September 27, 2018**.

The NOI can be found at the following:

<https://www3.epa.gov/region1/npdes/stormwater/nh/tms4noi/windham.pdf>

Authorization to Discharge under the 2017 NH Small MS4 General Permit was granted on **March 18, 2019**.

The Authorization Letter can be found:

<https://www3.epa.gov/region1/npdes/stormwater/nh/tms4noi/windham-auth.pdf>

1.3 Stormwater Management Program Team

SWMP Team Coordinator:

Position/Title: Town Administrator

Name: Brian McCarthy
Department: Administration
Phone Number: 603.432.7732
Email Address: TownAdmin@windhamnh.gov

SWMP Team:

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Position/Title: Community Development
Director

Name: Alex Mello
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Phone Number: 603.432.3806
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Position/Title: Environmental Planner

Name: Meaghan O'Dwyer
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1.4 Receiving Waters

The list of receiving waters, impairments and number of outfalls discharging to each waterbody segment updated to the most recent 2020/2022 305(b) and 303(d) list can be found below. The state list of impaired waters (303d) is updated biannually, and the Town of Windham intends to update the list of receiving waters in table 1.4.A as new reports are published. The original listing on the 2018 NOI can be found in Appendix A. Additionally, 1.4.2 lists all known community wells and one known public surface water source in Windham, New Hampshire.

Key Terms (Definitions can be found in Appendix A of the 2017 MS4 General Permit)

- **Impaired Water** – A water is impaired if it does not meet one or more of its designated use(s). For purposes of this permit, ‘impaired’ refers to categories 4 and 5 of the five part categorization approach used for classifying the water quality standards attainment status for water segments under the TMDL program. Impaired waters compilations are also sometimes referred to as “303(d) lists”. Category 5 waters are impaired because at least one designated use is not being supported or is threatened and a TMDL is needed. Category 4 waters indicate that at least one designated use is not being supported but a TMDL is not needed (4a indicates that a TMDL has been approved or established by EPA; 4b indicates other required control measures are expected in result in the attainment of water quality standards in a reasonable period of time; and 4c indicates that the nonattainment of the water quality standard is the result of pollution (e.g. habitat) and is not caused by a pollutant. See USEPA’s 2006 Integrated Report Guidance, July 29, 2005 for more detail on the five part categorization of waters [under EPA National TMDL Guidance <http://www.epa.gov/owow/tmdl/policy.html>]).
- **Pollutant of Concern** - A pollutant which causes or contributes to a violation of a water quality standard, including a pollutant which is identified as causing an impairment in a State's 303(d) list.
- **Total Maximum Daily Loads (TMDLs)** - A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes waste load allocations (WLAs) for point source discharges; load allocations (LAs) for nonpoint sources and/or natural background, and must include a margin of safety (MOS) and account for seasonal variations. (See section 303(d) of the Clean Water Act and 40 CFR §130.2 and §130.7).
- **Water Quality Limited Water** – for the purposes of this permit, a water quality limited water is any waterbody that does not meet applicable water quality standards, including but not limited to waters listed in categories 5 or 4b on the most recent (as of the permit effective date) EPA-approved New Hampshire Integrated Report of waters listed pursuant to Clean Water Act section 303(d) and 305(b).

Figure 1.4.A – Town of Windham Receiving Waters

Town of Windham NH Receiving Waters (Updated for NHDES 2020/2022 305(b)/ 303(d) list)													
Impaired Waterbodies in MS4 Regulated Area with a TMDL : CHLORIDE													
Assessment Unit ID (AUID)	Assessment Unit Name	Assessment Unit Category	On Original NOI (2018)?	NOI - Outfalls into receiving water segment	Number of Outfalls Discharging to Waterbody Years 1-6	Chloride	Chlorophyll-a	Impairment Name, Category					
								Dissolved Oxygen/DO Saturation	Nitrogen	Oil & Grease	Phosphorus	Solids/TSS/Turbidity	
NHRI700061102-18	POLICY BROOK - PORCUPINE BROOK	5-P	Y	1	0	X							Arsenic, Benthic Macroinvertebrate Bioassessment (Streams), Iron, pH, Mercury ¹
NHRI700061102-23	UNNAMED BROOK TO WESTERN EMBAYMENT	4A-P	Y	2	1	X							Mercury ¹
NHRI700061204-01	DINSMORE BROOK	4A-M	Y	1	1	X							Mercury ¹
Impaired Waterbodies in MS4 Regulated Area with a TMDL : E.Coli (ESCHERICHIA COLI)													
Assessment Unit ID (AUID)	Assessment Unit Name	Assessment Unit Category	On Original NOI (2018)?	NOI - Outfalls into receiving water segment	Number of Outfalls Discharging to Waterbody Years 1-6	Chloride	Chlorophyll-a	Impairment Name, Category					Other Pollutants Causing Impairments
								Dissolved Oxygen/DO Saturation	Nitrogen	Oil & Grease	Phosphorus	Solids/TSS/Turbidity	E.Coli
NHRI700061203-22	BEAVER BROOK	5-P	N		1								Benthic Macroinvertebrate Bioassessment (Streams)
Impaired Waterbodies in MS4 Regulated Area without a TMDL - E.Coli (Escherichia Coli) Impairment													
Assessment Unit ID (AUID)	Assessment Unit Name	Assessment Unit Category	On Original NOI (2018)?	NOI - Outfalls into receiving water segment	Number of Outfalls Discharging to Waterbody Years 1-6	Chloride	Chlorophyll-a	Impairment Name, Category					Other Pollutants Causing Impairments
								Dissolved Oxygen/DO Saturation	Nitrogen	Oil & Grease	Phosphorus	Solids/TSS/Turbidity	E.Coli
NHLAK700061204-01-03	COBBETS POND - TOWN BEACH	5-M	Y	1	2								Cyanobacteria hepatotoxic microcystins, Mercury ¹
Impaired Waterbodies in MS4 Regulated Area without a TMDL - Phosphorus Impairment													
Assessment Unit ID (AUID)	Assessment Unit Name	Assessment Unit Category	On Original NOI (2018)?	NOI - Outfalls into receiving water segment	Number of Outfalls Discharging to Waterbody Years 1-6	Chloride	Chlorophyll-a	Impairment Name, Category					Other Pollutants Causing Impairments
								Dissolved Oxygen/DO Saturation	Nitrogen	Oil & Grease	Phosphorus	Solids/TSS/Turbidity	E.Coli
NHLAK700061204-01-01	COBBETS POND	5-M	Y	2	6		X				X		pH, Cyanobacteria hepatotoxic microcystins, Non-Native Aquatic Plant Species, Mercury ¹
Impaired Waterbodies in MS4 Regulated Area without a TMDL - Chloride Impairment													
Assessment Unit ID (AUID)	Assessment Unit Name	Assessment Unit Category	On Original NOI (2018)?	NOI - Outfalls into receiving water segment	Number of Outfalls Discharging to Waterbody Years 1-6	Chloride	Chlorophyll-a	Impairment Name, Category					Other Pollutants Causing Impairments
								Dissolved Oxygen/DO Saturation	Nitrogen	Oil & Grease	Phosphorus	Solids/TSS/Turbidity	E.Coli
NHRI700061204-06	CONNIES BROOK	5-M	Y	1	0	X							Mercury ¹

Impaired Waterbodies in MS4 Regulated Area without a TMDL - <i>Other Pollutants Causing Impairment</i>														
Assessment Unit ID (AUID)	Assessment Unit Name	Assessment Unit Category	On Original NOI (2018)?	NOI - Outfalls into receiving water segment	Number of Outfalls Discharging to Waterbody Years 1-6	Chloride	Chlorophyll-a	Impairment Name, Category						Other Pollutants Causing Impairments
								Dissolved Oxygen/DO Saturation	Nitrogen	Oil & Grease	Phosphorus	Solids/TSS/ Turbidity	E.Coli	Enterococcus
NHLAK700061102-02	CANOBIE LAKE	5-P	Y	12	16			X						Mercury ¹
NHLAK700061102-08	SEAVEY POND	5-M	N		0			X						pH
NHLAK700061102-09-01	SHADOW LAKE	5-M	Y	3	3									pH, Mercury ¹
NHRIV700061203-21	BEAVER BROOK	5-M	Y	8	5									pH, Mercury ¹
NHRIV700061204-08	ROCK POND-SMITH RD INLET	5-M	Y	1	5									pH, Mercury ¹
Impaired Waterbodies in MS4 Regulated Area where Mercury ¹ is the only cause of impairment														
Assessment Unit ID (AUID)	Assessment Unit Name	Assessment Unit Category	On Original NOI (2018)?	NOI - Outfalls into receiving water segment	Number of Outfalls Discharging to Waterbody Years 1-6	Chloride	Chlorophyll-a	Impairment Name, Category						Other Pollutants Causing Impairments
								Dissolved Oxygen/DO Saturation	Nitrogen	Oil & Grease	Phosphorus	Solids/TSS/ Turbidity	E.Coli	Enterococcus
NHRIV700061101-10	UNNAMED BROOK - TO ARLINGTON MILL RESERVOIR	3-ND	N		0									Mercury ¹
NHRIV700061102-11	UNNAMED BROOK - TO MITCHELL POND	3-ND	N		2									
NHLAK700061102-12	SKATING POND	3-ND	N		0									Mercury ¹
NHRIV700061102-12	UNNAMED BROOK - TO SEAVEY POND	3-ND	N		0									Mercury ¹
NHRIV700061102-13	FLATROCK BROOK	3-PAS	Y	10	2									Mercury ¹
NHRIV700061102-20	SOUTHWEST TRIB. TO CANOBIE LAKE	3-ND	N		5									Mercury ¹
NHRIV700061102-22	SEARLES SCHOOL BROOK	3-PNS	Y	1	1									Mercury ¹
NHRIV700061102-24	UNNAMED BROOK	3-ND	Y	2	3									Mercury ¹
NHLAK700061203-11	UNNAMED POND	3-ND	N		0									Mercury ¹
NHIMP700061203-11	UNNAMED BROOK - GUDEK WILDLIFE POND DAM	3-ND	N		1									
NHLAK700061203-13	UNNAMED POND	3-ND	N		0									Mercury ¹
NHRIV700061203-18	UNNAMED BROOK TO BEACON HILL ESTATES DETENTION POND	3-ND	Y	4	1									Mercury ¹
NHRIV700061203-19	UNNAMED BROOK	3-ND	N		0									Mercury ¹
NHRIV700061203-20	BEAVER BROOK	3-PAS	N		0									Mercury ¹
NHRIV700061203-39	UNNAMED BROOK	3-ND	Y	1	0									Mercury ¹
NHRIV700061203-40	UNNAMED BROOK	3-ND	N		0									Mercury ¹
NHIMP700061204-01	UNNAMED BROOK	3-ND	N		0									Mercury ¹
NHRIV700061204-02	GOLDEN BROOK	3-PAS	Y	5	9									Mercury ¹
NHIMP700061204-02	UNNAMED BROOK	3-ND	N		0									Mercury ¹
NHRIV700061204-03	GOLDEN BROOK	3-PAS	Y	2	8									Mercury ¹
NHLAK700061204-03	ROCK POND	2-M	Y	1	1									Mercury ¹
NHLAK700061204-04	MOECKEL POND	3-ND	Y	1	1									Mercury ¹
NHRIV700061204-04	GOLDEN BROOK - ISLAND POND BROOK	3-ND	N		0									Mercury ¹
NHRIV700061204-05	WEIGHT STATION BROOK	3-ND	N		0									Mercury ¹
NHLAK700061204-05	UNNAMED POND	3-ND	N		0									Mercury ¹
NHRIV700061204-07	UNNAMED BROOK	3-PAS	N		0									Mercury ¹
NHRIV700061204-10	IVERS BROOK	2-G	N		0									Mercury ¹

NHRIV700061204-12	UNNAMED BROOK - TO COBBETTS POND	3-PAS	N		0									Mercury ¹
NHRIV700061204-13	UNNAMED BROOK	3-ND	N		0									Mercury ¹
NHRIV700061204-14	UNNAMED BROOK	3-ND	Y	1	0									Mercury ¹
NHRIV700061204-15	UNNAMED BROOK	3-ND	Y	1	0									Mercury ¹
NHRIV700061204-16	UNNAMED BROOK	3-ND	N		0									Mercury ¹
NHRIV700061204-17	UNNAMED BROOK	3-ND	N		2									Mercury ¹

All Other Waterbodies

AUID	Name	Assessment Unit Category	On Original NOI (2018)?	Number of Outfalls Discharging to Waterbody Years 1-6	
N/A	Unnamed Wetland/Waterbody/Brook/Stream	N/A	No	93	No Impairments
TBD	TBD - Outfalls have yet to be assigned to receiving water	N/A	N/A	43	
(Blank)	N/A Outfalls that have been mapped, but do not need to be sampled	N/A	N/A	24	

Notes

Mercury ¹	Northeast Regional Mercury TMDL, page vi		
	"In the Northeast, the majority of mercury pollution is a result of atmospheric deposition. Thus, the TMDL is based primarily on reduction of atmospheric deposition, which can be achieved through reductions in anthropogenic mercury emissions."	NOTE: There is no information listed in "Northeast Regional Mercury TMDL" for wasteload allocations or other requirements related to MS4 due to the reduction being focused on atmospheric deposition. It is still listed as an impairment in this spreadsheet, but there are no requirements outlined in MS4 for reduction. Appendix G of MS4 Permit also lists "No Monitoring Required" for Mercury unless there is potential for it to be present in the sample due to proximity to a potential source.	

Figure 1.4.B Map of Surface Waters in Windham, NH

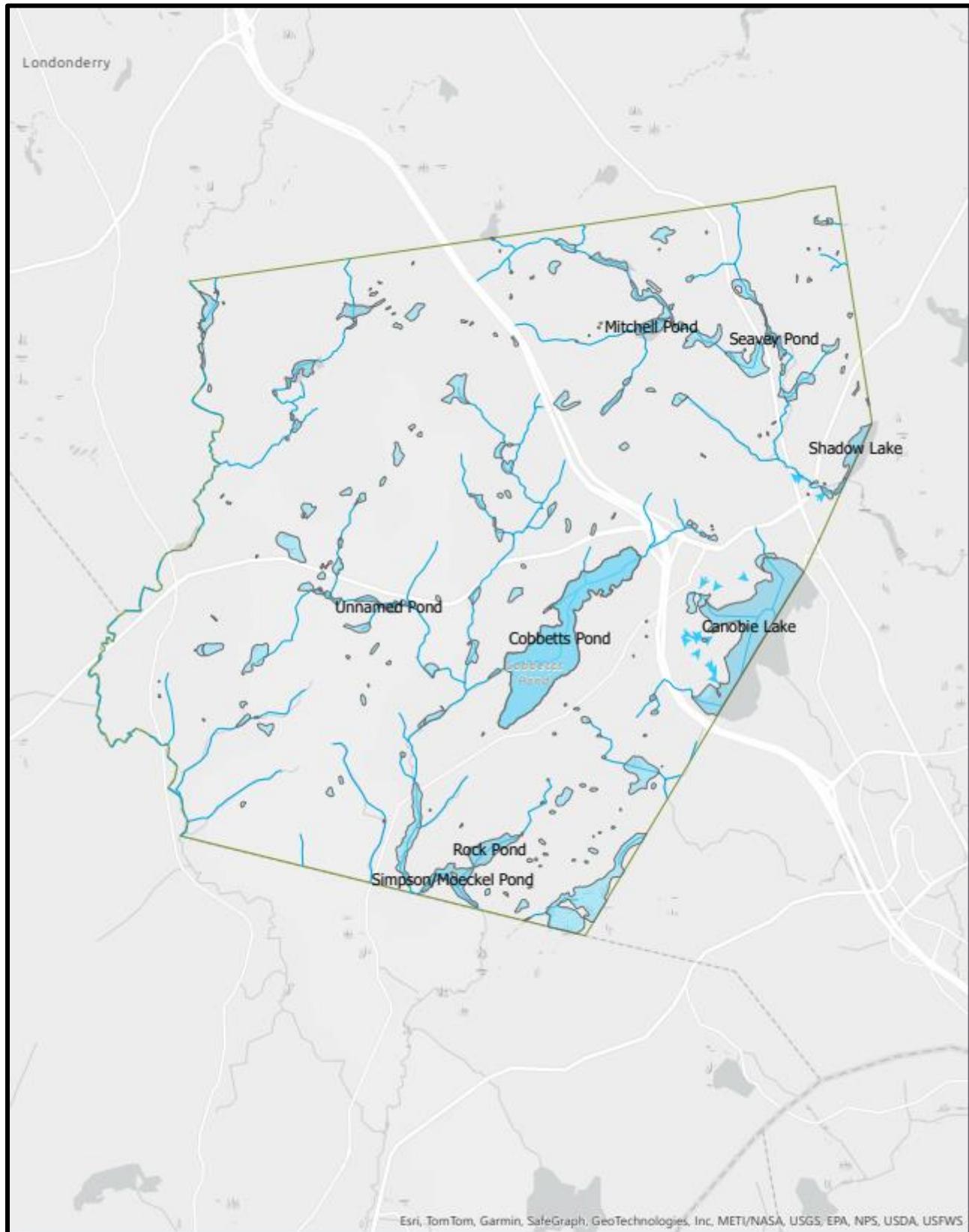
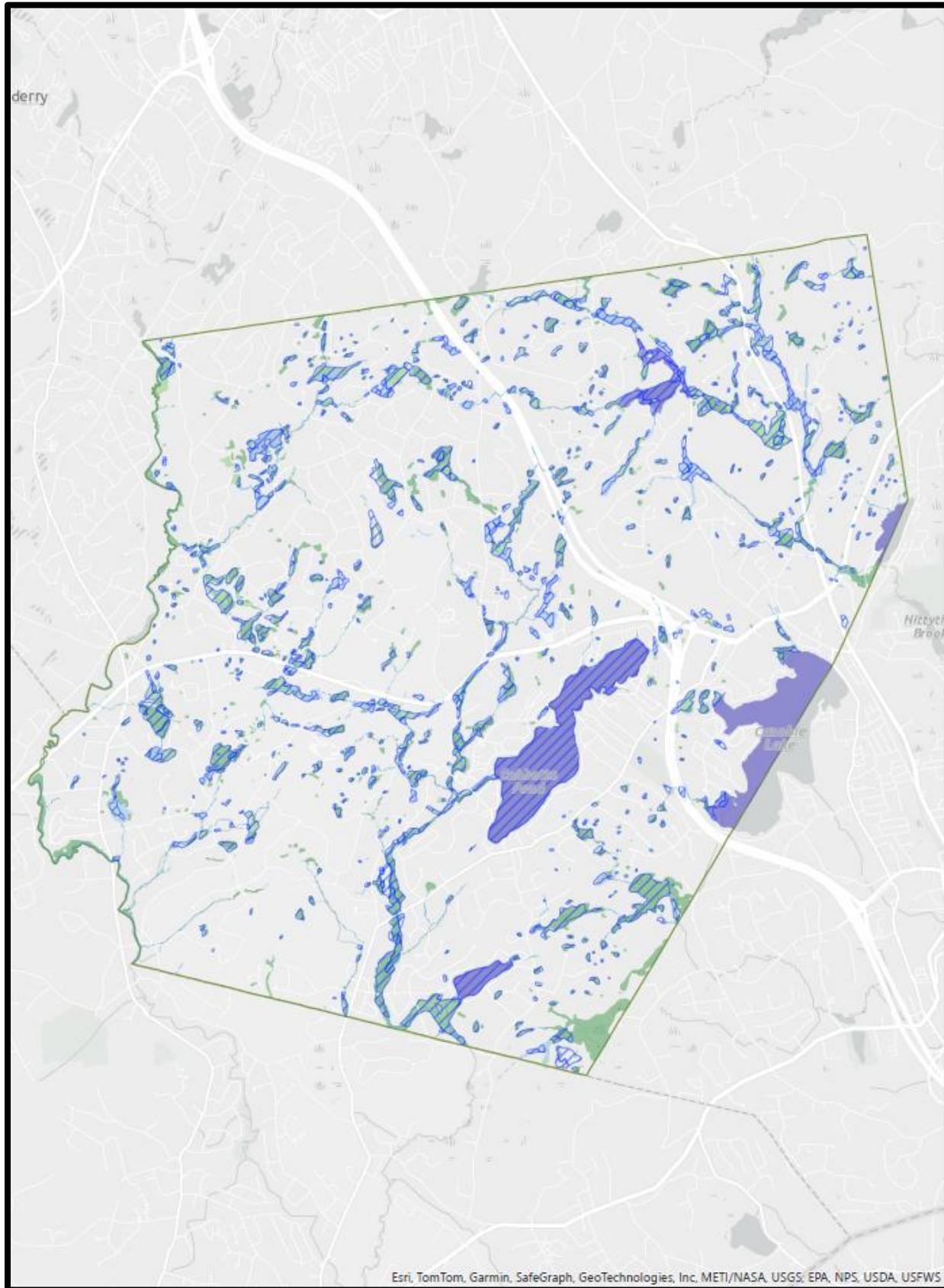


Figure 1.4.C Map of Wetlands in Windham, NH



Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc., METI/NASA, USGS, EPA, NPS, USDA, USFWS

1.4.1 Measures to Avoid or Minimize Impacts to Public and Known Private Drinking Water Sources (Surface Water and Groundwater)

Canobie Lake is a public surface water and drinking water supply¹ for the Town of Salem.

Residences and businesses not connected to the community water supply system(s) are served by onsite drinking water wells.

Following is a list of the Registered Community Wells and the one known public surface water source in Windham:

Name	Address	Type	Population Served
Canobie Lake	Range Rd	Salem Drinking Water	~18,000
Town Hall	3 North Lowell Rd	Municipal Building Community Well	25
PEU – Golden Brook	Sharon Rd	Single Family Residences	315
PEU – W and E	West Shore Rd	Single Family Residences	523
Braemar Woods Condos	Braemar Rd	Condominiums	60
PEU – Hardwood Hts – Birch Hill	N Lowell Rd	Condominiums	167
Villages of Windham	RTE 28	Condominiums	145
Wynridge Condos	14 Wynridge Rd	Condominiums	58
McAuley Commons	37 Searles Rd	Senior Housing	25
PEU – Castle Reach	82 Searles Rd	Single Family Residences	100
PEU – Fletcher Estates	21 Corliss Rd	Single Family Residences	135
Hadleigh Woods	22 Hadleigh Rd	Senior Housing	93
PEU – Lamplighter	Mountain Village Rd	Condominiums	162
PEU – Spruce Pond Estates	11 Northland Rd	Single Family Residences	120
Camelot 111	17 Sheffield St	Single Family Residences	30
Wood Meadow Estates	1 Acadia Drive	Single Family Residences	25
Warde Rehabilitation / Nursing	21 Searles Rd	Resident Homes (Nursing, Group, Live in)	148
Gateway Park	Gateway Blvd.	Commercial Business Park	~25 currently
Windham Terrace	3 Church Rd	Resident Homes (Nursing, Group, Live in)	110

The NHDES has resources available to assist those on private wells in monitoring their water quality. These include but are not limited to:

- The NHDES Be Well Informed Guide;
- NHDES Private Well Brochure;
- NHDES Private Well testing Program;

These resources are available at: <https://www4.des.state.nh.us/DWITool/>

Additional resources are available at: <https://windhamnh.gov/450/Stormwater-Management>

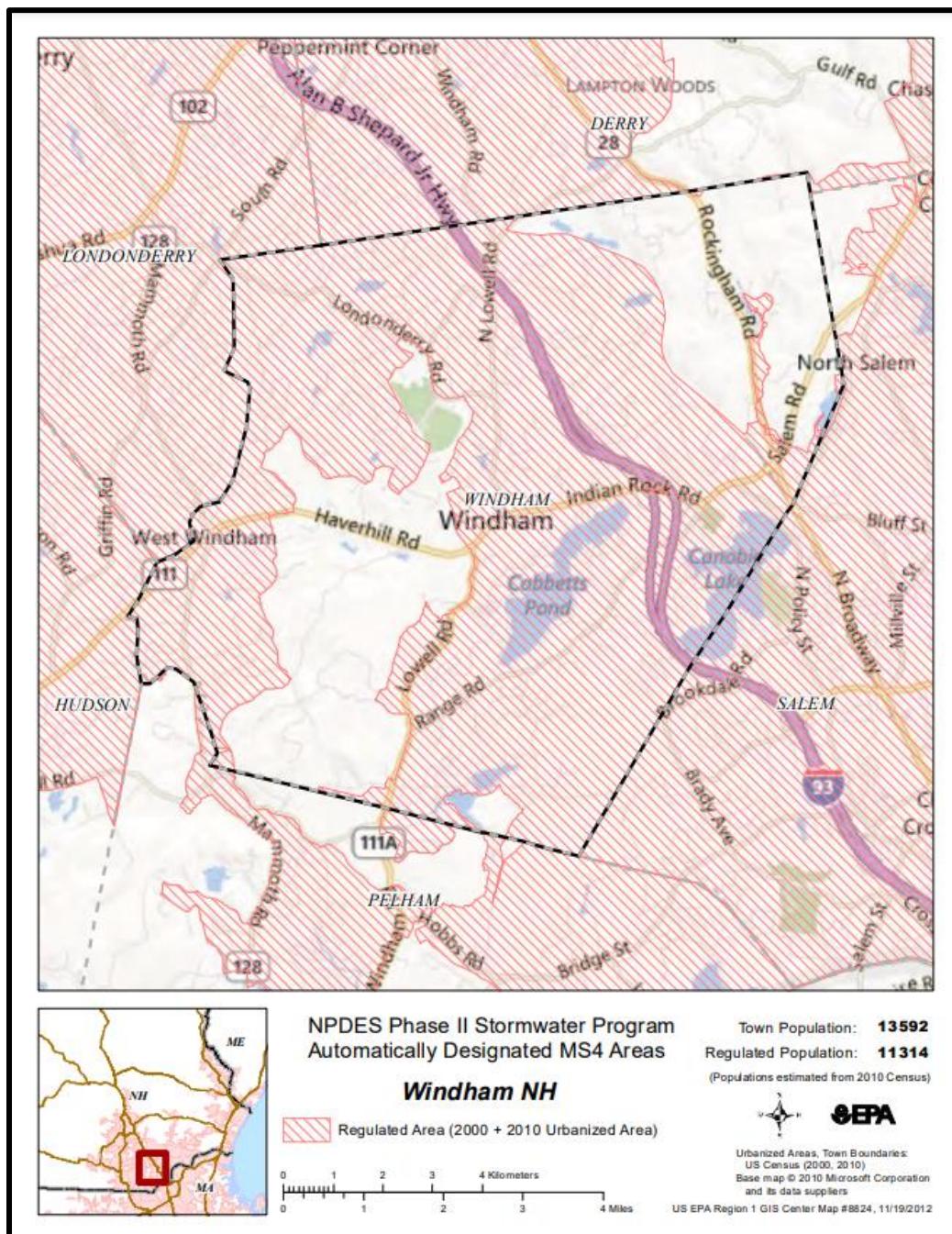
The Water Research Foundation has a fact sheet available describing measures that can be taken to protect groundwater potable water supplies from impacts associated with stormwater. The fact sheet can be viewed at: http://www.waterrf.org/knowledge/source-water-protection-and-management/FactSheets/SourceWater_FactSheet_LandUse.pdf

1.5 Eligibility: Endangered Species and Historic Properties

Endangered Species and Historic Properties eligibility information has been included in the Notice of Intent (found in Appendix A).

1.6 Map of Windham MS4 Regulated Area

Figure 1.6.A : Windham, NH MS4 Regulated Area (2017 NH MS4 General Permit)



Windham, NH | NPDES Phase II Stormwater Program Automatically Designated MS4 Areas
<https://www3.epa.gov/region1/npdes/stormwater/nh/ram/Windham.pdf>

2.0 Minimum Control Measures (MCM)

Overview

There are six (6) minimum control measures (MCM) described in parts 2.3.2 – 2.3.7 that outline requirements to reduce pollutants to the maximum extent practicable (MEP)

- MCM 1 – Public Education and Outreach (2.1)
- MCM 2 – Public Involvement and Participation (2.2)
- MCM 3 – Illicit Discharge Detection and Elimination (IDDE) Program (2.3)
- MCM 4 – Construction Site Stormwater Runoff Control (2.4)
- MCM 5 - Stormwater Management in New Development and Redevelopment (Post Construction Stormwater Management) (2.5)
- MCM 6 – Good Housekeeping and Pollution Prevention for Municipal Operations (2.6)

2.1 : MCM 1

Public Education and Outreach

Permit Part 2.3.2

2.1 Overview

Objective: The permittee shall implement an education program that includes educational goals based on stormwater issues of significance within the MS4 area. The ultimate objective of a public education program is to increase knowledge and change behavior of the public so that pollutants in stormwater are reduced. *(2.3.2 EPA, NPDES 2017 NH MS4 Permit)*

The Town has utilized in-house produced educational material as well as outsourced material to disseminate relevant stormwater topics to the four audience groups:

- Residents
- Businesses, institutions (private schools and assisted living facilities), and commercial facilities
- Developers (construction)
- Industrial facilities

Requirements for public outreach is outlined in 2.3.2.1.c.i – v of the 2017 NH MS4 General Permit and is noted below:

- ***Residential program:** effects of outdoor activities such as lawn care (use of pesticides, herbicides, and fertilizers) on water quality; benefits of appropriate onsite infiltration of stormwater; effects of automotive work and car washing on water quality; proper disposal of swimming pool water; proper management of pet waste; maintenance of septic systems. If the small MS4 area has greater than thirty percent of its residents serviced by septic systems, the permittee shall include maintenance of septic systems as part of its education program.
- ***Business/Commercial/Institution program:** proper lawn maintenance (use of pesticides, herbicides and fertilizer); benefits of appropriate on-site infiltration of stormwater; building maintenance (use of detergents); use of salt or other de-icing and anti-icing materials (minimize their use); proper storage of salt or other deicing/anti-icing materials (cover/prevent runoff to storm system and contamination to ground water); proper storage of materials (emphasize pollution prevention); proper management of waste materials and dumpsters (cover and pollution prevention); proper management of parking lot surfaces (sweeping); proper car care activities (washing of vehicles and maintenance); and proper disposal of swimming pool water by entities such as motels, hotels, and health and country clubs (discharges must be dechlorinated and otherwise free from pollutants).
- **Developers and Construction:** proper sediment and erosion control management practices; information about Low Impact Development (LID) principles and technologies; and information about EPA's construction general permit (CGP). This education can also be a part of the Construction Site Stormwater Runoff Control measure detailed in Part 2.3.5. vi.
- **Industrial program:** equipment inspection and maintenance; proper storage of industrial materials (emphasize pollution prevention); proper management and disposal of wastes; proper management of dumpsters; minimization of use of salt or other de-icing/anti-icing materials; proper storage of salt or other de-icing/anti icing materials (cover/prevent runoff to storm system and ground water contamination); benefits of appropriate on-site infiltration of stormwater runoff from areas with low exposure to industrial materials such as roofs or employee parking; proper maintenance of parking lot surfaces (sweeping); and requirements for coverage under EPA's Multi-Sector General Permit.

**Due to the presence of two Bacteria TMDL's¹ (Cobbetts Pond Town Beach - NHLAK700061204-01-03 [as of 2018 assessment cycle], Beaver Brook - NHRIV700061203-22) and a Phosphorus impairment (Cobbetts Pond - NHLAK700061204-01-01) as of the most recent 303(d) list (2020/2022), outreach requirements for the residential and business/commercial/institution audiences are replaced with requirements outlined in Appendix H and F. Please refer to figure 2.1.B for a chart referencing time frames, audience, and content per the 2017 MS4 General Permit.*

TMDL¹- A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges; load allocations (LAs) for nonpoint sources and/or natural background, and must include a margin of safety (MOS) and account for seasonal variations. (See section 303(d) of the Clean Water Act and 40 CFR §130.2 and §130.7).

Figure 2.1.A : Public Education and Outreach BMP's

The following listed BMP's may be used to fulfill the requirements outlined in the 2017 General MS4 permit section 2.3.2 applicable to the Town of Windham as well as requirements specified in Appendix H, part II.1.a.i.1 (public education and outreach for WQL waters for phosphorus) and Appendix F part II.1.a.i (public education for Bacteria TMDL's) that will replace Residential and Business/Commercial/Institution Program with annual timed messages on specified topics. Information on internal training can be found in the IDDEP and Section 2.6 MCM6.

MCM 1: Public Education and Outreach BMP's								
BMP	BMP Title	Document Name(s) and/or web address(es)	2017 MS4 Permit Cross Reference	Description	Targeted Audience	Responsible Department/Parties	Measureable Goal(s)	Message Date
1.1	Septic System Maintenance - Brochures/Pamphlets/ Social Media Posts	<p>"Do your Part—Be SepticSmart" flyer: https://windhamnh.gov/DocumentCenter/View/7090/Septic-System-Maintenance-Brochure?bidId=</p> <p>"Get Pumped! New Hampshire" https://windhamnh.gov/DocumentCenter/View/15653/Get-Pumped-New-Hampshire---NHDES</p> <p>Septic Smart Week - Social Media Posts (NHDES produced)</p>	Appendix F Part II.1.a.i and Appendix H Part II.1.a.i.1	<p>Information on regular pumping and maintenance of septic systems. Distribution of "Do your Part—Be SepticSmart" brochure that reminds all of the need for proper care and maintenance. Flyers will be distributed to residents and will be available at Town Offices. Educational outreach should inform septic system owners about maintenance for the system to minimize water quality impacts. Other forms of reaching a larger audience include updating the town website with resources as well as sharing relevant posts on Town's social media platform.</p>	Septic System Owners	Community Development Department	Increase residents' awareness of septic system maintenance and water quality impacts.	Spring 2019, 2020, Summer 2021, Summer 2023, Fall 2023/ Spring 2024
1.2	Pet Waste Disposal - Brochures/Pamphlets/ Social Media Posts	<p>"Help Keep Our Watershed Clean" flyer: https://www.windhamnh.gov/450/Stormwater-Management</p> <p>"Every Drop" post cards or flyer: https://www.nhms4.des.nh.gov/sites/g/files/ehbemt636/files/documents/2022-08/poop-card-prep-7.25x5.25.pdf</p> <p>"Every Drop" Online Pledge https://stateofourestuaries.org/everydrop/petpledge/</p> <p>Pet Waste Disposal Guide https://windhamnh.gov/DocumentCenter/View/7129/Pet-Waste-Disposal-Guide</p>	Appendix F Part II.1.a.i and Appendix H Part II.1.a.i.1	<p>Distribution and promotion of "Help Keep Our Watershed Clean", "Every Drop" or similar post cards or flyers with proper pet waste management, impacts of improper management, pet waste ordinance, and disposal requirements messaging. May include pledge to pick up pet waste to be made available during dog registration and other events or venues (veterinarians, dog training, groomers, etc.). Every Drop is a collaborative education effort with PREP, NHDES and other partners. Flyers will be available at the Town office and will also be posted online (Windhamnh.gov). Additionally, pet waste flyers may be distributed during Town Meeting, at the transfer station, mailed to dog owners at time of dog license renewal, and/or distributed to veterinary or pet service businesses in Windham. Relevant educational social media posts may also be shared by the Town's various social media platforms to reach a larger audience.</p>	Residents - Pet Owners and Pet Service Industry (Business/commercial/ institutions)	Community Development Department	Dog owners and/or dog walkers are aware of the potential water quality impacts from pet waste, local pet waste ordinances, and how to dispose of pet waste properly. If pledges are signed, there will be an increase of dog owners committed to picking up pet waste. Overall increased education and awareness about the potential water quality impacts and change in behavior of pet owners.	Spring, or time of license renewal (January - April) and/or Summer : 2019, 2020, 2021, 2022, 2023, 2024

1.3	Grass and Fertilizer - Brochures/ Pamphlets/ Social Media Posts	Green Grass & Clear Water Brochure: https://windhamnh.gov/DocumentCenter/View/7079/Grass-and-Fertilizer-Brochure	Appendix H Part II.1.a.i.1	<p>Distribution and promotion of four-fold flyer produced by UNH Cooperative Extension and NH Sea Grant outlining simple recommendations to keep lawns healthy while reducing water quality impacts- including proper fertilizer techniques and disposal of grass clippings. Relevant educational social media posts may also be shared by the Town's various social media platforms to reach a larger audience.</p>	Residences, Businesses and Institutions	Community Development Department	Lawn care enthusiasts/ residents understand the potential water quality impacts from fertilizer and improper disposal of grass clippings and are aware of the proper lawn care management techniques for reducing those impacts. Measurement includes materials distribution methods and numbers and change in visits to UNH Cooperative Extension or municipal stormwater webpages. Residences, businesses, and commercial institutions have increased awareness about the impacts of fertilizer on water quality.	Spring/Summer : 2019, 2020, 2021, 2022, 2023, 2024
1.4	Leaf Litter - Brochures/Pamphlets (SOP's)/ Social Media Posts	Standard Operating Procedures for Disposal of Leaf Litter: https://www4.des.state.nh.us/nh-ms4/?page_id=54 "Rake it or Leave it!" https://windhamnh.gov/DocumentCenter/View/15646/Rake-it-or-Leave-it- "Yard Waste" Disposal Guide https://windhamnh.gov/DocumentCenter/View/7096/Yard-Waste-Brochure	Appendix H Part II.1.a.i.1	<p>Distribution and promotion of Standard Operating Procedures for encouraging the proper disposal of leaf litter for municipalities or areas with nitrogen or phosphorous impairments or TMDLs. Brochures, pamphlets, or other educational materials may be distributed via mail, handed out in person at Town facilities, or posted online. Relevant educational social media posts may be shared by the Town's various social media platforms to reach a larger audience.</p>	Residents, businesses/institutions/commercial	Community Development Department	Increased awareness of impacts of improper leaf litter disposal by residents, business owners, and institutions. Measurement includes material distribution methods and numbers of educational materials disseminated. Track observations of any changes in known dumping sites.	Spring/Summer or Fall 2019, 2020, 2021, 2022, 2023, Spring 2024
1.5	Town Website	Town Website: https://windhamnh.gov/450/Stormwater-Management	2017 MS4 General Permit Part 2.3.2.1 (varying topics)	Information on MS4 permit requirements and posting of related documents, notices and materials regular pumping and maintenance of septic systems. Educational materials covering a wide range of topics are available on the Stormwater Management Website that are included in MS4 minimum outreach requirements as well additional other relevant and educational stormwater topics.	All target audiences	Administration and Information Technologies/ GIS / Community Development Department	Maintain an up-to-date website for dissemination and posting of MS4 permit and stormwater information.	Annually/ongoing beginning 2019

1.6	Salt Storage and Use – Brochures/Pamphlets/ Social Media Posts	<p>Green Sno Pro Flyer: https://windhamnh.gov/DocumentCenter/View/15652/Green-Snow-Pro-Flyer</p> <p>NHDES/NHDOT Salt Usage BMP's https://www.windhamnh.gov/450/Stormwater-Management</p> <p>https://www.des.nh.gov/organization/commissioner/pip/publications/wd/documents/wd-11-13.pdf</p>	2017 MS4 General Permit Part 2.3.2	<p>Information on storage/use of salt or deicing materials. Information will be direct mailed to target audiences and/or will be available at Town Office and on the website. Relevant educational social media posts may also be shared by the Town's various social media platforms to reach a larger audience.</p>	<p>Residents, industrial facilities, businesses, institutions, commercial facilities, landscaping companies, and private maintenance and snowplowing contractors</p>	Community Development Department and General Services Department	<p>Increase awareness of effects that salt or deicing materials have on surrounding environment and water quality; increase awareness to better manage and reduce the amount of salt or deicing materials used; and increase awareness of proper storage of salt or deicing materials.</p>	Fall 2019 or Fall 2020, Town website updated with NHDES BMPs and social media post made Winter 2023/2024
1.7	Construction/Developers Outreach	<p>NHDES "Low Impact Development and Stormwater Management" Fact Sheet: https://www.windhamnh.gov/DocumentCenter/View/15655/Low-impact-development-fact-sheet---NHDES</p> <p>New Version of the Construction General Permit (February 17, 2022)</p> <p>"Town of Windham - Stormwater for Developers" https://www.windhamnh.gov/DocumentCenter/View/7152/Developers-Brochure?bId=1</p>	2017 MS4 General Permit Part 2.3.2.1.c.v	<p>Distribution of educational materials to the targeted audience to inform relevant parties of the Construction General Permit and how it may apply to their projects. Additional information disseminated related to Low Impact Development (LID) and stormwater management.</p>	<p>Developers/Construction</p>	Community Development Department	<p>Increased awareness of LID principles as well as applicability of CGP.</p>	Spring 2020, Summer 2022, Spring 2024
1.8	Industrial Outreach	<p>Industrial Outreach Letter (produced by NHDES)</p> <p>Town of Windham: Stormwater for Industrial https://windhamnh.gov/DocumentCenter/View/7137/Industrial-Brochure</p> <p>Stormwater Pollution Control for Industrial Facilities https://www.windhamnh.gov/DocumentCenter/View/15656/Windham-Industrial-Fact-Sheet</p>	2017 MS4 General Permit Part 2.3.2.1.c.vi	<p>Information provided to industrial facilities to educate on responsibilities in regards to stormwater and pollutants. In addition, outreach may educate on general stormwater topics and provide updates to industrial facilities owners about MSGP monitoring.</p>	<p>Industrial</p>	Community Development Department	<p>Increased awareness of NPDES permit requirements related to industrial activity as well as increased understanding of how to reduce pollutants entering the storm drain in industrial facilities.</p>	Spring 2020, Summer 2021, Summer 2022, Spring 2023

1.9	Stormwater Booth	Located at Windham, NH Transfer Station at 2 Ledge Rd Windham, NH 03087	2017 MS4 General Permit Part 2.3.2.1 (varying topics)	The Town of Windham has a board outside the Transfer Station which displays various informational messaging related to stormwater. This board is periodically updated with different messaging to keep it relevant and up to date. Topics range from yard waste disposal, fertilizer usage, pet waste disposal, septic system maintenance, salt usage, relevant ordinances, as well as any additional miscellaneous messaging related to stormwater and the MS4 requirements.	Residents	Community Development Department	Increased visibility and awareness of various stormwater topics. The goal of the stormwater board is to have residents consider potential water quality impacts they may be contributing to.	Ongoing - displayed topics periodically change
1.10	Stormwater Brochures/ Informational material	Stormwater Guide for Businesses https://windhamnh.gov/DocumentCenter/View/7136/Business-Brochure	2017 MS4 General Permit Part 2.3.2.1.c.i - iv	The Town of Windham has developed additional brochures for residents and businesses with relevant stormwater topics such as salt usage/de icing best management practices, landscaping (yard waste, fertilizer), parking lot drainage BMPs, septic maintenance, pool draining, and additional topics.	Residents, businesses/institutions/commercial	Community Development Department	Increased awareness of residents and businesses/ institutions/ commercial audiences for best management practices related to stormwater.	Residents Brochure - Spring 2020,
		Stormwater Guide for Residents https://windhamnh.gov/DocumentCenter/View/7151/Residents-Brochure						Business Brochure - Spring 2020, Spring 2024
1.11	Site and Subdivision Regulations	Promote Low Impact Development (LID) by ensuring that each site plan of subdivision application includes information on LID. Town regulation to be modified to require LID practices. Information will be available in the site plan and subdivision regulations and on the Town website.	2017 MS4 General Permit Part 2.3.2.1.c.v	Promote Low Impact Development (LID) by ensuring that each site plan of subdivision application includes information on LID. Town regulation to be modified to require LID practices. Information will be available in the site plan and subdivision regulations and on the Town website.	Developers/Construction	Community Development Department	Increased awareness and use of LID principles and technologies	Early 2021

2.2 : MCM 2

Public Involvement and Participation

Permit Part 2.3.3

2.2 Overview

Objective: The permittee shall provide opportunities to engage the public to participate in the review and implementation of the permittee's SWMP. (2.3.3 EPA, NPDES 2017 NH MS4 Permit)

The town provides opportunities for residents to get involved in stormwater management and make comments to Stormwater Management Plan when desired. The public is encouraged to make commentary and provide feedback for review during time of updates. The BMP's below outline different ways the public can get involved and provide feedback for the SWMP.

Figure 2.2.A : MCM2 BMPS's

BMP	BMP Title	Location or Web Address	Description	Responsible Department/Parties	Measureable Goals
2.1.1	Public Review of Stormwater Management Program	Community Development Department: 3 North Lowell Road, Windham, NH, Administration Building: 4 North Lowell Rd, Windham NH, and https://www.windhamnh.gov/450/Stormwater-Management	The public has access to the SWMP either in person at the Administration Building, Community Development building, or online on the Stormwater Management web page to review.	General Services Department, Stormwater Team, Community Development Department	Stormwater Management Plan is publicly available.
2.1.2	Public Participation in Stormwater Management Program Development	The SWMP will be located at the Administration Building and Community Development Department Building. The Windham Town Administrator will periodically announce updates to the SWMP and direct residents to the website to review the SWMP and provide comments. Additionally, on the Stormwater Management web page (https://www.windhamnh.gov/450/Stormwater-Management), visitors of the page/ town residents are encouraged to reach out to the Environmental Planner for any comments on the SWMP and provides the email address for contact.		Community Development Department and Stormwater Team	Annual public input provided.
2.1.3	Public Participation in Stormwater Management Committee Meetings	Community Development Department Building, 3 North Lowell Rd, Windham, NH	The Stormwater Management Committee is made up of 5 town employees involved in stormwater management and the meetings are open to the public.	Community Development Department and Stormwater Team	Public is involved in stormwater management and is able to provide feedback.
2.1.4	Protect Our Ponds: Understanding Watersheds and Cyanobacteria	Town Hall, 6 Village Green, Pelham NH	Free event featuring speakers from the NH Department of Environmental Services, Dartmouth College, and NH Lakes. Hands-on activities and exhibits from New Hampshire organizations. Event was advertised by Town of Windham - sent to members of the Cobbetts Pond Improvement Association, posted on a bulletin board at Community Development and Town Hall, as well as posted on the Town's facebook page for Municipal Operations to spread the word about this event to Windham residents.	N/A	Environmental Planner attended as well as 2 Windham Residents
2.1.5	Household Hazardous Waste Collection Day	Nashua Public Works Garage 9 Stadium Drive, Nashua NH	A program hosted by Nashua Regional Planning Commission for residents of Windham and other communities to dispose of household hazardous waste. The Town of Windham advertises this program and refers residents inquiring about household hazardous waste to this program. Information regarding this event is available both on the Windham town website as well as in the stormwater booth located at the transfer station at 2 Ledge Rd Windham, NH	N/A - program hosted by Nashua Regional Planning Commission. Information in stormwater booth updated by Community Development and maintained on website by General Services and Parks and Recreation	Residents are informed regarding where to dispose of household hazardous waste so it is processed/disposed of properly.

2.3 : MCM 3

Illicit Discharge Detection and Elimination (IDDE) Program

Permit Part 2.3.4

BMP: IDDE Legal Authority

See Illicit Discharge Detection and Elimination (IDDE) Plan

BMP: Sanitary Sewer Overflow (SSO) Inventory

See Illicit Discharge Detection and Elimination (IDDE) Plan

BMP: Map of Storm Sewer System

See Illicit Discharge Detection and Elimination (IDDE) Plan

BMP: IDDE Program

See Illicit Discharge Detection and Elimination (IDDE) Plan

BMP: Employee Training

See Illicit Discharge Detection and Elimination (IDDE) Plan

2.4 : MCM 4

Construction Site Stormwater Runoff Control

Permit Part 2.3.5

2.4 Overview

Objective: The objective of an effective construction stormwater runoff control program is to minimize or eliminate erosion and maintain sediment on construction sites so that it is not transported in stormwater and allowed to discharge to a water of the U.S. through the permittee's MS4.(2.3.5 2017 MS4 General Permit)

The Town is required to implement and enforce a program to reduce pollutants in any stormwater runoff discharged to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. The program shall include disturbances less than one acre if that disturbance is part of a larger common plan of development or sale that would disturb one acre or more. (2.3.5.1 2017 MS4 General Permit)

BMP 2.4.1: Sediment and Erosion Control Ordinance

Completed (latest version March 28, 2011)

Document Name and/or Web Address: <https://www.windhamnh.gov/311/Local-Ordinances>

Ordinances Link or Reference: Zoning Ordinance and Land Use Regulations

<https://www.windhamnh.gov/DocumentCenter/View/14860/2023-Zoning-Ordinance-?bidId=>

Department Responsible for Enforcement: Community Development Department

BMP 2.4.2: Site Plan Review Procedures

Written procedures completed (by year 1)

Document Name and/or Web Address: Site Plan Review Procedures :

<https://www.windhamnh.gov/DocumentCenter/View/541/Site-Plan-Regulations-PDF?bidId=>

Description: Written documentation of Site Plan Review Procedures

Department Responsible for Enforcement: Community Development Department

Measurable Goal(s): Conduct site plan review of 100% of projects according to the procedures outlined above.

BMP 2.4.3: Site Inspections and Enforcement of Sediment and Erosion Control Measures Procedures

Completed (by year 1)

Document Name and/or Web Address: Windham Stormwater Regulations:

<https://windhamnh.gov/DocumentCenter/View/7192/Post-Construction-Stormwater-Standards>

Initial Site Inspection Checklist/Site Inspectors Checklist

<https://www.windhamnh.gov/DocumentCenter/View/15725/Site-Inspectors-Checklist> | on Survey123:

Initial Site Inspection Checklist/Site Inspector's Checklist

Department Responsible for Enforcement: Community Development Department

Description: Written documentation of Procedures for Site Inspections and Enforcement of Sediment and Erosion control Measures. This has also been developed into an electronic form using Survey123 in Spring 2024 for ease of access and documentation. Additionally, photos can be attached when inspecting in the field. Additional fields were added for better tracking/organization such as "Condition of Site, Parcel ID, Follow up Site Inspection Date and Time (if needed), Narrative of Follow Up Site Inspection, and Follow Up Site Inspection Photos." A complimentary ArcGIS map was created Spring 2024 to track site inspections completed in the field.

Measurable Goal(s): Inspect 100% of construction sites as outlined in the above document and take enforcement actions as needed.

BMP 2.4.4: Construction and Site Waste Control Measures Procedures

Completed (by year 1)

Document Name and/or Web Address: Initial Site Inspection Checklist/Site Inspectors Checklist
<https://www.windhamnh.gov/DocumentCenter/View/15725/Site-Inspectors-Checklist> | on Survey123:
Initial Site Inspection Checklist/Site Inspector's Checklist

Department Responsible for Enforcement: Community Development Department

Description: Develop Site Inspection Checklists for Use in Evaluation of Construction and Site Waste Control Measures. This has also been developed into an electronic form using Survey123 in Spring 2024 for ease of access and documentation. Additionally, photos can be attached when inspecting in the field.

Measurable Goal(s): Inspect 100% of construction sites as outlined in the above document and take enforcement actions as needed.

2.5 : MCM 5

**Post Construction Stormwater
Management in New Development and
Redevelopment**

Permit Part 2.3.6

2.5 Overview

Objective: The objective of this control measure is to minimize the water quality impact from new development and reduce the water quality impact due to stormwater runoff from a redeveloped site. (Part 2.3.6 of 2017 MS4 General Permit)

BMP 2.5.1: Post-Construction Ordinance

Completed (by year 2)

Town Ordinances Link or Reference:

<https://windhamnh.gov/DocumentCenter/View/7192/Post-Construction-Stormwater-Standards>

Department Responsible for Enforcement: Community Development Department

Description: Develop Ordinance that includes a requirement for as-built plans related to on-site stormwater controls.

Measurable Goal(s): Recommendations are implemented by year 2 with progress reported annually.

BMP 2.5.2: Submission of As-Built Drawings

Completed (by year 2)

Document Name and/or Web Address: <https://windhamnh.gov/DocumentCenter/View/7192/Post-Construction-Stormwater-Standards>

Department Responsible for Enforcement: Community Development Department

Description: Ordinance that requires submission of as-built plans related to on-site stormwater controls.

Measurable Goal(s): Recommendations are implemented by year 2 with progress reported annually.

BMP 2.5.3: Street Design and Parking Lot Guidelines Report

Completed (by year 4)

Document Name and/or Web Address:

<https://www.windhamnh.gov/DocumentCenter/View/16028/Regulation-Assessment-Report-236c-d>

Department Responsible for Enforcement: Community Development Department

Description: Develop a report that assesses street and parking lot guidelines, focusing on impervious cover reductions.

Measurable Goal(s): Recommendations are implemented by year 4 with progress reported annually.

BMP 2.5.4: Green Infrastructure Report

Completed (by year 4)

Document Name and/or Web Address:

<https://www.windhamnh.gov/DocumentCenter/View/16028/Regulation-Assessment-Report-236c-d>

Department Responsible for Enforcement: Community Development Department

Description: Develop a report that assesses local regulations to incorporate green infrastructure practices where feasible.

Measurable Goal(s): Recommendations are implemented by year 4 with progress reported annually.

BMP 2.5.5: List of Municipal Retrofit Opportunities

Completed (by year 4)

Document Name and/or Web Address: 2.3.6.e Inventory and Priority Ranking:

<https://www.nhms4.des.nh.gov/sites/g/files/ehbemt636/files/documents/2022-09/priority-ranking-windham.xlsx>

Department Responsible for Enforcement: Community Development Department

Description: Inventory and rank permittee-owned property and existing infrastructure with respect to BMP retrofits to reduce frequency, volume, and pollutant loads of stormwater discharges to the MS4.

Measurable Goal(s): The list is completed by year 4 and updated as needed.

2.6 : MCM 6

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

Permit Part 2.3.7

2.6 Overview

Objective: The permittee shall implement an operations and maintenance program for permittee operations that includes a training component and has a goal of preventing or reducing pollutant runoff and protecting water quality from all permittee operations.
(Part 2.3.6 of 2017 MS4 General Permit)

PERMITTEE OWNED FACILITIES

BMP 2.6.1: Parks and Open Spaces Operations and Maintenance Procedures

Written Document Completed (by year 2)

Document Name and/or Web Address:

<https://www.windhamnh.gov/DocumentCenter/View/17044/OM---Parks-and-Open-Space-2024>

Responsible Department/Parties: General Services Department/Recreation Coordinator

Description: The Town of Windham has established procedures to address the proper use, storage, and disposal of pesticides, herbicides, and fertilizers (PHF) including minimizing the use of these products in accordance with manufacturer's instructions; trash management; pet waste disposal; waterfowl management; and erosion and poor vegetative cover and as outlined in Section 2.3.7.1 a. of the MS4 permit.

Municipal Parks and Open Space Inventory

The following is a list of properties covered by these procedures and include all municipal and county facilities where fertilizers are stored, mixed, applied, recycled, or disposed of, and at municipal properties in which lawns or vegetation are mowed, trimmed, and maintained (e.g. parks, golf courses, and open space properties) located within the MS4 area. This inventory shall be updated annually during SWMP review.

2.3.7.1.a : Municipally Owned Parks and Open Space Inventory												
Name	Address	Services Contracted										
		Lawn Mowing	Landscaping	Fertilizing	Pesticide/Herbicide	Trash Mgmt	Pet Waste	Waterfowl Mgmt.	Chemical Toilets	Other		
Griffin Park	111 Range	X	X	X	X	X	X	X	X	X	Bathrooms	
Rogers Field	Ministerial	X	X	X	X	X	X			X	Bathrooms	
Cemetery on New Plains ¹	Ministerial	X	X									
Wonderland Playground	Esteys Rd					X				X		
Tokanel	3 Meadow	X	X	X	X	X	X			X		
Searles	3 Chapel	X	X	X	X	X	X			X		
Town Beach	45 Cobbetts Pond	X	X	X			X		X	X	Test Pond	
Nashua Rd	Nashua Rd	X	X	X	X	X	X			X		
Town Common	4 N. Lowell	X	X	X	X	X	X					
Town Hall/ CDD	3 N. Lowell	X	X	X	X	X	X					
PD/FD/Library	Fellows Rd	X	X	X	X	X	X					
Deer Leep	Woodbury	X				X						
Rail Trail	Depot Rd	X	X			X	X			X		
Center School*	2 Lowell Rd	X								X		
Golden Brook School*	112B Lowell	X								X		
Cemetery on the Plains	5 Cobbetts Pond Rd	X	X									

¹Same parcel as Rogers Field

*note: School District oversees fields, fertilizing, etc.

Red text - added year 6

Responsible Department/Parties

Town of Windham Parks and Recreation, General Service Division, and Conservation Commission.

Training

Annual maintenance procedures training will be made available to employees involved in Parks and Open Spaces operations. All contractors involved in Parks and Open Spaces operations are provided the information in this section of the SWMP.

Example training video: <https://www.youtube.com/watch?v=6eD29UBINqE&feature=youtu.be>

Best Management Practices

The following best management practices (BMPs) aim to minimize the concentration of nitrogen and phosphorus in stormwater runoff:

Lawn Maintenance

Landscape Maintenance

- Mulch-mow grasses whenever possible; grass clippings are a natural fertilizer.
- Sweep grass clippings from sidewalks or streets back onto grassy areas.
- Dispose of organic wastes by composting whenever possible. When composting is not possible, dispose of organic wastes at an approved disposal facility. In both cases, ensure that runoff from sites does not enter a waterway.
- Do not wash down or dispose of lawn clippings, leaves, tree trimmings, or other landscape waste in a storm drain, drainage ditch, or open body of water.
- Collect and dispose of wastes generated by cleaning equipment (e.g. grass clippings) in the trash or by composting.
- Irrigate with the minimal amount of water needed.
- Maintain all irrigation systems so that irrigation uses the minimum amount of water possible, is applied evenly, and does not run off. Repair broken or leaking sprinkler heads as soon as possible.

Application of Fertilizers

- Properly calibrate all fertilizer application equipment to ensure proper application rate.
- Time the application of fertilizers to coincide with the manufacturer's recommendation for best results.
- Consider use slow release fertilizers.
- Reduce the need for chemical, algal control in ponds through proper aeration, nutrient reduction, bio-filtration, vegetation management, and/or biological controls.
- Sweep or blow granular fertilizers back onto grassy areas from pavement and sidewalks.
- Train employees on proper application methods, as recommended by the equipment manufacturer (done by License Contractor).
- Do not apply fertilizers when heavy rainfall or winds are expected.
- Never over-apply fertilizers.
- Avoid spraying fertilizers within 25-50 feet of any surface water or storm drainage structure (unless stricter limits apply).

Storage and Handling of Fertilizers

- Town does not store materials – all materials are handled and stored by the Licensed Contractor Applicator at their own facilities.

Trash Management

- Routinely pick up any trash bags left along trails, parks, or streets.
- Empty trash cans and dumpsters regularly.

- Keep lids on all trash cans and dumpsters.

Pet Waste Cleanup

- Post signs in areas concerning the proper disposal of pet wastes.
- Provide pet waste bags and waste containers at Griffin Park

Waterfowl Waste Management

- Discourage waterfowl from living in stormwater infrastructure.
- Do not feed waterfowl.

Erosion and Poor Vegetative Cover

- Install temporary sediment and erosion control stabilization measures as needed.
- Re-establish grass or native plants, especially within 50 ft of a surface water.

Measurable Goal(s)

Implement the BMP's on 100% of the parks and open spaces.

BMP 2.6.2: Buildings and Facilities Operations and Maintenance Procedures

Written Document Completed (by year 2)

Document Name and/or Web Address:

<https://www.windhamnh.gov/DocumentCenter/View/17048/OM---Buildings-and-Facilities-2024>

Responsible Department/Parties: General Services Department

Description: 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 in accordance with Section 2.3.7.1 b. of the MS4 permit.

Municipal Buildings and Facilities Inventory

The following is a list of properties covered by these procedures and include all municipal offices, police and fire stations, located within the MS4 area. This inventory shall be updated annually during SWMP review.

2.3.7.1.b : Municipally Owned Buildings and Facilities Inventory

The following is a list of properties covered by these procedures (BMP 2.6.2 of SWMP) and includes all municipal offices, police and fire stations, located within the MS4 area. This inventory shall be updated annually during SWMP review.

Name	Address	Cleaning Services Contracted	Trash Mgmt	Building Maintenance	Pollutant Storage	Petroleum Storage	Other Maintenance	
Town Hall	3 North Lowell Rd	X	X	X				
Comm Devlpmnt	3 North Lowell Rd	X	X	X				*
Armstrong Building	3 North Lowell Rd	X	X	X				
Bartley Building	4 North Lowell Rd	X	X	X				*
Senior Center	2 North Lowell Rd	X	X	X				
Library	8 Fellows Rd	X	X	X				
Fire Station	3 Fellows Rd	X	X	X	X	X		*
Police Station	4 Fellows Rd	X	X	X				*
Transfer Station	2 Ledge Road	X	X	X	X	X		*
Highway Garage	2 Ledge Road	X	X	X	X			*
Searles Chapel	3 Chapel Rd	X	X	X				
*Vehicles and/or equipment is stored and/or maintained at facility								
Red text - added year 6								

Responsible Department/Parties

Town of Windham – General Services Division

Training

Annual maintenance procedures training will be made available to employees involved in Municipal Building and Facilities operations. All contractors involved in Building and Facilities operations are provided the information in this section of the SWMP.

Best Management Practices

The following best management practices (BMPs) will be implemented at all municipally owned or operated buildings and facilities located within the MS4 area:

Handling, Storage, Transfer, and Disposal of Trash and Recyclables

All liquid and solid waste must be disposed of properly. Some of the most common sources of pollution at municipal facilities are a result of littering, improper collection of debris, and improper disposal of solid or liquid waste.

- All waste and recycling receptacles must be leak-tight with tight-fitting lids or covers.
- Keep lids on waste dumpsters and containers closed at all times unless adding or removing material.
- Do not locate dumpsters over or adjacent to catch basins.

- Clean up any liquid leaks or spills with dry cleanup methods.
- Arrange for waste or recycling to be picked up regularly and disposed of at approved disposal facilities.
- Never place hazardous materials, liquids, or liquid-containing wastes in a dumpster or recycling or trash container.
- Conduct periodic inspections of solid and liquid waste storage areas to check for leaks and spills.
- Do not wash trash or recycling containers outdoors or in parking lots.
- Conduct periodic inspections of work areas to ensure that all wastes are being disposed of properly.
- In compactor areas, regularly check the hydraulic fluid hoses and reservoir to ensure that there are no cracks or leaks.

Building Maintenance

- Sweep parking lots and keep areas surrounding facilities clean to reduce runoff of pollutants.
- When power washing buildings and facilities, ensure that the wash water does not flow directly into the storm system. Containment or filtering systems should be provided.
- Paint and other chemicals should not be applied on the outside of buildings when it is raining or prior to expected rain.
- When sanding, painting, power washing, etc., ensure that sites are properly prepared (e.g., use tarps) and cleaned (e.g., use dry cleaning methods) especially if they are near storm drains. Protect catch basins when maintenance work is conducted upgradient of them.
- When painting, use a drop cloth and clean up any spills immediately.
- Do not leave open containers on the ground where they may accidentally tip over.
- Buildings should be routinely inspected for areas of potential leaks.
- Streets and parking lots surrounding municipal buildings and facilities should be swept and kept clean to reduce runoff of pollutants and debris to the stormwater system.

Storage of Petroleum Products and Potential Pollutants

- Evaluate the use, storage and disposal of petroleum products and other potential stormwater pollutants.
- Routinely inspect buildings and facilities for areas of potential discharges or leaks.

Spill Response

- Ensure that spill prevention plans are in place (these should be included for maintenance garages, public works yards, transfer stations and other waste handling facilities see individual SWPPPs).
- Notify the facility's supervisor immediately and ensure that other staff and/or members of the public are aware of the spill and removed from the spill area as appropriate.
- Coordinate with fire department as necessary.
- For large oil spills, NHDES Petroleum Spill Response program will be notified immediately at (603) 271-3644 and an emergency response contractor would be called in.
- Materials and equipment necessary for spill cleanup may include but are not limited to brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for the purpose.
- Spills of toxic or hazardous material will be reported to the appropriate State or local government agency as required by State and Local regulations.

Measurable Goal(s)

Implement the BMP's on 100% of buildings and facilities.

BMP 2.6.3: Infrastructure and Vehicles and Equipment Operations and Maintenance Procedures

Written Document Completed (by year 2)

Document Name and/or Web Address:

<https://windhamnh.gov/DocumentCenter/View/7202/OM---Vehicles-and-Equipment>

Responsible Department/Parties: General Services Department

Description: The Town of Windham has established procedures for the storage of permittee vehicles. Vehicles with fluid leaks shall be stored indoors and containment shall be provided. Evaluate fueling areas owned by the permittee or used by permittee vehicles. Procedures have been established to ensure that vehicle wash waters are not discharged to municipal storm drains or surface waters. Procedures have been established as outlined below and in accordance with Section 2.3.7.1.c of the MS4 permit.

Responsible Department/Parties

Town of Windham – Fire, Police, and General Service Division

Training

Annual maintenance procedures training will be made available to employees involved in Vehicle Equipment operations.

Best Management Practices

The following best management practices (BMPs) will be implemented for all municipally owned or operated vehicles and equipment:

Vehicle Storage

- Vehicles with fluid leaks shall be stored indoors or containment shall be provided until repaired.
- Monitor vehicles and equipment for leaks and use drip pans as needed until repairs can be performed.
- When drip pans are used, avoid overtopping.
- Drain fluids from leaking or wrecked vehicles and parts as soon as possible. Dispose of fluids properly.
- Store and park vehicles on impervious surfaces and/or under cover or indoors whenever possible.

Vehicle Maintenance

- Conduct routine inspections of heavy equipment and vehicles to proactively identify maintenance needs or potential leaks.
- Perform routine preventive maintenance to ensure heavy equipment and vehicles are operating optimally.
- Recycle or dispose of waste properly and promptly.
- Sweep and pick up trash and debris as needed.
- Do not dump any liquids or other materials outside, especially near or in storm drains or ditches.

Fueling

- Fueling areas owned or operated by the municipality should be covered if possible.
- Fueling areas should be evaluated to ensure that pollutants (e.g., gasoline or oil) do not enter the MS4.

Vehicle Washing Procedures

Washing of vehicles should be washed in commercial wash whenever feasible, particularly for standard sedans and SUV vehicles. Outdoor washing of municipal vehicles should be avoided. Vehicle wash waters shall not be discharged to the MS4 or to surface waters.

Where no alternative wash system is available, and full containment of wash water cannot be achieved, adhere to the following procedures:

- Avoid discharge of any wash water directly to the storm drainage system or surface water (e.g., stream, pond, or drainage swale)
- Minimize the use of water to the extent practicable.
- Where the use of detergent cannot be avoided, use products that do not contain regulated contaminants. The use of a biodegradable, phosphate-free detergent is preferred.
- Do not use solvents except in dedicated solvent parts washer systems or in areas not connected to a sanitary sewer.
- Grassy and pervious (porous) surfaces may be used to promote direct infiltration of wash water, providing treatment before recharging groundwater and minimizing runoff to an adjacent stormwater system. Pervious surfaces or other infiltration-based systems should not be used within wellhead protection areas or within other protected resources.
- Impervious surfaces discharging to the storm drainage system should not discharge directly to a surface water unless treatment is provided. The treatment device should be positioned such that all drainage must flow through the device, preventing bypassing or short-circuiting.
- Periodic sweeping and/or cleaning should be completed to prevent accumulation from forming on the washing area.
- Maintain absorbent pads and drip pans to capture and collect spills or noticeable leaks observed during washing activities.

Indoor Vehicle Washing Procedures

- Vehicles and equipment should be washed inside whenever possible to reduce runoff to the stormwater system.
- Where the use of detergent cannot be avoided, use products that do not contain regulated contaminants. The use of biodegradable, phosphate-free detergent is preferred.
- Detergents should not be used in areas where oil/water separators provide pre-treatment of drainage.
- Floor drains should be connected to a sanitary sewer or tight tank. Floor drains discharging to adjacent surface water bodies or engineered storm drain systems should be permanently plugged or otherwise abandoned before any vehicle wash activities are completed.
- Designate separate areas for routine maintenance and vehicle cleaning. This helps prevent contamination of wash water by motor oils, hydraulic lubricants, greases, or other chemicals.
- Dry cleanup methods are recommended within garage facilities. Do not wash down floors and work areas with water.
- Maintain absorbent pads and drip pans to capture and collect spills or noticeable leaks observed during washing activities.

Heavy Equipment Washing Procedures

- Mud and heavy debris removal should occur on impervious surfaces or within a retention area.
- Maintain these areas with frequent mechanical removal and proper disposal of waste.
- Impervious surfaces with engineered storm drain systems should not discharge directly to a surface water.
- Floor drains should be connected to a sanitary sewer or tight tank. Floor drains discharging to adjacent surface waterbodies or engineered storm drain systems should be permanently plugged or otherwise abandoned before any vehicle wash activities are completed.
- Where the use of detergent cannot be avoided, use products that do not contain regulated contaminants. The use of biodegradable, phosphate-free detergent is preferred.
- Detergents should not be used in areas where oil/water separators provide pre-treatment of drainage.
- Maintain absorbent pads and drip pans to capture and collect spills or noticeable leaks observed during washing activities.

Measurable Goal(s)

Implement the BMP's on 100% of the vehicles.

INFRASTRUCTURE

BMP 2.6.4: Catch Basin Cleaning Program

Written Document Completed (by year 1)

Document Name and/or Web Address:

<https://www.windhamnh.gov/DocumentCenter/View/17049/OM---Catch-Basin-Cleaning-2024>

Responsible Department/Parties: General Services Department

Description: The Windham General Services Department works with a vendor to perform routine inspections, cleaning, and maintenance of the approximately 2,800 catch basins that are located within the MS4 regulated area. The Town has implemented the following catch basin inspection and cleaning procedures to reduce the discharge of pollutants from the MS4.

- Routine inspection and cleaning of catch basins. Catch basins should be cleaned such that they are not more than 50 percent full at any time. The Town of Windham will initially inspect all catch basins within the regulated area within two (2) years of the effective date of the permit to evaluate sediment or debris accumulation and establish optimal inspection and maintenance frequencies to meet the “50 percent” goal.
- If a catch basin sump is more than 50% full during two consecutive routine inspections or cleaning events, the finding will be documented, the contributing drainage area will be investigated for sources of excessive sediment loading, and to the extent practicable, contributing sources will be addressed. If no contributing sources are found, the inspection and cleaning frequency will be increased.
- Catch basins located near construction activities (roadway construction, residential, commercial, or industrial development or redevelopment) will be inspected and cleaned more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings (i.e., catch basins more than 50 percent full). Priority will also be given to catch basins that discharge to impaired waters.
- The following information will be included in each annual report:
 - Any action taken in response to excessive sediment or debris loadings
 - Total number of catch basins
 - Number of catch basins inspected
 - Number of catch basins cleaned
 - Total volume or mass of material removed from catch basins.

Catch Basin Cleaning Standard Operating Procedure

The Town of Windham’s SOP on catch basin cleaning is as follows:

- If necessary, notify residents and businesses of catch basin cleaning schedule to restrict parking and other requirements that could obstruct catch basin cleaning operations.
- All catch basins and or manholes will be cleaned every three (3) years to maintain optimization while paying close attention to problem areas.
- Work will be carried out by subcontractors who possess the proper equipment and manpower needed to complete the task in a sufficient and timely manner.
- The Town shall provide subcontractors with printed maps and instructions for catch basin cleaning routes and maintenance assignments, instructions to include:
 - Working upstream to downstream.

- Cleaning sediment and trash off grate and visually inspecting the outside of the grate.
- Cleaning the catch basins using the “claw” method.
- Removing sediment that might have entered downstream pipe.
- Document any basins that are more than 50% full based on visual observations of sediment levels before and after cleaning.
- Inspecting catch basin for structural integrity.
- If the contractor observes or suspects contamination, they are not to remove the sediment but to notify the General Services Director for separate removal and testing for proper disposal.
- Document any and all observations about the condition of the catch basin structure and water quality on the Catch Basin Inspection Form (attached).
 - A Survey123 form was created to store files electronically (Attachment 2.6.4.b). This form can only be filled out by Town employees with an Esri account. If anyone solely performs or is supervising catch basin cleaning except for Town employees with access to the electronic form, a paper form may be utilized (attachment 2.6.4.A). The form may be modified in the future should the Town identify any changes needing to be made.
- Subcontractors shall be asked to fill out a Catch Basin Cleaning Log (see attached)
- Bringing collected sediment to the Town Facility on Marblehead Road for storage and potential reuse in accordance with Reuse guidelines below.
- All collected materials will be logged by estimated yardage and recorded as well as reported to the proper authorities as required.
- Any concerns with the quality or operation of a catch basin should be reported to the Windham, NH Highway Department and efforts will be made to address them as quickly as possible.

Reuse of Catch Basin Sediments

Catch basin cleanings may be reused in compliance with current NH DES policies.

Catch basin residuals that are obviously contaminated with wastewater, animal waste, oils, gasoline, or other petroleum products must be tested pursuant to applicable hazardous waste determination requirements.

Measurable Goal(s)

All catch basins are cleaned in accordance with these procedures such that no catch basin is more than 50% full at any given time.

Attachments

Catch Basin Inspection Form (Paper Form Below – Attachment 2.6.4.A)

Catch Basin Cleaning/ Inspection Survey (Below – Attachment 2.6.4.B)

Attachment 2.6.4.A : Paper Form for Catch basin Cleaning

TOWN OF WINDHAM Catch Basin Cleaning Log					
Date:		Precipitation in the last three days?		Yes	No
Weather Today:					
Supervisor/Crew Leader:					
ID / Street Name	Required Maintenance / Problems? (check all that apply)		Observed Potential Sources of Pollution	More than 50% Full?	Comments
	<input type="checkbox"/> Tree Work Required <input type="checkbox"/> New Grate Required <input type="checkbox"/> Pipe is Blocked <input type="checkbox"/> Frame Maintenance Required <input type="checkbox"/> Basin Undermined <input type="checkbox"/> Cannot Remove Cover	<input type="checkbox"/> Evidence of Dumping* <input type="checkbox"/> Ditch Work <input type="checkbox"/> Corrosion at Structure <input type="checkbox"/> Erosion Around Structure <input type="checkbox"/> Need Cement Around Grate <input type="checkbox"/> Other*	<input type="checkbox"/> None <input type="checkbox"/> Construct. Activity <input type="checkbox"/> Erosion <input type="checkbox"/> Material Storage <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Other*	Yes	
	<input type="checkbox"/> Tree Work Required <input type="checkbox"/> New Grate Required <input type="checkbox"/> Pipe is Blocked <input type="checkbox"/> Frame Maintenance Required <input type="checkbox"/> Basin Undermined <input type="checkbox"/> Cannot Remove Cover	<input type="checkbox"/> Evidence of Dumping* <input type="checkbox"/> Ditch Work <input type="checkbox"/> Corrosion at Structure <input type="checkbox"/> Erosion Around Structure <input type="checkbox"/> Need Cement Around Grate <input type="checkbox"/> Other*	<input type="checkbox"/> None <input type="checkbox"/> Construct. Activity <input type="checkbox"/> Erosion <input type="checkbox"/> Material Storage <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Other*	Yes	
	<input type="checkbox"/> Tree Work Required <input type="checkbox"/> New Grate Required <input type="checkbox"/> Pipe is Blocked <input type="checkbox"/> Frame Maintenance Required <input type="checkbox"/> Basin Undermined <input type="checkbox"/> Cannot Remove Cover	<input type="checkbox"/> Evidence of Dumping* <input type="checkbox"/> Ditch Work <input type="checkbox"/> Corrosion at Structure <input type="checkbox"/> Erosion Around Structure <input type="checkbox"/> Need Cement Around Grate <input type="checkbox"/> Other*	<input type="checkbox"/> None <input type="checkbox"/> Construct. Activity <input type="checkbox"/> Erosion <input type="checkbox"/> Material Storage <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Other*	Yes	
	<input type="checkbox"/> Tree Work Required <input type="checkbox"/> New Grate Required <input type="checkbox"/> Pipe is Blocked <input type="checkbox"/> Frame Maintenance Required <input type="checkbox"/> Basin Undermined <input type="checkbox"/> Cannot Remove Cover	<input type="checkbox"/> Evidence of Dumping* <input type="checkbox"/> Ditch Work <input type="checkbox"/> Corrosion at Structure <input type="checkbox"/> Erosion Around Structure <input type="checkbox"/> Need Cement Around Grate <input type="checkbox"/> Other*	<input type="checkbox"/> None <input type="checkbox"/> Construct. Activity <input type="checkbox"/> Erosion <input type="checkbox"/> Material Storage <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Other*	Yes	
	<input type="checkbox"/> Tree Work Required <input type="checkbox"/> New Grate Required <input type="checkbox"/> Pipe is Blocked <input type="checkbox"/> Frame Maintenance Required <input type="checkbox"/> Basin Undermined <input type="checkbox"/> Cannot Remove Cover	<input type="checkbox"/> Evidence of Dumping* <input type="checkbox"/> Ditch Work <input type="checkbox"/> Corrosion at Structure <input type="checkbox"/> Erosion Around Structure <input type="checkbox"/> Need Cement Around Grate <input type="checkbox"/> Other*	<input type="checkbox"/> None <input type="checkbox"/> Construct. Activity <input type="checkbox"/> Erosion <input type="checkbox"/> Material Storage <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Other*	Yes	
	<input type="checkbox"/> Tree Work Required <input type="checkbox"/> New Grate Required <input type="checkbox"/> Pipe is Blocked <input type="checkbox"/> Frame Maintenance Required <input type="checkbox"/> Basin Undermined <input type="checkbox"/> Cannot Remove Cover	<input type="checkbox"/> Evidence of Dumping* <input type="checkbox"/> Ditch Work <input type="checkbox"/> Corrosion at Structure <input type="checkbox"/> Erosion Around Structure <input type="checkbox"/> Need Cement Around Grate <input type="checkbox"/> Other*	<input type="checkbox"/> None <input type="checkbox"/> Construct. Activity <input type="checkbox"/> Erosion <input type="checkbox"/> Material Storage <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Other*	Yes	

Attachment 2.6.4.B: Survey123 Form for Catch basin Cleaning/ Inspection Survey

Catchbasin Cleaning/Inspection Survey			
Inspection Date and Time		Inspector Initials	
Catchbasin ObjectID			
Location	Survey123 Form: Location autopopulates		
Purpose of Inspection	Condition Assessment - Catchment Investigation	Condition Assessment - Outfall Screening	Condition Assessment - Follow up ¹
	Cannot Locate (CNL)	Cleaning	Mapping
¹ Description of Original Complaint/Report (If Purpose of Inspection is Follow up)			
(If purpose of inspection is cleaning) Weather Today?	Clear, No Precipitation	Light Rain	Moderate/Heavy Rain
(If purpose of inspection is cleaning) Precipitation in the last 3 days?	Yes	No	
Cleaning Required?	Yes	No	
Percentage of Sump Filled Before Cleaning (If purpose of visit is cleaning)	0% - 100%		
Required Maintenance or Problems Observed?	Yes	No	
Required Maintenance Problems (check/circle all that apply)	Tree work required	New grate required	Pipe is blocked
	Frame maintenance required	Basin undermined	Cannot remove cover
	Evidence of dumping	Ditch work	Corrosion at structure
	Erosion around structure	Need cement around grate	Other:
Condition Assessment?	Yes	No	
Cover/Grate Condition	Good	Fair	Poor
	Failing		
Frame Condition	Good	Fair	Poor
	Failing	Rusted	
Riser Condition	Good	Fair	Poor
	Failing	N/A - No Riser Present	
Riser Material	Brick	Concrete Block	Other:
Corbel/Chimney Condition	Good	Fair	Poor
	Failing	Not Visible	
Corbel Material	Brick	Concrete Block	Precast Concrete
	Cast in Place Concrete	Other:	
Wall Condition	Good	Fair	Poor
	Failing	Not Visible	
Wall Material	Brick	Concrete Block	Precast Concrete
	Cast in Place Concrete	Other:	
Bench Condition	Good	Fair	Poor
	Failing	Not Visible	
Bench Material	Brick	Concrete Block	Precast Concrete
	Cast in Place Concrete	Dirt	Other:
Any Failing Features?	Yes	No	
Describe Issues needing Immediate Maintenance (If anything failing):			
Observed Potential Sources of Pollution	None	Construction Activity	Erosion
	Material Storage	Equipment Storage	Other:
Notes or Comments			
Photos of Structure	Photo 1: Outlet at 6 O'Clock	Photo 2: Surrounding Area	
Additional Photos - Poor or Failing Rating	Add up to 4 photos of any features needing maintenance rated "poor" or "failing"		

BMP 2.6.5: Street Sweeping Program

Written Document Completed (by year 1)

Document Name and/or Web Address:

<https://www.windhamnh.gov/DocumentCenter/View/17045/OM---Street-Sweeping-2024>

Responsible Department/Parties: General Services Department

Description: The Town of Windham has implemented the following street and parking lot sweeping procedures to reduce the discharge of pollutants from the MS4:

- All streets except for rural uncurbed roads with no catch basins or high-speed limited access highways will be swept and/or cleaned a minimum of once per year in the spring (following winter activities such as sanding).
- More frequent sweeping will be considered for targeted areas based on pollutant load reduction potential, inspections, pollutant loads, catch basin cleaning or inspection results, land use, impaired waters, or other factors.
- More frequent sweeping is required for municipally-owned streets and parking lots in areas that discharge to certain nutrient-impaired waters. Sweeping must be performed in these areas a minimum of two (2) times per year, once in the spring (following winter activities such as sanding) and at least once in the fall (Sept 1 – Dec 1; following leaf fall).
 - The Town accepts leaf litter drop off from Windham residents at the Town landfill at 39 Marblehead Rd from the months of April-November. Accepted materials include grass clippings, hay or straw, leaves, and wood chips or mulch which is then composted or recycled into loam for public use. Information about the yard waste program can be located on the Town webpage here: <https://www.windhamnh.gov/225/Yard-Waste-Program>. *(In Appendix H Section II.1.a.i.3 of the 2017 NH MS4 General Permit, Permittees can either choose to increase street sweeping frequency of all municipally owned streets and parking lots to a minimum of two times per year (fall, spring) or can choose in lieu of post- leaf drop street sweeping, a fall leaf litter collection program).*
- For rural uncurbed roadways with no catch basins and limited access highways, the Town of Windham will either meet the minimum frequencies above, or develop and implement an inspection, documentation, and targeted sweeping plan outlining reduced frequencies within two (2) years of the effective date of the permit, and submit such plan with its year one annual report.
- The following information will be included in each annual report:
 - Number of miles cleaned or the volume or mass of material removed.

Roadway Power Sweeping Standard Operating Procedure

The Town of Windham's SOP on road power sweeping is as follows:

- If necessary, notify residents and businesses of catch basin cleaning schedule to restrict parking and other requirements that could obstruct catch basin cleaning operations.
- The Town will sweep all municipally owned and maintained roads as well as town paved parking areas once annually.
 - In the event of a storm or other concerns, some areas may be swept more than once in a season.
- Sweeping is to start in late April or May depending on the winter and early spring weather conditions.

- All sweeping on municipally owned and maintained roads and parking areas will be completed no later than June.
- Work will be carried out by subcontractors who possess the proper equipment and manpower needed to complete the task in a sufficient and timely manner.
- The Town shall provide subcontractors with printed maps and instructions for sweeping routes and maintenance assignments, instructions to include:
 - Roads are to be swept to the edge of pavement or to existing curbing where such is in place.
 - Avoid pushing materials into or around storm drains and catch basins
 - Subcontractors shall be asked to fill out a Sweeping Log as the work is completed (see attached)
 - Bringing collected sediment to the Town Facility on Marblehead Road for storage and potential reuse in accordance with the Town's SOP for Reuse of Street Wastes.
- All debris is to be tracked by load and estimated number of yards removed.
- The information will be logged, recorded, and or reported to the proper authorities as needed.
- Any concerns should be reported to the Windham, NH Highway Department and efforts will be made to address them as quickly as possible.

Reuse of Road Sweeping Materials

Road sweepings and roadside ditch cleanup soils may be reused without restriction in accordance with the provisions found in NH DES Environmental Fact Sheet WMD-SW-32 (2009), attached to this document.

Measurable Goal(s)

Annually sweep 100% of all curbed streets and municipal parking lots within the MS4 in accordance with these procedures.

Attachments

Street Sweeping Log Form

TOWN OF WINDHAM - Street Sweeping Log

Date:	Precipitation in the last three days?	Yes	No
Weather Today:			
Supervisor/Crew Leader:			
Street Sweep (Name)	Miles	Observed Potential Sources of Pollution	Comments
		<input type="checkbox"/> None <input type="checkbox"/> Material Storage <input type="checkbox"/> Construction Activity <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Erosion <input type="checkbox"/> Other*	
		<input type="checkbox"/> None <input type="checkbox"/> Material Storage <input type="checkbox"/> Construction Activity <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Erosion <input type="checkbox"/> Other*	
		<input type="checkbox"/> None <input type="checkbox"/> Material Storage <input type="checkbox"/> Construction Activity <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Erosion <input type="checkbox"/> Other*	
		<input type="checkbox"/> None <input type="checkbox"/> Material Storage <input type="checkbox"/> Construction Activity <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Erosion <input type="checkbox"/> Other*	
		<input type="checkbox"/> None <input type="checkbox"/> Material Storage <input type="checkbox"/> Construction Activity <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Erosion <input type="checkbox"/> Other*	
		<input type="checkbox"/> None <input type="checkbox"/> Material Storage <input type="checkbox"/> Construction Activity <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Erosion <input type="checkbox"/> Other*	
		<input type="checkbox"/> None <input type="checkbox"/> Material Storage <input type="checkbox"/> Construction Activity <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Erosion <input type="checkbox"/> Other*	
		<input type="checkbox"/> None <input type="checkbox"/> Material Storage <input type="checkbox"/> Construction Activity <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Erosion <input type="checkbox"/> Other*	
		<input type="checkbox"/> None <input type="checkbox"/> Material Storage <input type="checkbox"/> Construction Activity <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Erosion <input type="checkbox"/> Other*	
		<input type="checkbox"/> None <input type="checkbox"/> Material Storage <input type="checkbox"/> Construction Activity <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Erosion <input type="checkbox"/> Other*	
		<input type="checkbox"/> None <input type="checkbox"/> Material Storage <input type="checkbox"/> Construction Activity <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Erosion <input type="checkbox"/> Other*	
		<input type="checkbox"/> None <input type="checkbox"/> Material Storage <input type="checkbox"/> Construction Activity <input type="checkbox"/> Equipment Storage <input type="checkbox"/> Erosion <input type="checkbox"/> Other*	
Total Sediment Accumulated from Route (as weighed at landfill): _____ tons			

BMP 2.6.6: Winter Road Maintenance Program

Written Document Completed (by year 1)

Document Name and/or Web Address:

<https://www.windhamnh.gov/DocumentCenter/View/17047/OM---Winter-Road-Maintenance-2024>

Responsible Department/Parties: General Services Department

Description

The Town of Windham performs a variety of maintenance activities to ensure as best as possible safe winter driving conditions on its roads and parking lots.

The Town of Windham's adopted a Winter Operations Policy: Snow Removal and Ice Control Procedures. Adherence to this Ordinance and the following winter maintenance procedures the Town will help to reduce the discharge of pollutants from the MS4.

- Minimize the use and optimize the application of sodium chloride and other salt (while maintaining public safety) and consider opportunities for use of alternative materials.
- Optimize sand and/or chemical application rates through the use, where practicable, of automated application equipment (e.g., zero velocity spreaders), anti-icing and pre-wetting techniques, implementation of pavement management systems, and alternate chemicals. Maintain records of the application of sand, anti-icing and/or de-icing chemicals to document the reduction of chemicals to meet established goals.
- Prevent exposure of deicing product (salt, sand, or alternative products) storage piles to precipitation by enclosing or covering the storage piles. Implement good housekeeping, diversions, containment or other measures to minimize exposure resulting from adding to or removing materials from the pile. Store piles in such a manner as not to impact surface water resources, groundwater resources, recharge areas, and wells.
- The MS4 Permit prohibits snow disposal into waters of the United States. Snow disposal activities, including selection of appropriate snow disposal sites, will adhere to the New Hampshire Department of Environmental Services guidelines.
- Provide training for municipal employees on winter roadway maintenance procedures.
- As of August 2024, the Town of Windham has one (1) stream with a chloride impairment and three (3) streams with chloride TMDL's (refer to figure 1.4.A). The Town intends on assessing the Salt Reduction Plan and the Chloride Reduction Implementation Plan (referenced in attachment G.1 and G.2) as part of TMDL requirements as well as developing a chloride reduction plan. In as required in Appendix H, the Town intends on developing a Salt Reduction Plan.

Measurable Goal(s): Evaluate at least one salt/chloride alternative for use in the municipality. Monitor salt usage by the Town of Windham. Submit annual salt usage report to NHDES – years of submittal*: 2024, 2023, 2022, 2021, 2020

*The Town will continue to backfill the years of submittal beyond 2020 in future versions of the SWMP.

Attachments:

Winter Operations Policy: Snow Removal and Ice Control Procedures (located in linked BMP).

BMP 2.6.7: Stormwater Treatment Structures Inspection and Maintenance Procedures

Written Document Completed (by year 1)

Document Name and/or Web Address:

<https://www.windhamnh.gov/DocumentCenter/View/17046/OM---SW-Treatment-Structures-Inspection-and-Maintenance-2024>

Responsible Department/Parties: General Services Department

Description: Structural stormwater BMPs (excluding catch basins) will be inspected annually at a minimum and maintained as needed.

Catch Basin Maintenance and Repair Standard Operating Procedure

The Town of Windham's SOP on catch basin inspection and maintenance is as follows:

- Identify structures/equipment in need of repair during catch basin cleaning operations and prioritize need.
- Repair structures/equipment as soon as possible in order of prioritization. NEVER ALLOW DEFECTIVE STRUCTURES TO GO UNREPAIRED.
- Complete Catch Basin Maintenance/Repair Log, see attached, as the catch basin maintenance is performed.
- In Summer 2024, a new Survey123 Form was developed to document any repairs that may be completed on various stormwater assets. The questions follow the Catch Basin Maintenance/ Repair Log and includes all fields outlined in that document therefor either the physical or electronic form of documentation can be used.
 - Document any maintenance required (i.e. new grates, corrosion, erosion around structure, obstructions damaged roadway, etc.).
 - Keep a record of the date the repair was performed and what was done to repair the issue.
- Use appropriate erosion and sediment control practices when performing repairs.
- If necessary, remove sediment that might have entered downstream pipe.

Measurable Goal(s)

Inspect and maintain 100% of treatment structures to ensure they are properly functioning.

Attachments

2.6.7.A - Catch Basin Maintenance/Repair Log

2.6.7.B – Survey123 Stormwater Structure Maintenance/ Repair Log (Created Summer 2024)

2.6.7.C - Survey123 BMP Inspection Survey (Created Summer 2024)

Attachment 2.6.7.A Catch Basin Maintenance/Repair Log

Stormwater Structure Maintenance/ Repair Log			
Structure Type	Catchbasin	Manhole	Outfall
	Culvert	Swale	Pipe
Structural BMP - Stormwater Treatment Structure			
(If Pipe) Pipe Type	Connecting two structures	Field Inlet	
(If Structural BMP - Stormwater Treatment Structure) Structural BMP Type	Retention Basin/ Wet Pond	Detention Basin	Bioretention (Rain Garden)
	Water Quality Swale	Tree Well	Infiltration Trench
	Permeable Pavement	Constructed Stormwater Wetland	Sand Filter
	Vegetated Filter Strip		
Structure ID			
Location			
Date Original Issue was Identified			
Issues Identified			
Date and Time of Maintenance/ Repair			
Type of Maintenance/ Repair Performed			
Additional Comments?			
Photos			

Attachment 2.6.7.C Survey123 BMP Inspection Survey (in excel spreadsheet format)

BMP Inspection Survey			
Please fill out and note any maintenance concerns. These will be used for record keeping and tracking inspections.			
Form created from UNH Stormwater BMP Inspection Checklist (2021) located here: https://scholars.unh.edu/stormwater/95/			
BMP ID	Retention Pond	Detention Pond	
	Type of BMP	Water Quality Swale	Bioretention Cell/ Rain Garden
		Cistern	Dry Pond
		Tree Well	Other
Location of BMP (Address)			
Description of Location			
Year Installed			
Date of Last Inspection			
How often is the system being checked/maintained?	Biweekly	Monthly	
	Quarterly	Biannually	
	Annually		
Inspector's Initials	DS	JD	
	CB	MO	
	KM	Other:	
Weather	Sunny/Clear, no precipitation	Cloudy, no precipitation	
	Active precipitation	Rained within last 12 hours	
	Rained within last 24 hours	Rained within last 72 hours	
Inlet/ Outlet Conditions: Can water enter and exit the system?	Satisfactory	Unsatisfactory	
System Operability: Does system appear to be operating as designed?	Satisfactory	Unsatisfactory	
(If system operability is unsatisfactory) please explain:			
(If system operability is unsatisfactory) please attach photos			
Inorganic/ Organic Material Build-up: Is there noticeable buildup of debris, sediment, trash, vegetation, etc?	Satisfactory	Unsatisfactory	
(If inorganic/organic material build up is unsatisfactory) Please explain			
(If inorganic/organic material build up is unsatisfactory) Please attach photos			
System Integrity: Do system slopes look stable, is there notable damage in the system?	Satisfactory	Unsatisfactory	
(If system integrity unsatisfactory) Please explain			
(If system integrity unsatisfactory) please attach photos			
Is there maintenance required?	Yes	No	
If maintenance required, please indicate what maintenance is needed here			
If maintenance is required, please attach photos of areas needing maintenance			
Additional notes/ comments?			
Date of next inspection			
Photos of BMP			

BMP 2.6.8: SWPPP

Written Document Completed (by year 2)

Document Name and/or Web Address: <https://www.windhamnh.gov/450/Stormwater-Management>

Responsible Department/Parties: General Services Department

Description: Develop and implement a SWPPP for all municipally-owned or operated facilities in accordance with Section 2.3.7.2 of the MS4 permit.

Measurable Goal(s): Develop and implement SWPPP's for municipally owned facilities required by Section 2.3.7.2 of the MS4 permit.

BMP 2.6.9: Training of Town Staff

Training Completed (by year 2)

Document Name and/or Web Address: Discussion-style training. Topic varies per pertinent topic.

Responsible Department/Parties: Administration and Stormwater Team

Description: Annually provide education and training to Town staff on required/recommended good housekeeping procedures for municipal facilities.

Measurable Goal(s): Conduct annual training.

3.0 Annual Evaluation

Year 1 Annual Report

Document Name and/or Web Address: <https://windhamnh.gov/DocumentCenter/View/7109/Year-1-Annual-Report-2018-2019>

Year 2 Annual Report

Document Name and/or Web Address: <https://www.windhamnh.gov/DocumentCenter/View/7325/Windham-Annual-Report-Year-2>

Year 3 Annual Report

Document Name and/or Web Address: <https://www.windhamnh.gov/DocumentCenter/View/11373/Stormwater-Annual-Report-2021>

Year 4 Annual Report

Document Name and/or Web Address: <https://www.windhamnh.gov/DocumentCenter/View/13036/FINAL-Windham-annual-report-yr4>

Year 5 Annual Report

Document Name and/or Web Address: <https://www.windhamnh.gov/DocumentCenter/View/15678/MS4-Yr-5-Annual-Report>

Year X Annual Report

Document Name and/or Web Address: TBD

4.0 TMDLs and Water Quality Limited Waters

4.1 Bacteria/Pathogens TMDL/Impairment

Combination of Impaired Waters Requirements and TMDL Requirements as Applicable

Applicable Receiving Waterbody(ies) as listed in Appendix F of the MS4 permit and provided in the most recent approved list of impaired waterbodies.	TMDL/Impairment Name (if applicable)
Town Beach – Cobbetts Pond NHLAK700061204-01-03	Impairment: Escherichia coli (Bacteria) [TMDL approved during 2018 assessment cycle]
Beaver Brook – NHRI700061203-22	TMDL: Escherichia coli (Bacteria)

Annual Requirements Beginning Year 1

BMP 4.1.1: Initial Outfall Ranking

Document Name and/or Web Address: <https://www.windhamnh.gov/DocumentCenter/View/6384/IDDE-Plan>

Responsible Department/Parties: Stormwater Management Committee

Description: Rank Outfalls to receiving waters as high priority for IDDE implementation in the initial outfall ranking.

Measurable Goal(s): Outfalls discharging to receiving waters are ranked as high priority for IDDE implementation in the initial outfall ranking.

BMP 4.1.2: Catchments Ranking

Document Name and/or Web Address: <https://www.windhamnh.gov/DocumentCenter/View/6384/IDDE-Plan>

Responsible Department/Parties: Stormwater Management Committee

Description: Catchments draining to any waterbody impaired for bacteria or pathogens shall be designated either problem catchments or high priority in implementation of the IDDE program. (Appendix F, Section II.1.a.ii)

Measurable Goal(s): Catchments draining to any waterbody impaired for bacteria or pathogens is designated either problem catchment or high priority in implementation of the IDDE program.

- Annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate that describes the detrimental impacts of improper management of pet waste, requirements for pet waste collection and disposal, and penalties for non-compliance at the time of dog license renewal (January – April) or other appropriate time as outlined in this SWMP (Appendix F, Section II.1.a.i)
 - **Refer to BMP 1.2 in Figure 2.1.A : Public Education and Outreach**
- Annual message to septic-owning residents about proper maintenance in any catchment that discharges to a waterbody impaired for bacteria or pathogens (Appendix F, Section II.1.a.i) as outlined in this SWMP.
 - **Refer to BMP 1.1 in Figure 2.1.A : Public Education and Outreach.**

4.2 Phosphorus Impairment*

(* see Lake and Pond Phosphorus TMDL)

Applicable Receiving Waterbody(ies)	TMDL/Impairment Name (if applicable)
NHLAK700061204 (Cobbetts Pond)	Phosphorus

Annual Requirements Beginning Year 1

BMP 4.2.1: Initial Outfall Ranking

Document Name and/or Web Address: <https://www.windhamnh.gov/DocumentCenter/View/6384/IDDE-Plan>

Responsible Department/Parties: Stormwater Management Committee

Description: Rank Outfalls to receiving waters as high priority for IDDE implementation in the initial outfall ranking.

Measurable Goal(s): Outfalls discharging to receiving waters are ranked as high priority for IDDE implementation in the initial outfall ranking.

- Distribute an annual message that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release and phosphorus-free fertilizers as outlined in this SWMP. (Appendix H, Section II.1.a.i.1)
 - **Refer to BMP 1.3 and 1.4 in Figure 2.1.A : Public Education and Outreach**
- Distribute an annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate as outlined in this SWMP. (Appendix H, Section II.1.a.i.1)
 - **Refer to BMP 1.2 in Figure 2.1.A : Public Education and Outreach**
- Distribute an annual message in the encouraging the proper disposal of leaf litter as outlined in this SWMP (Appendix H, Section II.1.a.i.1)
 - **Refer to BMP 1.4 in Figure 2.1.A : Public Education and Outreach**
- 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 outlined in this plan. Or in lieu of post-leaf drop street sweeping, implementation of a fall leaf litter collection program (Appendix H, Section II.1.a.i.3).
 - **Refer to BMP 2.6.5 : Street Sweeping**
- Establish procedures to properly manage grass cuttings and leaf litter on permittee property, including prohibiting blowing organic waste materials onto adjacent impervious surfaces. (Appendix H, Section II.1.a.i.3)
 - **Refer to BMP 2.6.1 : Parks and Open Spaces Operation and Maintenance Procedures**

- Retrofit inventory and priority ranking under 2.3.6.e. shall include consideration of BMPs to reduce phosphorus discharges.
 - **Refer to BMP 2.5.5 : List of Municipal Retrofit Opportunities**
- 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 phosphorus removal by the BMP consistent with Attachment 1 to Appendix H. Document the BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus removed in pass per year by the BMP in each annual report.
 - **Located in part II.1.c.iii of Phosphorus Source Identification Report (PSIR)**

Requirements Due by Year 2

BMP 4.2.2: Requirement for New Development and Redevelopment Stormwater Management BMP's to be Optimized for Phosphorus Removal

Document Name and/or Web Address: Located in Site Plan Review Regulations:

<https://www.windhamnh.gov/DocumentCenter/View/541/Site-Plan-Regulations-PDF?bidId=>

Responsible Department/Parties: Community Development Department

Description: 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 phosphorus removal. (Appendix H, Section II.1.a.i.2)

Measurable Goal(s): New development and redevelopment stormwater management BMP's are optimized for phosphorus removal.

Requirements Due by Year 4

BMP 4.2.3 Phosphorus Source Identification Report

Document Name and/or Web Address:

<https://www.windhamnh.gov/DocumentCenter/View/17000/Phosphorus-Source-Identification-Report-2024-Year-6>

Responsible Department/Parties: Community Development Department

Description: Complete a Phosphorus Source Identification Report (Appendix H, Section II.1.b)

Measurable Goal(s): Complete a Phosphorus Source Identification Report by year 4

- Retrofit inventory and priority ranking under 2.3.6.e shall include consideration of BMPs that infiltrate stormwater where feasible.
 - **Refer to BMP 2.5.5 : List of Municipal Retrofit Opportunities**

Requirements Due by Year 5

- Evaluate all permittee-owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under Permit part 2.3.6.e or identified in the Phosphorus Source Identification Report that are within the drainage area of the impaired water or its tributaries.
 - **Located in part II.1.c.i of Phosphorus Source Identification Report (permittee-owned properties within the drainage area of the water quality limited water body (Cobbe's Pond)).**

- Complete a listing of planned structural BMPs and a plan and schedule for implementation.
 - **Located in part II.1.c.ii in Phosphorus Source Identification Report**

4.3 Nitrogen Impairment

Applicable Receiving Waterbody(ies)	TMDL/Impairment Name (if applicable)
<u>None</u>	

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

Applicable Receiving Waterbody(ies)	TMDL/Impairment Name (if applicable)
NHRIV700061102-18 (Policy/Porcupine Brook)	Iron

Annual Requirements Beginning Year 1

BMP 4.4.1: Initial Outfall Ranking

Document Name and/or Web Address: <https://www.windhamnh.gov/DocumentCenter/View/6384/IDDE-Plan>

Responsible Department/Parties: Stormwater Management Committee

Description: Rank Outfalls to receiving waters as high priority for IDDE implementation in the initial outfall ranking.

Measurable Goal(s): Outfalls discharging to receiving waters are ranked as high priority for IDDE implementation in the initial outfall ranking

- Increase street sweeping frequency of all municipal owned streets and parking lots to a schedule to target areas with potential for high pollutant loads as prescribed by this SWMP. (Appendix H, Section V.1.i.2)
 - **Refer to BMP 2.6.5 : Street Sweeping**
- 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.
 - **Refer to BMP 2.6.4 : Catch Basin Cleaning**

Requirements Due by Year 2

- 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. (Appendix H, Section V.1.i.2)
 - **There are no identified commercial and/or industrial land use areas within the drainage area of Policy/Porcupine Brook within the Town of Windham. The Town will reevaluate this as project plans come in the future.**

4.5 Lake and Pond Phosphorus TMDL

Applicable Receiving Waterbody(ies)	PCP Complete	TMDL/Impairment Name (if applicable)
<u>None Listed in Appendix F, Section III</u>	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	

4.6 Chloride Impairment

Applicable Receiving Waterbody(ies)	TMDL/Impairment Name (if applicable)
Connies Brook – NHRIV700061204-06 (Added in 2018)	Chloride

Annual Requirements | Appendix H, IV.3.a.i

BMP 4.6.1: Tracking Salt Application on Municipally Owned/Maintained Surfaces

Document Name and/or Web Address:

Responsible Department/Parties: General Services and Community Development Department

Description: (Beginning year 2) Track amount of salt applied to all municipally owned and maintained surfaces and reporting of salt use using the UNH Technology Transfer Center online tool: <http://www.roadsalt.unh.edu/Salt/> (Retired) or Annual Salt Usage Report Form: <https://onlineforms.nh.gov/app/?allowAnonymous=true#/formversion/a00f1b02-719c-4129-b669-57b3b955b2fe?FormTag=NHDES-W-07-001>

Measurable Goal(s): Annually track the amount of salt applied to all municipally owned and maintained surfaces using the UNH Technology Transfer Center online tool or Annual Salt Usage Report Form (Beginning Year 2).

Requirements Due by Year 5 | Appendix H, IV.2

BMP 4.6.2: Salt Reduction Plan

Document Name and/or Web Address: TBD

Responsible Department/Parties: Community Development, General Services

Description:

Measurable Goal(s):

Other Actions Completed by the Town

- The Town of Windham is considering being certified under the Municipal Green Sno Pro Program and will be discussing over the course of the next year

4.7 Chloride TMDL

Applicable Receiving Waterbody(ies)*	TMDL/Impairment Name (if applicable)
Dinsmore Brook NHRIV700061204-01	Chloride
Policy-Porcupine Brook NHRIV700061102-18	Chloride
Unnamed Brook to Western Embayment (North Tributary to Canobie Lake) NHRIV700061102-23	Chloride

*Beaver Brook is not listed in Windham per <https://www.epa.gov/tmdl/region-1-approved-tmdls-state#tmdl-nh>

Annual Requirements Beginning Year 1

BMP 4.7.1: Chloride Reduction Plan

Document Name and/or Web Address: TBD

Responsible Department/Parties: Community Development, General Services

Description:

Measurable Goal(s):

- The Town of Windham, NH plans on assessing the Salt Reduction Plan and Chloride Reduction Implementation Plan (attachment G.1 and G.2) as part of Appendix F, Chloride TMDL requirements.
- Review existing Chloride Reduction Plan prepared by the NHDES.
- Meet the requirements of Appendix F – Part I.2 including:
 - Keep a written copy (hard copy or electronic) of the NHDES Chloride Reduction Plan as part of the Town’s SWMP; and
 - Implement operator-specific permit requirements included in the Town’s Authorization Letter from EPA.
- Implement the measures set forth in the NHDES Chloride Reduction Plan.

APPENDIX A

2018 Town of Windham Notice of Intent (NOI) and Special Eligibility



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

VIA EMAIL

March 18, 2019

Jennifer Simmons
Board of Selectmen

And;

David Sullivan
Town Administrator
4 North Lowell Road
Windham, NH 03087
townadmin@windhamnh.gov

Re: National Pollutant Discharge Elimination System (NPDES) Permit ID: NHR041035, Town of Windham, NH

Dear David Sullivan:

Your Notice of Intent (NOI) for coverage under the 2017 NPDES General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems in New Hampshire (MS4 General Permit) has been reviewed by EPA and appears to be complete. You are hereby granted authorization by EPA to discharge stormwater from your MS4 in accordance with applicable terms and conditions of the MS4 General Permit, including all applicable Appendices. This authorization to discharge expires at midnight on **June 30, 2023**.

For those permittees that certified Endangered Species Act eligibility under Criterion C in their NOI, this authorization letter also serves as EPA's concurrence with your determination that your discharges will have no effect on the listed species present in your action area, based on the information provided in your NOI.

As a reminder, your first annual report is due by **September 30, 2019** for the reporting period from May 1, 2018 through June 30, 2019.

Information about the permit and available resources can be found on our website:
<https://www.epa.gov/npdes-permits/new-hampshire-small-ms4-general-permit>. Should you have

any questions regarding this permit please contact Suzanne Warner at warner.suzanne@epa.gov or (617) 918-1383.

Sincerely,

A handwritten signature in blue ink that reads "Thelma Murphy". The signature is fluid and cursive, with "Thelma" on the top line and "Murphy" on the bottom line.

Thelma Murphy, Chief
Stormwater and Construction Permits Section
Office of Ecosystem Protection
United States Environmental Protection Agency, Region 1

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Page 1 of 20

Part I: General Conditions

General Information

Name of Municipality or Organization:

State:

EPA NPDES Permit Number (if applicable):

Primary MS4 Program Manager Contact Information

Name: Title:

Street Address Line 1:

Street Address Line 2:

City: State: Zip Code:

Email: Phone Number:

Fax Number:

Other Information

Stormwater Management Program (SWMP) Location
(web address or physical location, if already completed):

Eligibility Determination

Endangered Species Act (ESA) Determination Complete?

Eligibility Criteria
(check all that apply): A B C

National Historic Preservation Act (NHPA) Determination Complete?

Eligibility Criteria
(check all that apply): A B C D

Check the box if your municipality or organization was covered under the 2003 MS4 General Permit

MS4 Infrastructure (if covered under the 2003 permit)

Estimated Percent of Outfall Map Complete?
(Part II, III, IV or V, Subpart B.3.(a.) of 2003 permit)

If 100% of 2003 requirements not met, enter an
estimated date of completion (MM/DD/YY):

Web address where MS4 map is published:

If outfall map is unavailable on the Internet an electronic
or paper copy of the outfall map must be included with
NOI submission (see section V for submission options).

Regulatory Authorities (if covered under the 2003 permit)

Illicit Discharge Detection and Elimination (IDDE) Authority Adopted?
(Part II, III, IV or V, Subpart B.3.(b.) of 2003 permit)

Effective Date or Estimated
Date of Adoption (MM/DD/YY):

Construction/Erosion and Sediment Control (ESC) Authority Adopted?
(Part II, III, IV or V, Subpart B.4.(a.) of 2003 permit)

Effective Date or Estimated
Date of Adoption (MM/DD/YY):

Post-Construction Stormwater Management Adopted?
(Part II, III, IV or V, Subpart B.5.(a.) of 2003 permit)

Effective Date or Estimated
Date of Adoption (MM/DD/YY):

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part II: Summary of Receiving Waters

Please list the waterbodies to which your MS4 discharges. For each waterbody, please report the number of outfalls discharging into it and, if applicable, the segment ID and any impairments.

New Hampshire list of impaired waters: <http://des.nh.gov/organization/divisions/water/wmb/swqa/>

Waterbody that receives flow from the MS4 and segment ID if applicable	Number of outfalls into receiving water segment	Other pollutant(s) causing impairments								
		Chloride	Chlorophyll-a	Dissolved Oxygen/DO Saturation	Nitrogen	Oil & Grease/PAH	Phosphorus	Solids/TSS/Turbidity	E. coli	Enterococcus
Cobbetts Pond - NHLAK700061204-01-01	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cobbetts Pond - Town Beach - NHLAK700061204-01-03	1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Unnamed Brook - NHRIV700061204-14	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Canobie Lake - NHLAK700061102-02	12	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Policy Brook - Porcupine Brook - NHRIV700061102-18	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beaver Brook - NHRIV700061203-21	8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rock Pond Smith Rd Inlet - NHRIV700061204-08	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Connies Brook - NHRIV700061204-06	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unnamed Brook - to Beacon Hill Estates Detention Pond - NHRIV700061203-18	4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Searles School Brook - NHRIV700061102-22	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unnamed Brook - NHRIV700061203-39	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shadow Lake - NHLAK700061102-09-01	3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flatrock Brook - NHRIV700061102-13	10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Golden Brook - NHRIV700061204-03	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rock Pond - NHLAK700061204-03	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Moeckel Pond - NHLAK700061204-04	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Golden Brook - NHRIV700061204-02	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unnamed Brook - NHRIV700061204-15	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Click to lengthen table

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary

Identify the Best Management Practices (BMPs) that will be employed to address each of the six Minimum Control Measures (MCMs).

For each MCM, list each existing or proposed BMP by category and provide a brief description, responsible parties/departments, measurable goals, and the year the BMP will be employed (public education and outreach BMPs also requires a target audience). **Use the drop-down menus in each table or enter your own text to override the drop down menu.**

MCM 1: Public Education and Outreach

BMP Media/Category (enter your own text to override the drop down menu)	BMP Description	Targeted Audience	Responsible Department/Parties (enter your own text to override the drop down menu)	Measurable Goal	Beginning Year of BMP Implementation
Various delivery methods	Varied. Use NH Stormwater Coalition outreach materials and guidance to implement outreach for relevant impairments. *See Note 2 in Section IV.	Residents	Community Development Department - Rex Norman with NH Region	To be determined with coordination with the Stormwater Coalition. Examples: 1) Increased awareness of proper fertilized use. 2) Increased awareness of pet waste impacts to water quality. 3) Increased awareness of yard waste impacts to water quality. 4) Increased septic system testing.	Year 1
Various delivery methods	Varied. Use NH Stormwater Coalition outreach materials and guidance to implement outreach for relevant impairments. *See Note 2 in Section IV.	Businesses, Institutions and Commercial Facilities	Community Development Department - Rex Norman with NH Region	To be determined with coordination with the Stormwater Coalition.	Year 1

Various delivery methods	Varied. Use NH Stormwater Coalition outreach materials and guidance to implement outreach for relevant impairments. *See Note 2 in Section IV.	Developers (construction)	Community Development Department - Rex Norman with NH Region	To be determined with coordination with the NH Stormwater Coalition.	Year 2
Various delivery methods	Varied. Use NH Stormwater Coalition outreach materials and guidance to implement outreach for relevant impairments. *See Note 2 in Section IV.	Industrial Facilities	Community Development Department - Rex Norman with NH Region	To be determined with coordination with the NH Stormwater Coalition.	Year 2

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

MCM 2: Public Involvement and Participation

BMP Categorization	Brief BMP Description (enter your own text to override the drop down menu)	Responsible Department/Parties (enter your own text to override the drop down menu)	Additional Description/ Measurable Goal	Beginning Year of BMP Imple- men- tation
Public Review	Make SWMP and annual reports available for public review.	General Services Department - Jack McCartney	Allow annual review of stormwater management plan and posting of stormwater management plan on website.	Year 2
Public Participation	Implement 1 or more public participation events/activities annually.	Community Development Department - Rex Norman	The number of public participation events conducted.	Year 2
Public Review	Annual Reporting.	General Services Department - Jack McCartney and Community Development De	Annual reporting of public participation activity(ies) and public review/ comment on SWMP.	Year 2

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

MCM 3: Illicit Discharge Detection and Elimination (IDDE)

BMP Categorization (enter your own text to override the drop down menu)	BMP Description	Responsible Department/Parties (enter your own text to override the drop down menu)	Measurable Goal (all text can be overwritten)
*See Note 3 in Section IV			
Storm sewer system map	Update map to add required details.	General Services Department - Jack McCartney and Information Technology	Update map within 2 years of effective date of permit and complete full system map 10 years after effective date of permit.
Written IDDE program development	Create written IDDE program.	General Services Department - Jack McCartney and Community Development	Complete within 1 year of the effective date of permit and update as required.
Implement IDDE program	Implement catchment investigations according to program and permit conditions.	General Services Department - Jack McCartney and Community Development	Complete 10 years after effective date of permit.
Implement employee training	Train employees on IDDE implementation.	Town Administrator - David Sullivan	Provide training annually.
Conduct dry weather screening	Conduct in accordance with outfall screening procedure and permit conditions in section 2.3.4.7.b.	General Services Department - Jack McCartney and Community Development	Complete 3 years after effective date of permit, update annually and based on results of dry weather screening.
Conduct wet weather screening	Conduct in accordance with outfall screening procedures and permit conditions in section 2.3.4.7.b.	General Services Department - Jack McCartney and Community Development	Complete 10 years after effective date of permit.
Ongoing screening	Conduct dry weather and wet weather screening (as necessary).	General Services Department - Jack McCartney and Community Development	Complete ongoing outfall screening on completion of IDDE program.

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

MCM 4: Construction Site Stormwater Runoff Control

BMP Categorization (enter your own text to override the drop down menu or entered text)	BMP Description	Responsible Department/Parties (enter your own text to override the drop down menu)	Measurable Goal (all text can be overwritten)
Continue site inspection and enforcement of Erosion and Sediment Control (ESC) measures	Complete written procedures of site inspections and enforcement procedures.	Community Development Department (CDD) - Dick Gregory	Complete within 1 year of the effective date of permit.
Prepare written procedures for site plan review	Document written procedures in regulations for site plan review and continue implementation.	CDD - Dick Gregory	Complete within 1 year of the effective date of permit.
Erosion and sediment control	Review (and update as required) existing requirements for construction operators to implement a sediment and erosion control program.	CDD - Dick Gregory	Complete within 1 year of the effective date of permit.
Construction and site waste control	Review (and update as required) existing requirements to control wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes.	CDD - Dick Gregory	Complete within 1 year of the effective date of permit.

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

MCM 5: Post-Construction Stormwater Management in New Development and Redevelopment

BMP Categorization <small>(enter your own text to override the drop down menu or entered text)</small>	BMP Description	Responsible Department/Parties <small>(enter your own text to override the drop down menu)</small>	Measurable Goal <small>(all text can be overwritten)</small>
As-built plans for on-site stormwater control	Enact procedures in accordance with permit requirements in Section 2.3 to require submission of as-built plans and ensure long term operations and maintenance as part of the SWMP.	Community Development Department (CDD) - Dick Gregory	Require submission of as-built plans for completed projects.
Target properties to reduce impervious areas	Complete an inventory and priority ranking of permittee-owned property and existing infrastructure that could be retrofitted with BMPs designed to reduce the frequency, volume and pollutant loads of stormwater discharges to its MS4 through the mitigation of impervious area.	CDD - Dick Gregory	Complete 4 years after effective date of permit and report annually on retrofitted properties.
Determine feasibility and allow for green infrastructure implementation	Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist.	CDD - Dick Gregory	Complete 4 years after effective date of permit and implement recommendations of report.
Street design and parking lot guidelines	Develop a report assessing requirements that affect the creation of impervious cover. The assessment will help determine if changes to design standards for streets and parking lots can be modified to support low impact design options.	CDD - Dick Gregory	Complete 4 years after effective date of permit and implement recommendations of report.

Ensure any stormwater controls or management practices for new development and redevelopment meet the retention or treatment requirements of the permit and consistent with the Southeast Watershed Alliance's Model Stormwater Standards for Coastal Watershed Communities. See Note 4 in Section IV.	Adoption, amendment, or modification of a regulatory mechanism to meet permit requirements.	CDD - Dick Gregory	Complete 2 years after effective date of permit.

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

MCM 6: Municipal Good Housekeeping and Pollution Prevention

BMP Categorization (enter your own text to override the drop down menu or entered text)	BMP Description	Responsible Department/Parties (enter your own text to override the drop down menu)	Measurable Goal (all text can be overwritten)	Beginning Year of BMP Implementation
Operation and Maintenance (O&M) procedures	Create written O&M procedures including all requirements contained in 2.3.7.1 for parks and open spaces, buildings and facilities, and vehicles and equipment.	General Services - Jack McCartney and Recreation Coordinator - Cheryl	Complete and implement 2 years after effective date of permit.	Year 2
Inventory all permittee-owned parks and open spaces, buildings and facilities, and vehicles and equipment	Create inventory.	General Services Department - Jack McCartney	Complete 2 years after effective date of permit and implement annually.	Year 2
Infrastructure O&M	Establish and record annually implementation of program activities for maintenance, repair and rehabilitation of MS4 infrastructure.	General Services Department - Jack McCartney	Complete 2 years after effective date of permit.	Year 2
Stormwater Pollution Prevention Plan (SWPPP)	Create SWPPPs for municipal properties or individual facilities per requirements of section 2.3.7.2.	General Services Department - Jack McCartney	Complete 2 years after effective date of permit.	Year 2
Catch basin cleaning	Establish schedule for catch basin cleaning such that each catch basin is no more than 50% full and clean catch basins on that schedule, ensure proper storage of basin cleanings.	General Services Department - Jack McCartney	Clean catch basins on established schedule and report number of catch basins cleaned and volume of material moved annually.	Year 1

Street sweeping program	Sweep all MS4 streets (curbed or with catch basins) and permittee-owned parking lots in accordance with permit conditions.	General Services Department - Jack McCartney	Sweep all streets and permittee-owned parking lots once per year in the spring.	Year 1
Road salt use optimization and winter road maintenance program	Evaluate current program to minimize the use of road salt and evaluate opportunities for use of alternative materials.	General Services Department - Jack McCartney	Implement salt use optimization during deicing season.	Year 2
Inspections and maintenance of stormwater treatment structures	Establish and implement inspection and maintenance procedures and frequencies.	General Services Department - Jack McCartney	Inspect and maintain treatment structures at least annually.	Year 1

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

Actions for Meeting Total Maximum Daily Load (TMDL) Requirements

Use the drop-down menus to select the applicable TMDL, action description to meet the TMDL requirements, and the responsible department/parties. If no options are applicable, or more than one, enter your own text to override drop-down menus. If submitting a NHDES approved alternative reduction plan, attach and submit it with the NOI.

Applicable TMDL	Action Description	Responsible Department/Parties (enter your own text to override the drop down menu)
I-93 Corridor: Dinsmore Brook in Windham (Chloride)	Adhere to requirements in Part I.1 of Appendix F	General Services Department - Jack McCartney and Community Deve
I-93 Corridor: North Tributary to Canobie Lake in Windham (Chloride)	Adhere to requirements in Part I.1 of Appendix F	General Services Department - Jack McCartney and Community Deve
I-93 Corridor: Policy-Porcupine Brook in Salem & Windham (Chloride)	Adhere to requirements in Part I.1 of Appendix F	General Services Department - Jack McCartney and Community Deve
I-93 Corridor: Beaver Brook (Chloride)	Adhere to requirements in Part I.1 of Appendix F	General Services Department - Jack McCartney and Community Deve
Bacteria Impaired Waters	Adhere to requirements in Part II.1 of Appendix F	General Services Department - Jack McCartney and Community Deve

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

Actions for Meeting Requirements Related to Water Quality | limited Waters

Use the drop-down menus to select the pollutant causing the water quality limitation and enter the waterbody ID(s) experiencing excursions above water quality standards for that pollutant. In addition, if you are subject to additional requirements due to a downstream nutrient impairment (see Part 2.2.2 of the permit) select the pollutant of concern and indicate applicable waterbody IDs or write "all waterbodies" if applicable. Choose the action description from the dropdown menu and indicate the responsible party. If no options are applicable, or more than one, **enter your own text to override drop-down menus**.

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part IV: Notes and additional information

Page 19 of 20

Use the space below to indicate the part(s) of 2.2.2 that you have identified as not applicable to your MS4 and provide all supporting documentation below or attach additional documents if necessary.

Provide any additional information about your MS4 program below.

The MS4 map prepared under the 2003 Permit was recently converted from rough map segments, notes and coordinates to a digital format. The waterbodies to which each outfall discharges will be reevaluated as part of the map refinement.

Attached please find documentation received from the United States Department of the Interior related to the Endangered Species Act inquiry. The Northern Long Eared Bat is within our MS4, but no planned activities under this permit are expected to affect the bat. We will consult with US Fish and Wildlife as needed during the permit term related to any future BMPs.

Note 1 - There are no known MS4 outfalls to the following impaired waters:

Cobbetts Pond - Dunkan (Duncan) Beach - NHLAK700061204-01-04
Seavey Pond - NHLAK700061102-08
Unnamed Brook - NHRIIV700061203-11 (Derry)

Note 2 - MCM 1 Requires a minimum of two messages to the four audiences listed for a total of eight messages over permit term. Additional messaging may be required under Appendix H for Water Quality Limited Waterbodies.

Note 3 - Windham does not have any municipally owned public sanitary sewer collection or treatment systems.

Note 4 - The MODEL STORMWATER STANDARDS FOR COASTAL WATERSHED COMMUNITIES is available at:
https://www.unh.edu/unhsc/sites/unh.edu.unhsc/files/Final_SWA_SWStandards_Dec_20121_0.pdf

Note 5 – Under Actions for Meeting Requirements Related to Water Quality Limited Waters, there are additional pollutants on Windham's 303(d) list, but, they have been omitted from the table as there are no applicable Action Descriptions in Appendix H.

There are no known direct connections to other regulated MS4 infrastructure. As the map is refined, this understanding will be confirmed.

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Page 20 of 20

Part V: 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 have no personal knowledge that the information submitted is other than 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. (40 CFR 122.22)

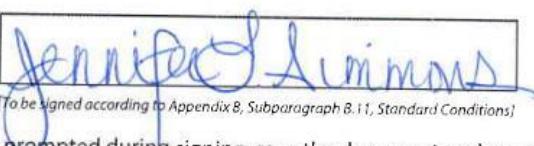
Name:

Jennifer Simmons

Title:

Board of Selectmen Member

Signature:



To be signed according to Appendix B, Subparagraph B.11, Standard Conditions

Date:

9/27/18

Note: When prompted during signing, save the document under a new file name



United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
<http://www.fws.gov/newengland>



In Reply Refer To:

September 20, 2018

Consultation Code: 05E1NE00-2018-SLI-3155

Event Code: 05E1NE00-2018-E-07404

Project Name: Windham MS4

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2018-SLI-3155

Event Code: 05E1NE00-2018-E-07404

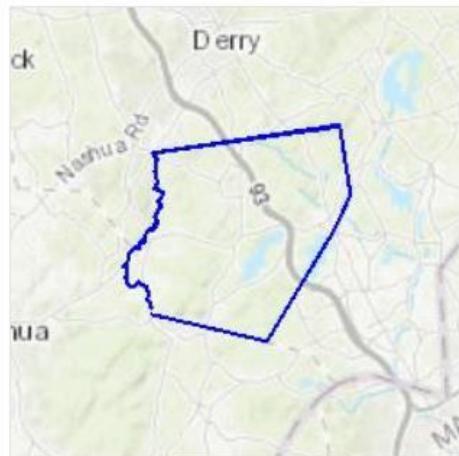
Project Name: Windham MS4

Project Type: ** OTHER **

Project Description: There is no construction planned related to the MS4 Permit process. If future construction projects are planned, Consultation will be revisited.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/42.805334237080125N71.24754542675176W>



Counties: Hillsborough, NH | Rockingham, NH

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Ref#	Prefix	Historic Name	Other Name(s)	Multiple Name	NHL Listing Date	Federal Date	National Agency	Park	City	County	State	Address	Significant Person	Request Type	Secondary Status	Code
82001694		Searles School and Chapel			1/11/1982				Windham	Rockingham	NH	Range and Searles Rds.	FALSE	Vaughan, Henry	Single	Listed

APPENDIX B
Copy of Authorized Representative Authority



TOWN OF WINDHAM, NEW HAMPSHIRE

OFFICE OF THE BOARD OF SELECTMEN/TOWN ADMINISTRATOR

3 NORTH LOWELL ROAD – WINDHAM, NEW HAMPSHIRE 03087

PH: 603 432-7732 FAX: 603 965-1234 EMAIL: TOWNADMIN@WINDHAMNH.GOV

June 28, 2019

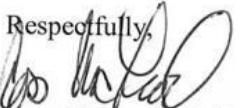
Re: **Windham Stormwater Management Plan**

To Whom it May Concern:

In accordance with GP Appendix B, subsection 11.B of the 2016 MS4 General Permit, the purpose of this letter is to confirm that, as part of our regularly scheduled meeting on June 17, 2019, the Board of Selectmen voted 4-0 to authorize Town Administrator David Sullivan to sign and submit the Town of Windham's finalized Stormwater Management Plan.

In closing, should there be any questions, or anything further required regarding this matter, please feel free to contact me.

Respectfully,


Ross McLeod, Chair
Windham Board of Selectmen

APPENDIX C

MS4 Map

The map of the Windham, NH MS4 Regulated Area (2017 NH MS4 General Permit) can be located in Figure 1.6.A

Publicly available AxisGIS map can be found [here](#)

This map does not have the most up to date information, refer to map below for updated information The following elements can be found on this map:

- Catch basins
- Water Drainage Line
- Drainage Areas

Publicly available ArcGIS map of Windham, NH's separate storm sewer system/stormwater assets can be found [here](#)

This map was developed in 2023 and is continuous being updated as more information becomes available. The following information can be found on this map:

- Catch basins
- Manholes
- Outfalls
- Interconnections
- Structural BMP's – Stormwater Treatment Structures
- Original AxisGIS Water Drainage Line layer (Stormdrain Pipes – Original Layer [Axis GIS])
- Stormdrain Pipes (2023 – Present)
- Cross Culverts
- Swales
- Field Inlets
- Surface Waters – Waterbodies, Streams, Wetlands (AxisGIS Layer)
- MS4 Area (2010 Census)

If you have any questions or inquiries, please contact the Environmental Planner at the Community Development Department (603) 432-380

APPENDIX D

Required Description of Response for GP 2.1.1.d. Documentation

~~Ongoing updates to documentation related to GP Section 2.1.1.d. is maintained with the hard copy of the Stormwater Management Plan (SWMP).~~

Permit Year 1 (July 1, 2018 – June 30, 2019) – No Documentation
Permit Year 2 (July 1, 2019 – June 30, 2020) – No Documentation
Permit Year 3 (July 1, 2020 – June 30, 2021) – No Documentation
Permit Year 4 (July 1, 2021 – June 30, 2022) – No Documentation
Permit Year 5 (July 1, 2022 – June 30, 2023) – No Documentation
Permit Year 6 (July 1, 2023 – June 30, 2024) – No Documentation

APPENDIX E
Listing of Interconnected MS4's

General Information																			
Interconnection Object ID	Ranking	SVF	Address	Structure Type	Structure Object ID	Pipe ID	Pipe Direction	Pipe Material	Pipe Size	Discharging to or Receiving from Interconnected MS4?	Interconnecting MS4	Receiving Waterbody of the Ultimate Outfall	Receiving Waterbody ID	Impairments	TMDL	Sample For	Classification under the applicable state wter quality standards	Date Mapped	Notes
IC_1	Low Priority	Delahuntly Dr @ Range Rd	Catchbasin	State CB - No ID	957	SW	HDPE	18"	Discharging	State	TBD				E.Coli		12/14/2023		
IC_2	Low Priority	4 Chapel Rd	Catchbasin	(CB)1751	959	NW	HDPE	15"	Receiving	State	Searles School Brook	NHRIV700061102-22			E.Coli		12/14/2023		
IC_3	Low Priority	Haris Rd @ Rockingham Rd	Other	Outfall in State Detention Pond	965	SW	HDPE		Discharging	State	TBD				E.Coli		12/14/2023	Discharges to a state-owned detention basin.	
IC_4	Low Priority	3 North Lowell Rd	Catchbasin	State CB - No ID	1564	SNW	Concrete	12"	Discharging	State	Golden Brook	NHRIV700061204-02			E.Coli, Mercury*		4/2/2024	On CDD Property - upstream is inlet flowing from old animal pound	
IC_5	Low Priority	3 North Lowell Rd	Catchbasin	State CB - No ID	32 (Under drain/ perimeter drain)	E	PVC	4"	Discharging	State	Golden Brook	NHRIV700061204-02			E.Coli, Mercury*		4/2/2024	On CDD Property - upstream appears to be underdrain/perimeter drain	
IC_6	Low Priority	4 North Lowell Rd	Catchbasin	(CB) 5	1561	NW	Concrete	15"	Receiving	State	Golden Brook	NHRIV700061204-02			E.Coli, Mercury*		4/2/2024		
IC_6A	Low Priority	5 North Lowell Rd	Catchbasin	(CB) 5	1563	W	Concrete	12"	Receiving	State	Golden Brook	NHRIV700061204-02			E.Coli, Mercury*		4/2/2024		
IC_7	Low Priority	Hardwood Rd @ NH111	Manhole	State MH - No ID	1856	NW	Concrete	15"	Discharging	State	TBD				E.Coli		7/26/2024		

Inventory can also be viewed here: <https://www.windhamnh.gov/DocumentCenter/View/17004/Outfall-and-Interconnection-Inventory-Year-6>

APPENDIX F

Contents of SWMP required 1.10.2.b - d

Ongoing updates to documentation related to GP Section 1.10.2.b., c., and d. is maintained with the hard copy of the Stormwater Management Plan (SWMP)

APPENDIX G

Additional Documentation Required to be Documented in the SWMP

G.1 : Salt Reduction Plan

The Salt Reduction Plan (2011, Revised 2016) can be located on the Town website here:
<https://www.windhamnh.gov/DocumentCenter/View/16772/Salt-Reduction-Plan-2011-Revised-2016>

G.2 : Chloride Reduction Implementation Plan

The Chloride Reduction Implementation Plan (2011) can be located here:
<https://www.nhms4.des.nh.gov/sites/g/files/ehbemt636/files/documents/2022-09/dinsmore.pdf>

APPENDIX H
Copy of the 2017 MS4 General Permit

A copy of the MS4 General Permit (2017) can be found here: <https://www3.epa.gov/region1/npdes/stormwater/nh/2017-small-ms4-general-permit-nh-mod.pdf>

APPENDIX I

#Win 2:06:25:11 Stormwater Management Program Ordinance

**ORDINANCE:
WINDHAM STORM WATER MANAGEMENT PROGRAM:****SECTION I: PURPOSE:**

The purpose of this Ordinance is to mandate a storm water management program to reduce the discharge of pollutants from municipal storm water collection systems within the urbanized area of the Town of Windham, NH as mandated by the U.S. EPA Phase II National Pollutant Discharge Elimination System (NPDES) Storm Water Program.

SECTION II: AUTHORITY:

This Ordinance has been enacted pursuant to the statutory authority granted to the Town of Windham by provisions of the Clean Water Act, 33 USC 1251, under 40 CFR part 122 EPA Administered Permit Programs: The National Pollutant Discharge Elimination System.

SECTION III: DEFINITIONS:

"Regulated Storm Water": Water from rain and/or melting snow or ice, which flows over paved or unpaved surfaces to a Town of Windham storm water collection system and migrates to a State of New Hampshire water resource.

"Storm Water Conveyance System": A storm water collection mechanism and discharge point for storm water runoff.

"Impaired Waters": Waters of the State of New Hampshire that are adversely affected by non-natural impacts of contamination and have been designated as such by the State.

"Illicit Discharge": Non-storm water discharge or contaminated storm water, which is not authorized for discharge to a Windham storm water collection system.

"MS4 Plan": Municipal separate storm water sewer systems plan to control storm water pollution.

"Control Measures": Required elements within the MS4 Plan.

SECTION IV: PROGRAM CONTROL MEASURES:

Each of the six mandated Control Measures, listed below, have associated goals or "Best Management Practices (BMPs)", which shall be implemented during the term of the NPDES Permit and presented in detail in the Town's mandated MS4 Plan.

- A) Public Education and Outreach.
- B) Public Participation/Involvement.
- C) Illicit Discharge Detection and Elimination.
- D) Construction Site Runoff Control.
- E) Post-Construction Runoff Control.

F) Pollution Prevention/Good Housekeeping.

SECTION V: RECORD KEEPING:

Records will be kept public for period of 5 years. Records will be only submitted when requested by the permitting authority.

SECTION VI: ENFORCEMENT:

The Board of Selectmen is hereby charged to carry out the enforcement of the provisions within this Ordinance and the provisions within the MS4 Plan this Ordinance represents by statute. The Board of Selectmen may delegate such powers to one or more designees with authority to bring actions to force compliance with this Ordinance and the MS4 Plan.

SECTION VII: PENALTIES:

Any person(s) (including individuals, corporations, associations, etc.) who knowingly violate the provisions of this Ordinance and its referenced MS4 Plan shall be subject to imposition of the following:

- A) Windham procedural rules regulating planning & development, construction, post-construction, and road maintenance are used in conjunction with the MS4 Plan. These rules include, but not limited to, Site Plan Regulations, Subdivision Regulations, and Zoning & Land Use Ordinance. Violations and penalties of the above regulations are levied through designated Town authorities.
- B) Penalties relating to illicit discharges or improper run-off controls as referenced in the Storm Water Plan and not under the jurisdiction of Windham's Community Development Department or other regulating authority shall be levied by an agent of the Board of Selectmen. Penalties are as follows:
 1. Aforesaid persons shall receive a written notification to cease and desist discharging into Windham's storm water conveyance system and shall be required to take corrective measures to permanently eliminate the illicit discharge from entering Windham's storm water conveyance system and/or correct the run-off controls within 10 days of the notification.
 2. Upon non-compliance of the cease and desist notification, aforesaid persons shall be fined \$1000/day until illicit discharge is eliminated from the Windham storm water conveyance system.
 3. Upon 30 days of non-compliance, the New Hampshire Department of Environmental Services (NH DES) and the US EPA shall be notified for further enforcement actions.
 4. In addition to the monetary fines established by this policy, the Town further reserves the right to require, with the assistance of NH DES and US EPA, aforesaid persons to remediate any infrastructure and/or environmental damages caused by the illicit discharge.

SECTION VIII : WAIVERS:

The Windham Board of Selectmen reserves the right, for good cause shown, to make special exceptions and/or waive any portion of the regulations.

SECTION IX : SEVERABILITY:

If any provision of these Regulations is held to be invalid, other provisions and sections shall not be affected, and to this end, the provisions and sections hereof are declared to be severable.

SECTION X - AMENDMENTS:

These Regulations shall be adopted, and subsequent amendments shall be adopted from time to time by the Board of Selectmen, following a public hearing, notice of which shall be posted pursuant to State and local laws in two (2) or more public places, or published in a newspaper of general circulation not less than ten (10) days prior to the public hearing.

SECTION XII - ADOPTION:

These Regulations shall take effect immediately upon adoption of the Board of Selectmen.

Approved by the Board of Selectmen this 28th day of March, 2011.

Board of Selectmen