



City of Nashua, NH  
2017 NPDES Phase II Small MS4  
**General Permit No. NHR041021**  
**2023 Annual Report**

July 1, 2022 to June 30, 2023



Prepared for:

City of Nashua  
Public Works Division  
848 West Hollis Street  
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# **Year 5 Annual Report**

**New Hampshire Small MS4 General Permit**

**Reporting Period: July 1, 2022 - June 30, 2023**

**CITY OF NASHUA**

EPA NPDES Permit Number NHR041021

# Certification of Small MS4 Year 5 Annual Report

“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: Daniel Hudson, P.E.	
Title: City Engineer	
Signature:	Date: 09/28/2023

**Authorized Representative:**

The authorization letter is:

Attached to this document (document name listed below):

20230914 Designation of City Engineer as authorized person
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Publicly available at the website:

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**Primary MS4 Program Manager Contact Information:**

Name: Daniel Hudson, P.E.	Title/Position: City Engineer	
Department: Division of Public Works, Engineering Department		
Street Address: 848 West Hollis Street		
City: Nashua	State: New Hampshire	Zip Code: 03062

Email: <a href="mailto:HudsonD@nashuanh.gov">HudsonD@nashuanh.gov</a>	Phone Number: 603-589-3120
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# Small MS4 Authorization

The following annual report, which serves as a self-assessment, is intended to document the activities undertaken over the **reporting period from July 1, 2022, through June 30, 2023**, in accordance with the Permit.

The Notice of Intent (NOI) can be found at the following web address:

<https://www.epa.gov/npdes-permits/regulated-ms4-new-hampshire-communities>

Compliance activities have been identified and described in the City of Nashua Stormwater Management Program Plan (SWMP) and Illicit Discharge Detection and Elimination (IDDE) Plan. Those documents and other pertinent Year 5 information can be found in submission or at the following websites, and will be referred to throughout this report:

SWMP: <a href="https://www.nashuanh.gov/1456/Stormwater-Management">https://www.nashuanh.gov/1456/Stormwater-Management</a>
Date SWMP was Last Updated: September of 2023
IDDE Program Plan (included in SWMP): <a href="https://www.nashuanh.gov/1456/Stormwater-Management">https://www.nashuanh.gov/1456/Stormwater-Management</a>
Updated System Map: <a href="https://newgis.nashuanh.gov/nashuanh/">https://newgis.nashuanh.gov/nashuanh/</a>
Progress on Completion of System Map: Map of storm sewer system and associated outfalls is continually updated to reflect findings and changes. The City of Nashua maintains an ArcGIS Online map which field contractors, engineering consultants, and city staff collaboratively update as CCTV inspections of the City’s stormwater collection system are performed.
Updated SSO Inventory: The SSO inventory has been updated, including the status of mitigation and corrective measures implemented or was addressed. SSOs are reported to the EPA in accordance with NPDES POTW Permit No. NH0100170.
Updated Inventory and Ranking of Outfalls/Interconnections: See attached ranking within IDDE Appendix to SWMP.
Dry Weather Screening Data: Reference appendices of SWMP, available at <a href="https://www.nashuanh.gov/1456/Stormwater-Management">https://www.nashuanh.gov/1456/Stormwater-Management</a>
Wet Weather Screening Data: Reference appendices of SWMP, available at <a href="https://www.nashuanh.gov/1456/Stormwater-Management">https://www.nashuanh.gov/1456/Stormwater-Management</a>
Catchment Investigation Data: Reference appendices of SWMP, available at <a href="https://www.nashuanh.gov/1456/Stormwater-Management">https://www.nashuanh.gov/1456/Stormwater-Management</a>
Illicit Discharge Removal Report: See attached submission or refer to website linked below <a href="https://www.nashuanh.gov/1456/Stormwater-Management">https://www.nashuanh.gov/1456/Stormwater-Management</a>

Results from additional stormwater or receiving water quality monitoring reports or studies: Mine Falls Hydro Project Relicensing, Nashua, NH. Document can be found at <https://www.nashuanh.gov/1243/>

Salt Reduction Plan: Reference appendices of SWMP, available at <https://www.nashuanh.gov/1456/Stormwater-Management>

Annual Salt Usage Report: Reference appendices of SWMP, available at <https://www.nashuanh.gov/1456/Stormwater-Management>

Updated Nitrogen Source Identification Report: N/A

Updated Phosphorus Source Identification Report: N/A

Street Sweeping Schedule: Discussed in the MCM 6 Good Housekeeping section of this report

Chloride Reduction Plan: N/A

Annual Salt Usage Report: See "Annual Salt Usage Report" box above

Lake Phosphorus Control Plan: N/A

Lake Phosphorus Control Plan (Items 1-4): N/A

# Self-Assessment

Select the impairment(s) and/or TMDL(s) that are applicable to your MS4. Make sure you are referring to the 2020/2022 EPA approved Section 303(d) Impaired Waters List which was used for the Year 5 reporting period and can be found on the [NHDES webpage](#).

All **Appendix F and H requirements** can be found under “Appendix F and H: Water Quality Limited Waters & TMDLs” section of this report.

Impairment(s)		
<input type="checkbox"/> Bacteria/Pathogens	<input checked="" type="checkbox"/> Chloride	<input type="checkbox"/> Nitrogen
<input type="checkbox"/> Phosphorus	<input checked="" type="checkbox"/> Solids/Oil/Grease (Hydrocarbons)/Metals	
TMDL(s)		
<input checked="" type="checkbox"/> Bacteria and Pathogens	<input type="checkbox"/> Chloride	<input type="checkbox"/> Lake and Pond Phosphorus

## Receiving Waters/Impaired Waters/TMDL

Have you made any changes to your lists of receiving waters, outfalls, or impairments since the NOI was submitted?

Yes

City of Nashua has made changes to the list of receiving waters, outfalls, or impairments since the NOI submission. Reference the table below for a list of current tracked impairments in accordance with the current 2020/2022 303(d) list.

TMDL: None

No

City of Nashua has not made changes to the list of receiving waters, outfalls, or impairments since the NOI submission.

Current impairments within the City of Nashua, in accordance with the 2020/2022 303(d) list:

Waterbody segment that receives flow from the MS4	Number of outfalls into receiving water segment								Other pollutant causing impairments
		Chloride	DO/DO Saturation	Oil & Grease/Nitrogen	Phosphorus	Solids/TSS/Turbidity	Enterococcus E. coli		
Nashua River - Mine Falls Dam Pond	8	x		x					pH, Cyanobacteria hepatotoxic microcystins
Nashua River - Nashua Canal Dike	7	x	x						pH
Harris Pond/Pennichuck Brook, PWS	3								Iron, Cyanobacteria hepatotoxic microcystins
Nashua River - Jackson Plant Dam	8								
Unnamed Brook from Round Pound to Holts Pond	3			x					Iron
Merrimack River (NHRIV700061002-14)	12								pH, creosote
Merrimack River (NHRIV700061206-24)	12		x						pH, aluminum
Unnamed Brook to Pennichuck Brook (Boire Field)	54			x					pH
Spit Brook (NHRIV700061206-17)	6								
Spit Brook (NHRIV700061206-16)	8								
Salmon Brook (NHRIV700061201-07)	3								
Salmon Brook (NHRIV700061201-06)	10								
Salmon Brook - Hassells Brook - Old Maids Brook - Hale Brook	90								
Salmon Brook - Cold Brook	65								
Old Maids Brook - McLaughlin Dam	5								
Old Maids Brook	4								
Pennichuck Brook (NHRIV700061001-10)	3								Benthic-Macroinvertebrate Bioassessments (Streams)
Nashua River (NHIMP700040402-04)	3								
Nashua River (NHIMP700040402-05)	8								
Pennichuck Brook - Witches Brook	6								
Nashua River (NHIMP700040402-09)	3								
Nashua River (NHIMP700040402-08)	14								
Unnamed Brook to Nashua River	26								
Lyle Reed Brook	8								
Bowers Pond (NHLAK700061001-04-02)	4								Iron
Salmon Brook (NHIMP700061201-03)	5								
Salmon Brook (NHIMP700061201-04)	2								
Holt Pond (NHLAK700061001-06)									DO, DO saturation, pH
Muddy Brook - Unnamed Brook (NHRIV700061001-06)									pH, DO
Second Brook (NHRIV700061206-10)									

Describe progress made on any **incomplete requirements** listed above **or** optionally provide any additional relevant details, in the box below:

Box 1: Incomplete Requirements

Not Applicable

Box 2: Additional Relevant Details:

**Introduction**

In 2019, the City began working with a consultant to develop an Integrated Plan as the City moves forward with the next phase of a Long-Term Control Plan. A comprehensive and integrated planning approach to the City’s wastewater and stormwater obligations offers the opportunity for identifying cost-effective solutions that have the greatest impact to improve water quality and implementing the most important projects first. The plan will be used to evaluate and properly apportion financial resources to wastewater and stormwater management. The Integrated Plan was submitted to the EPA on June 30, 2021, and the city is awaiting comments. This document can be found on the City’s website available to the public; <https://www.nashuanh.gov/1483/Nashuas-Integrated-Plan>

**CSO Program**

The City of Nashua continues to be under an EPA Consent Decree (Civil Action No. 05-376-PB), dated December 26, 2005 (based on the Long-Term Water Quality and Infrastructure Control Plan), to mitigate combined sewer overflows (CSOs). The oldest, most urbanized portion of the city is served by a combined sewer system. Currently, there are nine CSO outfalls that are a part of the City’s sewer collection system, four that discharge to the Nashua River and five that discharge to the Merrimack River and CSOs have been identified as a probable source for the Escherichia coli impairment within reaches located adjacent to the City. While a statewide TMDL has been approved for all waterways impaired with Escherichia coli, the projects completed related to the Consent Decree will reduce CSOs being discharged into the Nashua and Merrimack Rivers.

The CSO program was designed based on the understanding that urban runoff, particularly in the urbanized areas dictated by the MS4 Permit, contains pollutants that are harmful to the waterways. To improve water quality and comply with the Consent Decree, the City adopted a hold and treat approach versus complete separation. As inner-city areas are served by combined sewers, the stormwater runoff enters the sewer system and is conveyed with sanitary flow to the City’s sewage treatment facilities. The system is particularly effective at treating the most polluted “first flush” that occurs with every rain event.

Projects completed to contain combined sewage, which includes urbanized runoff are:

- The 60 MGD Wet Weather Flow Treatment Facility (WWFTF), located at the Nashua Wastewater Treatment Facility (NWTf), to capture and treat combined sanitary and stormwater. The WWFTF continues to operate, reducing the occurrence of CSOs and the volume of combined flows discharged to the rivers. Urban stormwater runoff from approximately 30 percent of the City, which is part of the combined flow, is conveyed to the WWFTF where it is being treated before being discharged to the Merrimack River.
- The construction of a CSO storage tank located near Burke Street was completed in December 2013. This 40,000-gallon tank contains overflow up to a 2-year storm event and reduces the amount of combined sewage discharging to the Merrimack River.
- Sewer separation work completed upstream of CSO 3 has eliminated the discharge of combined sewage at CSO 3 up to a 2-year storm event. A stormwater treatment train constructed in 2006 includes a Vortech swirl concentrator, a detention pond and a constructed wetland allowing treated stormwater to be discharged to the Merrimack River.
- Drop over structures were constructed on the North Merrimack River Interceptor. These structures reduce discharges to the Merrimack River at CSO 005 by allowing combined sewage flow from a 2-year and higher storm event in sewer pipes on East Hollis and Crown streets to flow directly into the larger interceptor that flows directly to the NWTf and the WWFTF where the combined flow is treated prior to discharge to the Merrimack River.
- Separation of the 60-acre combined sewer Harbor Avenue area resulted in reducing the volume of combined sewage flowing to the CSO 5 regulator on the Merrimack River. An additional benefit of this work is that localized flooding of combined sewage in the streets was eliminated.
- The Screening and Disinfection Facility (SDF) between CSOs 5 and 6, the last CSO plan element, was completed and became operational in 2015. This CSO treatment facility has the capacity to hold one million gallons of wet weather flow, containing overflow up to a 2-year storm event, and reducing the amount of combined sewage overflow discharging to the Merrimack River. In addition, this CSO treatment facility screens and disinfects combined sewer overflows that previously were discharged untreated from CSO 5, located on the Merrimack River, and CSO 6, located on the Nashua River slightly upstream of its confluence with the Merrimack River. The new outfall for this facility is located on the Merrimack River.
- The City documents the volume of combined sewer overflows discharging into the Nashua and Merrimack Rivers. An annual monitoring program provides information for the volume of discharge at each of the nine CSOs. Rainfall data is also recorded. A plan for the Post Construction Monitoring Program for the CSO program was submitted to the EPA for comment. Included in the program is testing of the Nashua and Merrimack Rivers to determine water quality.

As mentioned above, with the projects required for the Consent Decree completed, the next phase of a Long-Term Control Plan, as directed by the EPA, was to develop an Integrated Plan, which was submitted on June 30, 2021.

### **Condition Assessment and Rehabilitation of Sanitary and Stormwater Systems**

- The City has completed upgrades to twelve (12) of the 13 (thirteen) City operated sewer pump stations which allow for better operation and with connection to the SCADA system monitored 24/7 at the wastewater plant which will result in quicker response to operational problems that could cause SSOs. Construction at the one (1) remaining pump station that was designed and bid on during 2022 is expected to be underway later this year.
- Closed-circuit Television (CCTV) inspection and cleaning of 22 sewer siphon barrels at eight locations that serve the wastewater collection sewer system was completed during the last reporting period. Recommendations were to line 14 of the sewer siphon barrels at seven of the eight siphon locations using Cure-in-Place Pipe (CIPP) lining technology. The construction was completed during this reporting period.
- The Wastewater Department continues to inspect and clean pipes and infrastructure using two CCTV cameras. The largest pipes in the systems were inspected by two contractors hired by the City. In addition, approximately 37,100 linear feet of pipe was CIPP lined.

The Separated Storm Sewer System outfalls also discharge to the Nashua and Merrimack Rivers as well as numerous other waterbodies as listed in the NOI.

### **Nashua River- Canal Dike (NHIMP700040402-03) Assessment Unit**

NHDES previously assessed Nashua Canal Dike as being impaired for chloride based on specific conductance data that had erroneously been attributed to Nashua River - Mine Falls Dam Pond (NHIMP700040402-02) in prior years. Though surface levels of specific conductance indicate compliance with chloride water quality standards, the levels at the lower depths do not. NHDES noted that this is likely due to salinity-based stratification with the “denser saltier water sinking to the bottom.” Additionally, the Mine Falls Dam Relicensing Study<sup>1</sup> noted low turnover and limited ability to manage water quality due to limitations on the amount of water discharged from the Mine Falls Dam Pond.

Mill Pond is bounded to the north by Mine Falls Park which does not represent a potential source of chloride to the pond. Measures taken by Nashua to manage salt usage (as described in the Appendix H section) further limit the potential for chloride containing runoff to enter the pond. The salinity

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<sup>1</sup> <https://www.nashuanh.gov/1243/Mine-Falls-Hydro-Project-Relicensing>

associated with lower pond depths are likely due to discharges into the system prior to controls being in place compounded by the lack of flushing provided by the low flows through the pond.

During Year 5, the City performed a CCTV and outfall investigation of the 9 Stadium Drive property, where the Nashua Street Department stores salt in a covered building. The goal of this investigation was to establish whether the property is a potential source of chloride to the Nashua Canal Dike assessment unit. The results of this field investigation confirmed that the 9 Stadium Drive property does not drain to the Nashua Canal Dike assessment unit; all contributing outfalls are abandoned and bulkheaded. Catch basins on the property drain into the sanitary system, which takes flow out of this assessment unit and is covered by a separate permit outside of the City's MS4 program. Accordingly, the City has definitively determined that the City's Street Department and salt storage is not a contributor of chloride to the Nashua Canal Dike assessment unit. The City's Salt Reduction Plan is also fully implemented.

### **Public Education and Participation**

The City is a member of the New Hampshire Lower Merrimack Valley Stormwater Coalition which meets to share ideas, discuss the MS4 permit and foster a unified approach to dealing with issues in the Merrimack River watershed in which all the communities lie. During the reporting period the group met virtually twelve times and discussed community stormwater management programs and successes and challenges in addressing compliance with the MS4 regulations.

The Paulie the Pickerel "Let Only Rain Go down the Storm Drain" logo continues to be used for marketing the stormwater management program in the city. Magnets with the logo will continue to be distributed during educational presentations. Two thousand magnets were purchased during this reporting period.

The Mine Falls Park Advisory Committee sponsored a total of five Trail Days during the reporting period. In addition to general park maintenance, trash and debris were removed from the waterways and banks of the Nashua River, Nashua Canal and Mill Pond. Advertisement for this event can be found on the City website here: <https://nashuanh.gov/491/Mine-Falls-Park>

As part of the annual Paving Program, catch basin frames and grates are replaced as needed with structures imprinted with "Dump No Waste Drains to Waterways". Three hundred units were ordered during this reporting period.

Six collections were also made for household hazardous waste throughout the reporting period. Household Hazardous Wastes are chemicals that are used in our daily lives and can be found in most of our homes – in the workshop, under the sink, and in the garage. These chemicals are corrosive, flammable, toxic, or reactive, and can cause damage to the environment and/or public health if they are not handled and disposed of properly. The City of Nashua and surrounding communities work together to provide opportunities for residents to safely dispose of unwanted hazardous waste. Residents of Nashua, as well as Amherst, Brookline, Hollis, Hudson, Litchfield, Merrimack, Milford, Mont Vernon, Pelham and Windham are eligible to participate in any of the events. The City advertises

these collections via flyers and on their website (<https://www.nashuanh.gov/431/Household-Hazardous-Waste>).

Updates on stormwater issues are reported at least monthly at meetings of the Board of Public Works, Planning Board, and Conservation Commission. All meetings are public, and the meetings are recorded and available for viewing/listening on the internet and broadcast repeatedly on the government access channel. The stormwater update includes city-wide drainage issues and the progress made on addressing them, wetland related impacts and any other items that are related to the management of stormwater. A public comment period during the meetings allows the public to address any issues related to the Stormwater Management Plan (SWMP). Stormwater inquiries were also collected through phone calls and the Cartegraph work order system. Calls received are directed to the appropriate departments and addressed.

The Enviroscope Watershed model continues to be used to discuss stormwater management in classrooms and other public gatherings. Over three days in the falls of 2022 at Elm Street Middle School, the presentation was given fifteen times to approximately 270 seventh grade students. On June 3, 2023, the presentation was given approximately 10 times to about 110 people of all ages during a City public event.

The City owns the landfill used by both residential and commercial entities. Information about the citywide soft yard waste program was distributed through flyers, the City's web site, and Solid Waste Department staff. Updates or changes to the program are also provided on the City's local cable access channel (Channel 16). The City also has a Composting Program provided through the Solid Waste Department. Residents can purchase composting bins through the department with a "How To" brochure available on the Solid Waste website.

To spread information on stormwater among local businesses, informational brochures are posted at the Building Safety Department, Planning Department and the Environmental Health Department. The information available to businesses who enter the Building Safety Department and the Environmental Health Department includes fact sheets and brochures including information on stormwater pollution controls for industrial facilities, management of fats, oils and grease, preventing sewer system blocking and overflows, and septic system maintenance.

Similarly, the City works to raise awareness among local industries. This is accomplished by visiting Industrial Facilities through the Industrial Pretreatment program and including information on Stormwater Awareness. City staff present to staff at industrial facilities to help them understand their industrial permit and how stormwater impacts water quality and what they can do to reduce impacts.

A small portion of the city remains on septic systems. The NHDES "Get Pumped" educational brochure on proper maintenance of a septic system, and related magnets, continued to be distributed by the Environmental Health Department to septic system owners and to septage haulers at the wastewater treatment facility for distribution to their clients. In addition to being distributed at the Wastewater

Treatment Facility, the brochures are available to the public at the Environmental Health Department and Building Department.

The City has an Animal and Dog Park Advisory Committee that was created in 2020. The mission of the Animal and Dog Park Advisory Committee is to promote responsible pet ownership in the community including education and promotion of the City's Dog Waste Clean-Up campaign. In addition, the City's Wastewater Department has flyers informing residents of items that should not be flushed down the toilet, including pet waste. The committee meets approximately 8 times per year, and agendas are publicly available at <https://www.nashuanh.gov/AgendaCenter>.

### **Construction Site and Post-Construction Runoff Control**

The Nashua Land Use Code addresses land use planning issues through a variety of provisions related to stormwater management including the protection of wetlands, floodplain regulations, landscaping requirements, impervious surface requirements, open space requirements, and designs issues discussed during the development review process. The technical review process affords an interdisciplinary review of all applications submitted for Planning Board approval. Stormwater, drainage, and improved landscaping elements are included in discussions for every site and contribute to improving the stormwater quality directly or indirectly. The open space, impervious surface, parking and other zoning provisions are addressed as part of the process as well. The current land use code (with revisions incorporated dated September 1, 2012), is routinely discussed at staff meetings, noting areas where future amendments may be warranted. The City's Land Use Code and Stormwater Management ordinances also require developers to infiltrate and restrict runoff from leaving the property. Developers design BMPs and LID practices, which are discussed with and reviewed by City staff and ultimately approved by the Planning Board.

Wetlands and wetland buffer areas are protected and proposals to impact these areas are carefully reviewed by the Nashua Conservation Commission who makes a formal recommendation to the Zoning Board of Adjustment. Wetland Buffer Markers are required to be installed in the buffer areas impacted by site development. The purpose of the markers is to encourage residents to not dump debris in wetland areas.

The building permit process includes review of not only zoning and building issues, but proximity to local conservation lands and practical things to do or not do. For example, no construction materials shall be stored or left in the wetland buffer areas, best management practices to be followed during construction and site cleanup upon project completion. Any impacts to the wetland buffer are reported back to the Conservation Commission and are either rectified administratively or sent to the Conservation Commission for their recommendations.

Staff provide ongoing assistance to residents with flood insurance and floodplain management questions. This serves as an opportunity to educate the public about floodplain management and the relationship to stormwater management.

Staff routinely provided educational literature through the Nashua Conservation Commission and Planning Board on issues related to environmental protections such as stormwater management, erosion control and use of salt/sand in winter deicing applications.

### **Good Housekeeping**

Good housekeeping measures include the continuous city-wide street sweeping program. The City maintains four street sweepers and one sidewalk sweeper. The sweepers operate eight hours a day on weekdays from April 1 to December 1. All curbed streets are swept at least once. Winter salt and sand use is monitored and controlled. Trucks equipped with spreaders are calibrated annually, prior to the winter season. To prevent exposure of deicing product, all salt and sand is enclosed in covered storage facilities with a capacity of 2,000 tons.

Fleet maintenance staff services vehicles for the Division of Public Works, School Department, Health Department, City Hall, Emergency Management and Parking. Maintenance and fluid changes occur in a covered facility. Waste oil is stored in a waste oil tank and picked up for disposal as needed. Furthermore, the City's main fuel island was recently rebuilt. This services all City vehicles. The project produced a new Spill Prevention, Control, and Countermeasure (SPCC) plan. A spill kit is kept at the fuel island, as well as a covered trash receptacle.

The Parks and Recreation Department continues to use the practice of Integrated Pest Management (IPM) principles as one of the department's key Best Management Practices used throughout the year. The annual 2022 Pesticide Usage Report was submitted during this reporting period to the NH Department of Agriculture.

The City owns both a landfill and a wastewater treatment facility, each identified as an Industrial Facility. Both properties have their own Stormwater Management Program Plan in place. All catch basin cleanings and street sweeping debris is deposited and managed at the landfill.

The City developed an inventory of municipally owned properties with the potential to generate stormwater pollutants, including parks and open spaces, city owned buildings and facilities, and vehicle storage and fueling areas. Operations and Maintenance Procedures were developed for the identified properties including identification of responsible parties, training procedures, and best management practices (BMPs). BMPs for parks and open spaces aimed to minimize the concentration of nitrogen and phosphorus in stormwater runoff, including practices for lawn maintenance, trash management, pet waste cleanup, waterfowl waste management, and erosion. BMPs for city owned facilities included handling, storage, transfer, and disposal of trash and recyclables, storage of petroleum products and potential pollutants, and spill response procedures. BMPs for vehicles and equipment included vehicle storage, vehicle maintenance, fueling, and vehicle and heavy equipment washing procedures. Infrastructure BMPs were also developed, including catch basin cleaning, street and parking lot sweeping procedures, winter road maintenance, stormwater treatment structures, and stormwater pollution prevention plans (SWPPPs).

Facility-specific SWPPPs were developed for city-owned maintenance garages, public works yards, and other waste handling facilities where pollutants are exposed to stormwater. These facilities included the Conant Road Fire Station, the Parks and Recreation Department, the Police Department, the Street Department, and the Nashua Transit Facility. SWPPPs for each are included as an appendix to the SWMP and are available online at [www.nashuanh.gov/1456/Stormwater-Management](http://www.nashuanh.gov/1456/Stormwater-Management). Site visits were conducted at each of these facilities and on-site data and information was collected to inform development of the SWPPPs. The purpose of the SWPPP is to identify the SWPPP team at each facility, describe the facility and identify potential stormwater contaminants, describe the stormwater management control and BMPs needed to reduce pollutants from the facility in stormwater discharges, and describe the facility's monitoring plan.

The City provides curbside pickup of soft yard waste (defined as leaves, grass clippings, pine needles, twigs, and small sticks) to Nashua residents between April and November. Residents and commercial customers may also bring soft yard waste directly to the Four Hills Landfill/Nashua Recycling Center year-round. The total annual mass of yard waste collected at curbside by the City is 3,874 tons, with an estimated additional 1,500 tons brought directly to Four Hills by residents. 1,183 tons of yard waste from Nashua properties was brought to Four Hills by commercial customers. All soft yard waste is composted at Four Hills and is typically used for landfill daily cover.

The Cartegraph Operations Management System is used to track work orders which allows entering and tracking of all work orders within the Division of Public Works, many of which are related to stormwater management.

**Stormwater Management Program (SWMP) Information**

The Stormwater Management Plan (SWMP), updated in 2023, is publicly available on the City's website.

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

There are four street sweepers and one sidewalk sweeper running city-wide eight hours a day from April 1st to December 1st, weather permitting. Approximately 500 tons of material was removed within the City this reporting period. As mentioned above winter sand use is monitored and controlled to minimize solids discharged into the MS4. All curbed areas are swept at least once per year, with commercial areas, the urbanized downtown area, arterial and collector streets and critical streets being swept more than once per year. This includes the sub-watersheds that are identified with impairments that are also subject to enhanced BMPs per Appendix H of the NH Small MS4 General Permit. (NH MS4 GP)

The City owns and maintains a landfill. All street sweeping deposits are disposed of in the lined section of the landfill.

### **Outfall Ranking/Screening**

System Vulnerability Factors were assessed and added to the outfall ranking/screening spreadsheet, part of the City's IDDE Plan.

Wet weather outfall screening was conducted at 30 outfalls in 2023. Outfall screening was conducted in accordance with the Wet Weather Outfall Screening and Sampling Procedures included in Nashua's written Illicit Discharge Detection and Elimination (IDDE) Program.

## **Minimum Control Measures**

### **MCM 1: Public Education**

Total number of all MS4 related educational efforts completed during this reporting period: Fifty eight separate events, plus additional ongoing efforts as described below and in self-assessment.

Were any of the messages below different than what was proposed in your NOI?

No

Yes

#### **BMP: Grass and Fertilizer**

##### **Outreach Resources:**

Grass and fertilizer related flyers, social media posts and websites.

##### **Description:**

The City educates the public on potential water quality impacts from fertilizer and improper disposal of grass clippings through the city-wide soft yard waste program. Flyers with soft waste collection guidelines are included in a packet of information about Nashua's trash and recycling programs that are handed out or mailed to residents on request. Soft waste guidelines and backyard composting brochures are also available for public access on the City website:

<https://www.nashuanh.gov/467/Soft-Yard-Waste>

and <https://www.nashuanh.gov/DocumentCenter/View/25999/Leaves-Guidelines?bidId=> . The City's stormwater outreach website (<https://www.nashuanh.gov/1559/Stormwater-Outreach-and-Good-Practices>) also provides links to resources on fertilizer application guidelines to help educate residents.

##### **Targeted Audience:**

Residential *and/or* Business and Institutions

**Responsible Department/Parties:**

Solid Waste Department

**Measurable Goal(s):**

Following are the number of packets distributed to residential landfill permit purchasers. In addition, the tonnage of residential and commercial soft yard waste collected curbside, and the tonnage of residential soft yard waste dropped off during this reporting period is used as a measurable goal:

Year 5 = at least 11,900 packets handed or mailed out upon Landfill permit purchase or request

Year 5 = 3,875 tons soft yard waste collected curbside (residential)

Year 5 = 1,184 tons soft yard waste collected curbside (commercial)

Year 5 = estimated 1,500 tons soft yard waste dropped off (residential)

**Goal was achieved.**

**Message Date:** 1/1/2023 (annual, rolling basis throughout the year)

**BMP: Pet Waste Disposal**

**Outreach Resources:**

MuttMitt pet waste stations and "Every Drop" flyer

<https://www.nashuanh.gov/DocumentCenter/View/26000/Pet-Waste-Message?bidId=Description>

Distribution and promotion of "Every Drop" flyers with educational information about proper pet waste management, impacts of improper management, pet waste ordinance, and disposal requirements messaging. Includes the "Every Drop" pledge to pick up pet waste.

**And**

Signs and pet waste equipment are located throughout the City at the majority of municipal parks and trails. The City provides "MuttMitt" bag dispensers, signs and collection cans at the majority of municipal parks and trails. This was developed through the City's Animal and Dog Park Advisory Committee, which held 8 meetings in the reporting period. These agendas can be found here: <https://www.nashuanh.gov/AgendaCenter>

**Targeted Audience:**

Residents - Pet Owners

**Responsible Department/Parties:**

Parks Department

**Measurable Goal(s):**

A flyer about “Every Drop” was posted on the City’s website:

<https://nashuanh.gov/DocumentCenter/View/26000/Pet-Waste-Message?bidId=>

and

5,000 replacement “MuttMitt” bags purchased and implemented during this reporting period.

**Goal was achieved.**

**Message Date:** Pet waste equipment and signage was monitored throughout the year.

**BMP: Disposal of Leaf and Grass Clippings**

**Outreach Resources:**

Grass and fertilizer related flyers, social media posts and websites.

**Description:**

The City educates the public on potential water quality impacts from fertilizer and improper disposal of grass clippings through the city-wide soft yard waste program. Flyers with soft waste collection guidelines are included in a packet of information about Nashua's trash and recycling programs that are handed out or mailed to residents on request. Soft waste guidelines and backyard composting brochures are also available for public access on the City website:

<https://www.nashuanh.gov/467/Soft-Yard-Waste>

**Targeted Audience:**

Residential *and/or* Business and Institutions

**Responsible Department/Parties:**

Solid Waste Department

**Measurable Goal(s):**

Residents are aware of the water quality impacts of yard waste dumping near or in water bodies and safe alternatives for yard waste disposal.

Following are the number of flyers, brochures, and door hangers that were distributed during this reporting period:

Year 5 = at least 11,900 packets handed or mailed out upon permit purchase or request

Year 5 = 3,875 soft yard waste collected curbside (residential)

Year 5 = 1,184 tons soft yard waste collected curbside (commercial)

Year 5 = estimated 1,500 tons soft yard waste dropped off (residential)

**Goal was achieved.**

**Message Date:** Soft waste collection began the second week of April 2023.

## **BMP: Septic System Maintenance**

### **Outreach Resources:**

Get Pumped NH, brochure, a collaborated effort between the New Hampshire Association of Septage Haulers (NHASH) and the New Hampshire Department of Environmental Services (NHDES).

### **Description:**

Distribution and promotion of Get Pumped NH, EPA, educating New Hampshire homeowners with septic systems on how to identify, locate and maintain those systems.

### **Targeted Audience:**

Septic System Owners

### **Responsible Department/Parties:**

Environmental Health Department, Wastewater Treatment Facility

### **Measurable Goal(s):**

Residents are aware of water quality impacts from septic systems, the importance of maintaining septic systems, and how to maintain them.

Following are the number of flyers that were distributed during this reporting period:

Year 5 = At least 100 flyers

### **Goal was achieved.**

**Message Date:** Brochures are available throughout the year at the wastewater treatment facility for septage haulers and are distributed on a routine basis by the Environmental Health Department. A link to septic management resources is also posted on the City's website:

<https://www.nashuanh.gov/1559/Stormwater-Outreach-and-Good-Practices>

## **BMP: Industrial Outreach**

### **Outreach Resources:**

Outreach letter and Industrial Facilities Fact Sheet

### **Description:**

- Nashua does not have any industrial facilities located within the NH MS4 regulated area that are permitted under the NPDES Multi-Sector General Permit. This has been documented in Nashua's NOI and SWMP that this audience is absent from the municipality. No education or outreach efforts were conducted during this reporting period for the industrial audience as a result.

- ☒ Provided an outreach letter and Industrial Facilities Fact Sheet to the permittees that fall under the Multi-Sector General Permit and whose facilities are located within the NH MS4 regulated area to educate them on both the new and updated requirements within the EPA 2021 Multi-Sector General Permit, and the 2017 NH MS4 General Permit.

**Targeted Audience:**

Industrial facilities regulated under the Multi-Sector General Permit located within the regulated NH MS4 area.

**Responsible Department/Parties:**

Planning Department and Division of Public Works

**Measurable Goal(s):**

Operators and managers of industrial facilities are made aware of the updates and changes made to the EPA 2021 Multi-Sector General Permit including the requirements to additional monitoring, updated benchmark thresholds and monitoring schedules, monitoring of impaired waters, and specific additional monitoring depending on the industry sector. In addition, noted the overlapping requirements with the NH MS4 General Permit.

Following are the number of outreach letters that were distributed to municipal or local organizations during this reporting period:

Year 5 = 65 letters, each distributed together with and stormwater industrial fact sheet and SnowPro handout

**Goal was achieved.**

**Message Date:** On a rolling basis throughout Year 5 (and every year)

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

The City of Nashua requires a pre-construction meeting for every project and maintains 99% conformity as the owner cannot start a project until the educational on-site meeting is complete. In addition, the City provides inspections of industrial facilities. City of Nashua also provides a handout which describes proper stormwater pollution prevent to developers, including industrial users, prior to land disturbance.

## MCM 2: Public Participation

- Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements as described in the City of Nashua SWMP.
- Kept records relating to the permit available for 5 years and made available to the public.

Describe the opportunity provided for public involvement in the development of the Stormwater Management Program (SWMP) during this reporting period:

**Description:**

Updates on stormwater issues are reported at least monthly at meetings of the Board of Public Works, Planning Board, Conservation Commission, and the Animal and Dog Park Advisory Committee. All meetings are public and the meetings are recorded and available for viewing/listening on the internet and broadcasted repeatedly on the government access channel. The stormwater update includes city-wide drainage issues and the progress made on addressing them, wetland related impacts and any other items that are related to the management of stormwater. A public comment period during the meetings allows the public to address any issues related to the Stormwater Management Program (SWMP). Documents and records relating to the permit are retained and available for 5 years to the public on the City's website.

**Was this opportunity different than what was proposed in your NOI?**

- No
- Yes.

**Measurable Goal(s):**

Input was received and records are maintained. **Goal was achieved.**

Describe any other public involvement or participation opportunities conducted **during this reporting period:**

Nashua has conducted the following public involvement or participation opportunities:

- Enviroscape demonstrations (25 total presentations),
- Annual walk and debris pick up around LCHIP wetlands that surround Pennichuck Lake in Northwest Nashua performed by The City of Nashua Conservation Commission.
- Household Hazardous Waste Days (6 total),
- Drug Take Back Day
- Public Works Day (June 23<sup>rd</sup> 2023),
- Trail Days (5 total),

- Animal and Dog Park Advisory Committee (8 total)

Describe progress made on any **incomplete requirements** listed above **or** optionally provide any additional relevant details, in the box below:

Not Applicable.

## MCM 3: Illicit Discharge Detection and Elimination (IDDE)

### Sanitary Sewer Overflows (SSOs)

- This SSO section is NOT applicable because we DO NOT have sanitary sewers.
- This SSO section is NOT applicable because we DID NOT find any new SSOs.
- The SSO inventory has been updated, including the status of mitigation and corrective measures implemented or was addressed and can be found as reported in accordance with EPA NPDES POTW Permit No. NH0100170.

*Below, report on the number of SSOs identified in the MS4 system and removed:*

Number of SSOs identified **during this reporting period**: Not reported here – refer to NPDES POTW Permit No. NH0100170 correspondence and documentation as reported to EPA and NHDES.

Number of SSOs removed **during this reporting period**: Not reported here – refer to NPDES POTW Permit No. NH0100170 correspondence and documentation as reported to EPA and NHDES.

### MS4 System Mapping

- Updated system map due in Year 2 as necessary:

Provide additional status information regarding your map:

Map of storm sewer system and associated outfalls is continually updated to reflect findings and changes. The City of Nashua maintains an ArcGIS Online map (available at <https://www.nashuanh.gov/698/Maps>) which field contractors, engineering consultants, and city staff collaboratively update as CCTV inspections of the City’s stormwater collection system are performed.

### Screening of Outfalls/Interconnections

#### Dry Weather Screening

- No outfalls were inspected for dry weather screening during this report period.

- Outfalls were inspected for dry weather screening during this report period and data can be found in submission **and/or** at the following website: N/A.

*Below, report on the number of outfalls screened in the MS4 system:*

Number of outfalls/interconnections screened during this reporting period: 0.

Percent of total known outfalls/interconnections screened to date (Year 1 – Year 5):  
100%

The inventory and ranking of outfalls/interconnections were not updated during Year 5 because outfalls/interconnections were previously screened by Year 4.

## Wet Weather Screening

- Wet weather outfall/interconnection screening data can be found in the IDDE appendix to the SWMP.

**Number** of outfalls screened during this reporting period: 30.

**Percent** of total known outfalls/interconnections screened **to date (Year 1 – Year 5)**:  
9%

## Catchment Investigations

- No catchment investigations were conducted **during this report period**. Catchment investigations include investigations associated with Problem, High Priority, and Low Priority Outfalls/Interconnections within the MS4 regulated area.
- Catchment investigations were conducted, and data can be found in submission at the following website [www.nashuanh.gov/1456/Stormwater-Management](http://www.nashuanh.gov/1456/Stormwater-Management).

**Number** of catchment investigations during this reporting period: 27.

Catchment Investigations were conducted as outlined in Part 2.3.4.8. of the permit and include investigations associated with Problem, High Priority, and Low Priority Outfalls and Interconnections within the MS4 regulated area.

**Percentage** of total catchments investigated **to date (Year 1 – Year 5)**: 8%

## IDDE Progress

- No illicit discharges were found during this reporting period.
- Illicit discharges were found but not removed during this reporting period.
- Illicit discharges were removed during this reporting period and the illicit discharges removal report can be found in submission.

Number of illicit discharges identified during this reporting period: 4.

Number of illicit discharges removed **during this reporting period**: 4.

Estimated gallons of flow removed **during this reporting period**: 1,500 gallons/day.

Total number of illicit discharges identified **since the effective date of the permit (July 1, 2018 – June 30, 2023)**: 20.

Total number of illicit discharges removed **since the effective date of the permit (July 1, 2018 – June 30, 2023)**: 20.

### Employee Training (related to IDDE)

- Provided training to employees involved in IDDE program **during the reporting period**:  
Nashua held an IDDE training session for municipal staff in May 2023. In addition, the City routinely provides IDDE materials and training, including information on how to identify illicit discharges and SSOs are made available to applicable employees in accordance with IDDE Program Plan. Training logs are included in Appendix F of the IDDE Program Plan.

Describe progress made on any incomplete requirements listed above **or** optionally provide any additional relevant details, in the box below:

Additional Relevant Details:

The City of Nashua Wastewater Department held PACP training (NASSCO Pipeline Assessment Certification Program) for employees involved with the wastewater and storm sewer collection systems and also employees from the Engineering and Wastewater Departments. Through this training, Nashua staff learn how to interpret CCTV footage and CCTV inspection of drain lines as part of the process of identifying illicit discharges. The City is continuing to complete condition assessments of the 295 miles of combined and separated sewers and 140 miles of stormwater drains using closed-circuit television (CCTV), prioritizing inspections based on the age of the pipes. This process has led to the identification and removal of multiple illicit discharges within the City, as discussed in the attached Illicit Discharge Removal Report. The City will continue with CCTV inspections because they provide the best opportunity to identify illicit discharges within the older piping networks that were once acceptable. The City also has developed an SSO Response and Reporting Standard Operating Procedure, which is shared with employees and reviewed as part of training for employees working in the stormwater collection system. An employee from wastewater was promoted to Foreman with responsibilities including the collection system and he had already obtained Grade 4 Collections System Certification from NEWIPCC. Additional training is offered to wastewater staff through courses at the NHDES Franklin Training Center. "On the Job" training may be the most beneficial training afforded employees in Nashua based on daily activities including complaint investigations, response to sewer backups, sanitary sewer overflows and illicit discharge

reports. All of these measures were completed in addition to normal maintenance of the storm and sanitary sewers.

## MCM 4: Construction Site Stormwater Runoff Control

The following tasks are in progress in accordance with the permit:

Number of site plan reviews completed during this reporting period: 70.

Number of inspections completed during this reporting period: 55.

Number of enforcement actions taken during this reporting period: 10

The City of Nashua works closely with contractors to address environmental concerns for the least environmental impact.

Describe progress made on any incomplete requirements listed above **or** optionally provide any additional relevant details, in the box below:

### Additional Relevant Details:

All MCM4 Requirements were met. In addition, the Nashua Land Use Code addresses land use planning issues through a variety of provisions related to stormwater management including the protection of wetlands, floodplain regulations, landscaping requirements, impervious surface requirements, open space requirements, and design issues discussed during the development review process. Recent 2018 updates to Section 190-215, stormwater management standards, have been improved to better address new standards. The technical review process affords an interdisciplinary review of all applications submitted for Planning Board approval. Stormwater, drainage, and improved landscaping elements are included in discussions for every site and contribute to improving the stormwater quality directly or indirectly. The open space, impervious surface, parking and other zoning provisions are addressed as part of the process as well. The current land use code (with revisions incorporated dated September 1, 2018), is routinely discussed at staff meetings, noting areas where future amendments may be warranted. The City's Land Use Code and Stormwater Management ordinances also require developers to infiltrate and restrict runoff from leaving the property. Developers design BMPs and LID practices, which are discussed with and reviewed by City staff and ultimately approved by the Planning Board.

Wetlands and wetland buffer areas are protected and proposals to impact these areas are carefully reviewed by the Nashua Conservation Commission, which makes a formal recommendation to the Zoning Board of Adjustment. Wetland buffer markers are required to be installed to prevent future encroachment.

The building permit process includes review of not only zoning and building issues, but proximity to local conservation lands and practical things to do or not do. For example, no construction materials are allowed to be stored or left in wetland buffer areas, best management practices are defined to be followed during construction and site cleanup upon project completion.

The Planning Department requires all Planning Board approvals to file a stormwater easement document to be placed on file at the Hillsborough County Registry of Deeds. The document shows how all drainage devices will be maintained and, in the event, they are not the City can clean the area before it impacts catch basins and downstream flows. The owners or Association is then sent a bill as they are not in compliance with the easement. The Nashua Conservation Commission has recommended on cases not going to the Planning Board that a similar document be required for properties in close proximity to streams.

The City of Nashua has a program to monitor all construction sites either by the Planning Department or Building Department, and the Division of Public Works follow up on any sediment laden maintenance-related stormwater issues.

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

## Ordinance or Regulatory Mechanism

- City of Nashua has a regulatory mechanism(s) consistent with permit requirements 2.3.6.a.ii. Section 190-215, Stormwater Management of the Nashua Revised Ordinances was adopted prior to July 1<sup>st</sup> 2021. Recent 2018 updates to Section 190-215 have been improved to better address new standards. The regulatory document can be found at: <https://www.nashuanh.gov/227/Revised-Ordinances-City-Charter>

## As-built Drawings

Number of as-built drawings received during this reporting period: 70.

The City of Nashua Planning Department has transitioned to require an as-built plan for most construction projects and is working on a Construction Affidavit for some smaller projects.

## Street Design and Parking Lots Report

- During Year 4, City of Nashua developed a report assessing current street design and parking lot regulations to determine the feasibility of making low impact design options allowable when appropriate site conditions exist and made it available as part of the SWMP.
- During this reporting period, Nashua developed a report assessing street design and parking lot regulations to determine the feasibility of making low impact design options allowable when appropriate site conditions exist and made it available as part of the SWMP and:
- No updates were recommended to the Assessment Report during this reporting period.
- Updates were recommended to the Assessment Report during this reporting period.
- No changes were made or planned to be made to local regulations and/or guidelines during this reporting period.
- Updates were recommended and/or planned to be made to local regulations and/or guidelines during this reporting period. Following are the recommended updates: general upgrades to encourage green roof technology, continued onsite infiltration, and any rain garden additions where feasible. The anticipated date or date of completion for updates is Updated Nashua ordinance changes by Fall of 2024.

- No updates were made during this reporting period because all required local regulation changes have been made to make low impact designs allowable as outlined in the Local Regulations Assessment Report.

## Green Infrastructure Reports

- During Year 4, City of Nashua developed a report assessing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist and made it available as part of the SWMP.
- During this reporting period, Nashua developed a report assessing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist, made it available as part of the SWMP and:
- No progress was made during this reporting period towards making green infrastructure practices allowable as outlined in the Local Regulations Assessment Report.
- Progress was made during this reporting period as outlined in the Local Regulations Assessment Report. Nashua has made progress on Green Roofs, Infiltration Practices, and/or Water Harvesting. Progress includes updating the ordinance, regulation, code.
- Updates were made to the Local Regulations Assessment Report during this reporting period to reflect: N/A.
- No updates were made during this reporting period because all required local regulation changes have been made to make green infrastructure practices allowable as outlined in the Local Regulations Assessment Report.

## Retrofit Properties Inventory

- Identified permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious cover in Year 4. The following was completed during the reporting period:
- Identified permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious cover during this reporting period because Nashua did not complete this requirement during Year 4. The following was also completed during the reporting period:
  - Nashua has identified the remaining permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas, and of which are not included in the list below:
    - List of MS4 Properties: 15
    - List of Non-MS4 Properties: 7

- Nashua has modified or retrofitted the following MS4 and/or Non-MS4 properties with BMPs to mitigate impervious area that were inventoried as part of 2.3.6.e as part of the permit in Year 4 or Year 5. Following is a list of the properties that were modified or retrofitted during this reporting period:

N/A

Describe progress made on any incomplete requirements listed above **or** optionally provide any additional relevant details, in the box below:

The City's Planning Board continues to advocate for the addition of green infiltration areas on all new and retrofitted construction sites including the approval of two large conservation subdivisions where 40% of the open space must be preserved.

Regarding the Street Design and Parking Lots Report subsection;

1. The City already has Ordinance 190-184 which requires a waiver for not introducing landscaped islands after every 10 consecutive parking spaces.
2. A waiver for too many parking spaces is also required.
3. Additional landscaping requirements under 190-180-189 provide additional opportunities to infiltrate and filter stormwater.
4. Where public parking is available and within 1000 feet of a development in the Inner City, required parking is eliminated although having at least some parking onsite is needed.

# MCM 6: Good Housekeeping

## Catch Basin Cleaning

- Stored and disposed of catch basin cleanings so they did not discharge to receiving waters.
- Report on the actions taken if a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events:
  - A schedule for catch basin cleaning has been established with the goal of ensuring that a catch basin should not be more than 50% full.

Number of catch basins inspected during this reporting period: at least 200.

Number of catch basins cleaned during this reporting period: at least 200.

Total volume of material removed from all catch basins during this reporting period: 330 tons

Total number of catch basins within the MS4 system: at least 8,850

All catch basin cleanings is deposited in the city-owned lined landfill.

## Street Sweeping

- Stored and disposed of street sweepings so they did not discharge to receiving waters.
- All curbed roadways were swept at least once within the reporting period.
  - Number of (lane) miles swept during this reporting period: about 1,200 miles.
  - Mass of swept material during this reporting period: estimated 500 tons

Good housekeeping measures include the continuous city-wide street sweeping program. The City maintains four street sweepers and one sidewalk sweeper. The sweepers operate eight hours a day on weekdays from April 1st to December 1st. All curbed areas are swept at least once per year, with commercial areas, the urbanized downtown area, arterial and collector streets and critical streets being swept more than once per year. Winter sand use is monitored and controlled to minimize the amount placed in the roadway and parking lots.

**The City owns and maintains a landfill. All street sweeping deposits are disposed of in the lined section of the landfill.****Stormwater Pollution Prevention Plan (SWPPP)**

- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities, which are not currently covered under another NPDES Permit.
  - Number of site inspections completed during this reporting period: 4.
  - Number of corrective actions taken during this reporting period: 0

Describe any corrective actions taken at a facility with a SWPPP:

**No corrective actions necessary. Operations and Maintenance (O & M) Programs**

- O&M programs for all permittee owned facilities have been completed and/or updated as noted below:
  - Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs.
  - Updated inventory of all permittees owned facilities as necessary.  
All permittee owned facilities, including an inventory, are included in our SWMP. There were no changes to report during Year 5.
  - Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants as outlined in the SWMP.
  - Inspected all permittee owned treatment structures (excluding catch basins) as outlined in the SWMP.
  - Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt as outlined in the SWMP.

Describe progress made on any **incomplete requirements** listed above **or** optionally provide any additional relevant details, in the box below:

Not Applicable.
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# Appendix F and H:

## Water Quality Limited Waters & TMDLs

### Bacteria/Pathogens Impairment (Appendix H) AND TMDL (Appendix F)

- Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate during this reporting period.
- Permittee or its agent(s) disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time during this reporting period.
- Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria during this reporting period.

Describe progress made on any incomplete requirements listed above **or** optionally provide any additional relevant details, in the box below:

### Chloride Impairment (Appendix H)

- Permittee **does not** have a chloride impairment.
  - Permittee **has** a chloride impairment.
    - Fully implemented Salt Reduction Plan during this reporting period and can be found as an attachment to the SWMP (link provided above).
- The Municipal Green SnowPro Certification Program bill was passed during the 2021 legislation session. NHDES developed rules and regulations during this reporting period. Final approval of the rules and regulations is anticipated in 2023/2024.
- Reported amount of salt applied to all municipally owned and maintained surfaces by completing the New Hampshire DES Annual Salt Usage reporting form and submitting it to NHDES and can be found in submission.

Describe progress made on any incomplete requirements listed above **or** optionally provide any additional relevant details, in the box below:

The Nashua Street Department, located at 9 Stadium Drive, Nashua, NH 03062, has procedures in place to control chloride containing discharges into waterbodies including the Nashua Canal Dike (Mill

Pond). Winter salt use is monitored and controlled to limit application. The construction of a brine system was completed so roads can be treated prior to icing/snowfall so that less salt can be applied during winter weather events. Municipal and residential salt stored at the Nashua Street Department are both kept in covered facilities to minimize the runoff exposure to salt stockpiles. Additionally, the catch basins located adjacent to the salt stockpiles and fueling facility at the Nashua Street Department have been disconnected from the stormwater system and tied into the sanitary system, in order to minimize discharge of runoff to Nashua waterbodies. This has been additionally verified by both dye testing and CCTV inspection.

During Year 5, the City performed a CCTV and outfall investigation of the 9 Stadium Drive property to confirm the connectivity described above. The goal of this investigation was to confirm whether or not the property is a potential source of chloride to the Nashua Canal Dike assessment unit. The results of this field investigation confirmed that the 9 Stadium Drive property does not drain to the Nashua Canal Dike assessment unit; all contributing outfalls are abandoned and bulkheaded. Catch basins on the property drain into the sanitary system, which takes flow out of this assessment unit and is covered by a separate permit outside of the City's MS4 program. Accordingly, the City has definitively determined that the City's streets department and salt storage is not a contributor of chloride to the Nashua Canal Dike assessment unit.

## Nitrogen Impairment (Appendix H)

Permittee **does not** have a nitrogen impairment.

## Phosphorus Impairment (Appendix H)

Permittee **does not** have a phosphorus impairment.

## Solids, Oil and Grease (Hydrocarbons), or Metals Impairment(s) (Appendix H)

Permittee does not have a solids, oil and grease, or metals impairment(s).

Permittee has a solids, oil and grease, or metals impairment(s).

Increased street sweeping frequency of all municipal owned streets and parking lots to a schedule that targets areas with potential for high pollutant loads during this reporting period.

Describe progress made on any **incomplete requirements** listed above **or** optionally provide any additional relevant details, in the box below:

This year street sweeping continued as usual, with the City of Nashua's Street Department sweeping every public lane mile within the City at least once a year in a continuous manner. The City worked to identify target areas (e.g., Amherst Street, an arterial road, within the UNNAMED BROOK – ROUND POND TO HOLTS POND Assessment Unit) with potential for high pollutant loads this year and will be working to implement an increased street sweeping frequency as funding permits in these areas next year. However, private roadways are outside of the City's responsibility and are not swept as part of the public street sweeping programs.

## Chloride TMDL (Appendix F)

Permittee **does not** have a chloride TMDL.

## Lake and Pond Phosphorus TMDL (Appendix F)

Permittee **does not** have a lake and pond phosphorus TMDL.

## Additional Required Information

### Monitoring or Study Results

Results from all stormwater or receiving water quality monitoring or studies conducted during the reporting period and not otherwise mentioned above, where the data is being used to inform permit compliance or permit effectiveness is:

- Not applicable.
- The results from additional reports or studies are at the following website:  
<https://www.nashuanh.gov/1243/Mine-Falls-Hydro-Project-Relicensing>

### **Description of Any Changes in Identified BMPs or Measurable Goals**

Nashua has implemented activities in accordance with the permit and outlined in the SWMP. All BMPs and measurable goals outlined in the SWMP are appropriate.

### **Activities Planned for Next Reporting Period**

The City of Nashua will continue to implement activities in accordance with the permit and SWMP. As the Land Use Code undergoes updates starting in the Next Reporting Period, the City of Nashua will be looking for opportunities to implement green infrastructure in accordance with the prior assessment of street and parking lot guidelines and BMP retrofit opportunities (as detailed in the SWMP).