



City of Nashua, NH
2017 NPDES Phase II Small MS4
General Permit No. NHR041021
2024 (Year 6) Annual Report

July 1, 2023 to June 30, 2024



Prepared for:

City of Nashua
Public Works Division
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Year 6 Annual Report

New Hampshire Small MS4 General Permit

EXISTING PERMITTEES


Reporting Period: July 1, 2023 - June 30, 2024

City of Nashua

EPA NPDES Permit Number NHR041021

Certification of Small MS4 Year 6 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: 9/30/2024

Authorized Representative:

The authorization letter is:

Attached to this document (document name listed below):

"20230914 Designation of City Engineer as authorized person.pdf"
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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: HudsonD@NashuaNH.gov	Phone Number: 603-589-3120	

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, 2023, through June 30, 2024**, in accordance with the Permit.

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

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

Compliance activities have been identified and described in the Nashua’s Stormwater Management Program Plan (SWMP) and Illicit Discharge Detection and Elimination (IDDE) Plan. Those documents and other pertinent Year 6 information can be found in submission or at the following websites, and will be referred to throughout this report:

SWMP: www.nashuanh.gov/1456/Stormwater-Management
Date SWMP was Last Updated: September 2023
IDDE Program Plan: Reference appendices of SWMP, available at www.nashuanh.gov/1456/Stormwater-Management
Updated System Map: https://www.nashuanh.gov/698/Maps
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 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 www.nashuanh.gov/1456/Stormwater-Management
Wet Weather Screening Data: Reference appendices of SWMP, available at www.nashuanh.gov/1456/Stormwater-Management
Catchment Investigation Data: Reference appendices of SWMP, available at www.nashuanh.gov/1456/Stormwater-Management
System Vulnerability Factors: Reference appendices of SWMP, available at www.nashuanh.gov/1456/Stormwater-Management
Illicit Discharge Removal Report: Reference appendices of SWMP, available at www.nashuanh.gov/1456/Stormwater-Management

Results from additional stormwater or receiving water quality monitoring reports or studies: Mine Falls Hydro Project, <https://www.nashuanh.gov/1243/Mine-Falls-Hydro-Project-Relicensing>

PTAP 2024 Nutrient Reduction Report: N/A

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

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

Updated Nitrogen Source Identification Report: N/A

PTAP 2024 Nutrient Reduction Report: N/A

Nashua Nutrient Tracking Program Report: N/A

Updated Phosphorus Source Identification Report: N/A

PTAP 2024 Nutrient Reduction Report: N/A

Nashua Nutrient Tracking Program Report: N/A

Street Sweeping Schedule: <https://www.nashuanh.gov/1654/Street-Sweeping>

Chloride Reduction Plan: N/A

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

Lake Phosphorus Control Plan: N/A

PTAP 2024 Nutrient Reduction Report: N/A

Nashua Nutrient Tracking Program Report: 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 6 reporting period and can be found on the [New Hampshire Department of Environmental Services \(NHDES\) 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 there been any changes to your lists of **receiving waters or impairments** since the NOI was submitted?

Yes

Changes have been made to the lists of receiving waters or impairments since the NOI submission. The following **impairments and/or TMDLs** have been added or delisted:

Water Quality Impaired Waters: Due to an error in NHDES data tracking, Nashua River – Mine Falls Dam Pond was delisted for chloride impairment, and a chloride impairment was added to Nashua River – Nashua Canal Dike.

TMDL: N/A

No

There have been no changes to the lists of **receiving waters or impairments** since the NOI submission.

Have there been any changes to your **list of outfalls** since the NOI was submitted?

Yes

Changes have been made to the **list of outfalls** since the NOI submission.

A total of N/A outfall(s) have added.

A total of N/A outfall(s) have removed.

No

Nashua has not made changes to the **list of outfalls** 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 Chlorophyll-a	Nitrogen	Oil & Grease/PAH	Phosphorus	Solids/TSS/Turbidity	Enterococcus E. coli	
Nashua River - Mine Falls Dam Pond	8			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

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

Progress is being made by the City of Nashua to review the list and GIS mapping of permitted outfalls in accordance with the definition provided in Appendix A of the NH MS4 General Permit, and as part of continuous updates and review. These revisions are based on the definition of a regulated outfall per Appendix A of NH MS4 General Permit as follows: A point source at the point where a municipal separate storm sewer discharges to waters of the US and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances (i.e., culverts) which connect segments of the same stream or other water of the US and are used to convey waters of the US.

The city is making progress to ensure there are no open conveyances, pipes, tunnels, or culverts which connect segments of the same stream or other water of the US included in the City's regulated outfall list.

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 those 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 review comments. This report 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 remains 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. CSO discharges have been identified as a contributing source to the Escherichia coli impairment within reaches located within the city. While a statewide TMDL has been approved for all waterways impaired with Escherichia coli, the projects completed related to the Consent Decree have reduced CSO discharges into the Nashua and Merrimack Rivers.

The CSO program was designed based on the understanding that urban runoff, particularly in the urbanized areas identified within 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), was constructed to capture and treat combined sanitary and stormwater. 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 treated before discharge 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 discharge to the Merrimack River.
- Sewer separation work completed upstream of CSO 3 has eliminated 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 to the NWTF and the WWFTF where the combined flow is treated prior to discharge to the Merrimack River.
- Separation of the 60-acre 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 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 discharge 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 discharged into the Nashua and Merrimack Rivers. An annual monitoring program provides information for the volume of discharge and duration of the event 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 thirteen (13) city operated sewer pump stations which allow for better operation and with connection to the SCADA system monitored 24/7 at the N WTF which will result in quicker response to operational problems that could cause SSOs. Construction at the one (1) remaining pump station is now underway and substantial completion is expected to be achieved by the end of the calendar year 2024.
- After previously completing video inspection and cleaning of all eight (8) sewer siphons that serve the collection sewer system throughout the City, in total, 14 out of 22 (at 7 of the 8 siphon locations) were lined using CIPP technology.
- Condition assessment of the sewer and drainage collection systems using closed-circuit television (CCTV) inspections continue to be conducted using both in-house forces as well as contractors. During this reporting period, 17,670 feet of drain pipe was inspected and 162,960 feet of sanitary pipe was inspected.

The Separate 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- Nashua Canal Dike (NHIMP700040402-03) Assessment Unit

NHDES previously assessed the Nashua River - 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 Study¹ 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.

The segment of waterway identified as the Nashua River – Nashua Canal Dike is known locally as Mill Pond. This waterway 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 Appendix H) further limit the potential for chloride containing runoff to enter the pond. The salinity at

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

greater pond depths is likely due to discharges into the system prior to controls being in place compounded by the lack of flushing due to 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 adjacent to the Mill Pond is a potential source of chloride. The results of this field investigation confirmed that the 9 Stadium Drive property does not drain to the waterway. 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 Street Department property and salt storage is not a contributor of chloride to the Nashua Canal Dike assessment unit. The 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 eleven 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 are distributed during educational presentations. About 750 magnets were distributed during this reporting period.

The Mine Falls Park Advisory Committee sponsored a total of four 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 these events can be found on the City website: <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 and fifty units were purchased during this reporting period.

Six collections for household hazardous waste were held during 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. 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 its 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 are broadcast repeatedly on the government access channel. The updates include city-wide drainage issues and the progress made on addressing them, wetland related impacts and 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 and the SeeClickFix application. Calls received are directed to the appropriate departments and addressed.

The Enviroscape Watershed model continues to be used to discuss stormwater management in classrooms and other public gatherings. Over three days in the fall of 2023 at Elm Street Middle School, the presentation was given fifteen times to approximately 318 seventh grade students. On June 1, 2024, the presentation was given approximately 11 times to about 77 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 the City's website and Solid Waste Department staff. Updates or changes to the program are also provided on the City's local cable access channel (Channel 16).

To spread information on stormwater among local businesses, informational brochures are posted at the Building Safety Department and the Environmental Health Department. The information available to businesses who visit 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. More information for industrial users can be found here: www.nashuanh.gov/1456/Stormwater-Management.

Septic systems are present in a number of properties in the City. The NHDES "Get Pumped" educational brochure on proper maintenance of a septic system, and related magnets, are distributed by the Environmental Health Department to septic system owners and to septage haulers at the Wastewater Treatment Facility for distribution to their clients.

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. The committee met three times during the reporting period, and agendas are publicly available at the link provided here:

<https://www.nashuanh.gov/AgendaCenter>. In addition, the City's Wastewater Department has flyers informing residents of items that should not be flushed down the toilet, including pet waste.

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 design issues discussed during the development review process. The technical review process affords an interdisciplinary review of all applications submitted for Planning Board review. 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 limit 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 Nashua Conservation Commission has also made it a priority to reduce excess impervious areas during site plan review.

The Planning Department conducted approximately fifty-nine pre-construction meetings on-site this year. Residential properties including single-family, multi-family, and institutional housing made up 74% of all pre-construction meetings while commercial and industrial sites were evenly split among the remaining 26%. Standardized erosion control sheets are distributed to the construction manager onsite. The Planning Department and Engineering Department representatives on-site explain the need to implement erosion controls depending on each unique site-specific situation.

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 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. An example of the educational literature provided to Staff can be found at the following link:

<https://www.nashuanh.gov/DocumentCenter/View/2622/Brochure-Protecting-Wetland-Buffers-PDF>

Good Housekeeping

Good housekeeping measures include the continuous city-wide street sweeping program. The City maintains six street sweepers and two sidewalk sweepers. 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.

The Fleet Department services vehicles for the Division of Public Works, School Department, Health Department, Administration, 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 and provides fuel for 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 2023 Pesticide Usage Report was submitted during the 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 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. 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 was 4,435 tons, with an estimated additional 1,500 tons brought directly to the landfill by residents. An additional 1,496 tons of yard waste from Nashua properties was brought to Four Hills by commercial customers. All soft yard waste is composted at the landfill 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 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 2024, is publicly available on the City's website.

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

There are six street sweepers and two sidewalk sweepers running city-wide eight hours a day from April 1st to December 1st, weather permitting. Approximately 1,300 lane miles within the City were swept 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) 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.

Nashua has documented the presence or absence of System Vulnerability Factors for each catchment, and retains this documentation as part of its IDDE program. Catchments with a minimum of one (1) System Vulnerability Factor are subject to wet weather sampling requirements of Part 2.3.4.8.c.ii.2 and this sampling effort continued this year. System Vulnerability Factor assignments were also used to help in ranking high priority outfalls to prioritize wet weather sampling at locations with a greater number of SVFs, understanding that in accordance with the terms of MS4 permit all outfalls with at least one SVF must be wet-weather sampled.

Wet weather outfall screening was conducted at 30 outfalls in Year 6. 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*: Forty-nine (49) 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:

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. The City is also moving towards a paperless awareness approach.

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 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=>.

Targeted Audience:

Residential *and/or* Business and Institutions

Responsible Department/Parties:

Solid Waste Department

Measurable Goal(s):

Residents that are lawn care enthusiasts 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 quantity of materials distributed.

Following are the number of packets distributed to residential landfill permit purchasers, 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*:

Year 6 = 1,250 packets handed or mailed out upon permit purchase or request

Year 6 = 1,496 tons soft yard waste collected curbside (commercial)

Year 6 = 1,500 tons soft yard waste dropped off (residential)

Goal was achieved.

Message Date: 1/1/24 (annual, rolling basis throughout the year)

BMP: Pet Waste Disposal

Outreach Resources:

The City's stormwater outreach website (<https://www.nashuanh.gov/1559/Stormwater-Outreach-and-Good-Practices>) also provides links to resources on pet waste guidelines to help educate residents. The City is also moving towards a paperless awareness approach.

Description:

Distribution and promotion of "Every Drop" with educational information about proper pet waste management, impacts of improper management, pet waste ordinance, and disposal requirements messaging. May include the "Every Drop" 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.

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 three 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=>

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.

And

15,000 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:

The City’s stormwater outreach website (<https://www.nashuanh.gov/1559/Stormwater-Outreach-and-Good-Practices>) also provides links to resources on leaf and grass clipping guidelines to help educate residents. The City is also moving towards a paperless awareness approach.

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 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/26000/Pet-Waste-Message?bidId=>

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 metrics of waste distributed *during this reporting period*:

Year 6 = 1,250 packets handed or mailed out upon permit purchase or request

Year 6 = 1,184 tons soft yard waste collected curbside (commercial)

Year 6 = 4,435 tons soft yard waste collected curbside (residential)

Year 6 = 1,500 tons soft yard waste dropped off (residential)

Goal was achieved.

Message Date: For the Year 6 reporting period, July to November of 2023 and April to June of 2024.

BMP: Septic System Maintenance

Outreach Resources:

The City’s stormwater outreach website (<https://www.nashuanh.gov/1559/Stormwater-Outreach-and-Good-Practices>) also provides links to resources on septic system maintenance guidelines to help educate residents. The City is also moving towards a paperless awareness approach.

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. Get Pumped NH is a collaborated effort between the New Hampshire Association of Septage Haulers (NHASH) and the NHDES.

Targeted Audience:

Septic System Owners

Responsible Department/Parties:

Environmental Health Department, Wastewater Department

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 6 = More than 75 flyers distributed

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: Construction/Developers Outreach

Outreach Resources:

Construction/developers related letter and fact sheets found at <https://www.nashuanh.gov/1558/Stormwater-Resources-for-Site-Developmen>

And

The City’s yearly stormwater easement maintenance reminder mailer.

Description:

Provide the Construction General Permit (CGP) outreach letter and fact sheets to developers, construction contractors, and other municipal or local organizations to educate them on the

EPA 2022 Construction General Permit along with information on the selection, installation, and maintenance of construction related best management practices.

- ☒ Review the construction checklist with developers and construction contractors prior to the beginning of construction projects (pre-construction) to identify responsible parties, erosion control practices, other best management practices, and requirements for the EPA Construction General Permit as appropriate.

Targeted Audience:

Construction/Developers.

Responsible Department/Parties:

Planning and Public Works

Measurable Goal(s):

Contractors, developers, and municipal or local organizations are made aware of the EPA 2022 Construction General Permit and its associated requirements including that those who wish to be considered a qualified person to conduct inspections must meet EPA training standards. Contractors, developers, and municipal or local organizations are also educated on how to properly select, install, and maintain construction related best management practices.

Following is the number of outreach letters that were distributed to contractors, developers, and municipal or local organizations **during this reporting period:**

Year 6 = 69 letters

The City of Nashua held 59 pre-construction meetings, representing 85% of projects that received planning board approval and began construction **during this reporting period.**

Goal was achieved.

Message Date: On a rolling basis throughout Year 6 (each year).

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 lays out proper stormwater pollution prevent to developers, including industrial users, prior to land disturbance. In the waiting room where contractors and developers sit to prepare for their required pre-construction meeting with the City, additional brochures on General Permit requirements, proper management of yard waste, septic systems, and pet waste are available.

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 Nashua SWMP.
- Kept records relating to the permit 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. Updates include 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 to the public for 5 years 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:

- Enviroscene demonstrations (26 total presentations),
- Household Hazardous Waste Days (6 total),
- Drug Take Back Day (2 total); Police additionally maintains a drop off box year-round,
- Public Works Day (June 1, 2024),
- Trail Days (4 total),
- Animal and Dog Park Advisory Committee (3 total),

- April Sustainability Fair at the Nashua Public Library (April 21, 2024), and
- Several tours at the wastewater treatment plant were conducted during the year for middle and high school students, City departments' senior staff and citizens through a Nashua Public Library program.

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 sewer.
- 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 NPDES POTW Permit No. NH0100170.

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 **Phase 1** 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.

The City is actively developing green infrastructure initiatives aimed at environmental sustainability and stormwater management. As part of this effort, a structural stormwater facility layer is being developed for public properties. This initiative focuses on integrating natural processes into urban design, primarily through reduction of runoff by encouraging infiltration.

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 6)**:
100%

The inventory and ranking of outfalls/interconnections was not updated during Year 6 because outfalls/interconnections were not inspected.

Wet Weather Screening

- No outfalls/interconnections were inspected for wet weather screening **during this report period**.
- 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 6)**: 17%

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 **and/or** at the following website www.nashuanh.gov/1456/Stormwater-Management.

Number of catchment investigations *during this reporting period*: 36

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 6)*: 18%.

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*: 0

Number of illicit discharges removed *during this reporting period*: 0

Estimated gallons of flow removed *during this reporting period*: 0 gallons/day

Total number of illicit discharges identified *since the effective date of the permit (July 1, 2018 – June 30, 2024)*: 20

Total number of illicit discharges removed *since the effective date of the permit (July 1, 2018 – June 30, 2024)*: 20

Employee Training

- ☒ Provided training to employees involved in IDDE program *during this reporting period*:
Nashua held an IDDE training session for municipal staff in May of 2024. In addition, Nashua 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 10 total employees involved with the wastewater and storm sewer collection systems and also employees from the Engineering Department. 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 in prior years. 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. Through its accompanying CMOM work and the pump station work described in the self-assessment, the City lines and cleans its sanitary and storm systems, and their aggressive work to advance this maintenance has helped reduce SSO as evidenced by their being none this past Permit Year.

The City Engineer this year obtained a NHDES Culvert Maintainer Certification in order to continue performing system maintenance reliably and responsibly. 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*: 178

Number of inspections completed *during this reporting period*: 80 – site is always verified that it is built to standards and drainage is clean and functional before final certificate of occupancy.

Number of enforcement actions taken *during this reporting period*: Through Planning and Conservation, about 10 outside of normal project review.

Nashua works closely with contractors to address environmental concerns for the least environmental impact. Two applications of porous pavement will be implemented by developments this year.

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 City of Nashua Planning Department requires all Planning Board approvals to file a stormwater Operation and Maintenance document to be placed on file at the Hillsborough County Registry of Deeds. The document explains how all drainage infrastructure will be maintained. 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, building department, and public works road crew to follow up on any sediment laden stormwater issues.

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

Ordinance or Regulatory Mechanism

- Nashua has a regulatory mechanism(s) consistent with permit requirements 2.3.6.a.ii.
Date regulatory mechanism(s) was adopted: Prior to July 1, 2021. The regulatory document can be found at: <https://www.nhdeeds.org/hillsborough-county-home/>

As-built Drawings

Number of as-built drawings received **during this reporting period**: 55 as-builts were required by the Planning Department. Additionally, residential properties are required to provide a certified plot plan to determine all drainage devices suggested on the subdivision plan are functioning properly.

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

- The **Assessment Report** was evaluated and no updates were recommended **during this reporting period**.
- The **Assessment Report** was evaluated and updates were recommended **during this reporting period**. Following are the recommended updates: general upgrades to encourage green infrastructure, onsite infiltration, and any rain garden additions where feasible. In general these are on track to be completed by Fall of 2024 but we anticipate that these recommendations will be implemented on a rolling basis as opportunities for redevelopment arise.
- No updates were made **during this reporting period** because all required updates have been made to make low impact designs allowable as outlined in the **Assessment Report**.
- No updates were made or planned to be made to **Local Regulations and/or Guidelines during this reporting period**.
- Updates were recommended **and** planned to be made to **Local Guidelines during this reporting period**. Following are the recommended updates: general upgrades to encourage green infrastructure technology, continued onsite infiltration, and any rain garden additions where feasible. In general these are on track to be completed by Fall of 2024 but we anticipate that these recommendations will be implemented on a rolling basis as opportunities for redevelopment arise.

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

Green Infrastructure Reports

- The **Assessment Report** was evaluated and no updates were recommended **during this reporting period**.
- The **Assessment Report** was evaluated and updates were recommended **during this reporting period**. Following are the recommended updates: Nashua has made progress on Infiltration Practices **and/or** Water Harvesting.
- No updates were made **during this reporting period** because all required updates have been made to make green infrastructure practices allowable as outlined in the **Assessment Report**.
- No updates were made or planned to be made to **Local Regulations during this reporting period**.
- Updates were made to the **Local Regulations during this reporting period**. Nashua has made progress on Green Roofs, Infiltration Practices, **and/or** Water Harvesting. Progress includes updating the ordinance, regulation **and/or** code.
- No updates were made **during this reporting period** because all required **Local Regulation** updates have been made to make green infrastructure practices allowable as outlined in the Assessment Report.

Retrofit Properties Inventory

- Nashua has identified the remaining permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas and of which are 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 of the permit. Following is a list of the properties that were modified or retrofitted as well as the type of BMP(s) that were implemented:

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:** 167

Number of catch basins cleaned **during this reporting period:** at least 210

Total mass of material removed from **all** catch basins **during this reporting period:** 343 tons

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

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:** approximately 1,300

Mass of swept material **during this reporting period:** 500 tons (estimated, not weighed)

Stormwater Pollution Prevention Plan (SWPPP)

Nashua has implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities that are not currently covered under another NPDES Permit.

Number of site inspections completed for *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 permittee owned facilities as necessary.
All permittee owned facilities, including an inventory, are included in our SWMP. There were no changes to report during Year 6.
 - 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.

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:

In prior years, the City of Nashua has disseminated educational material to dog owners at the time of issuance or renewal of dog licenses. However, due to significant staff turnover in the City Clerk's office this past year, there was a gap period, during which time educational information was not being disseminated. This gap has been identified and has been fixed by City staff as part of internal QA processes and educational materials have been issued again as normal.

Chloride Impairment (Appendix H)

- Permittee **does not** have a chloride impairment.
- Permittee **has** a chloride impairment.
 - Fully implemented Salt Reduction Plan which can be found as an attachment to the SWMP.

The Municipal Green SnowPro Certification Program's (Program) rules and regulations were approved and adopted in 2024. The Program anticipates they will be ready to accept voluntary applications from municipalities in fall of 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. The UNH Technology Transfer Center online tool is non-functional and has been for several years.

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.
- Permittee **has** a nitrogen impairment.
 - Distributed an annual message that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers **during this reporting period.**
 - Distributed an annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate **during this reporting period.**
 - Distributed an annual message encouraging the proper disposal of leaf litter **during this reporting period.**
 - Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.d.iii to a minimum of two times per year (spring and fall) **during this reporting period.**
 - Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.d.iii to a minimum of one time per year (spring) and implemented a fall leaf litter collection program in lieu of post-drop street sweeping **during this reporting period.**

Structural BMPs

- The Nitrogen Source Identification Report was reviewed and there were no updates required **during this reporting period** because there were no revisions. The Nitrogen Source Identification Report can be found: N/A
- The Nitrogen Source Identification Report was **updated during this reporting period** and can be found: N/A. An updated list of the planned structural BMPs and a plan and schedule for implementation can be found in *Section 2: Potential Structural BMPs Report (Year 5) part 1.1.c.ii* of the Nitrogen Source Identification Report.
- Nashua has **not** installed a minimum of one structural BMP(s) as a demonstration project within the drainage area of the water quality limited water or its tributaries **by the end of this reporting period**. Nashua plans to install a structural BMP(s) in: N/A
- Nashua has installed a minimum of one structural BMP(s) as a demonstration project within the drainage area of the water quality limited water or its tributaries, **but the structural BMP was installed after the end of this reporting period**. The structural BMP(s) was installed on: N/A. The type of structural BMP(s) that was installed was: N/A. Information regarding the installed BMP(s) can be found in *Section 2: Potential Structural BMPs Report (Year 5) in Part 1.1.c.iii* of the Nitrogen Source Identification Report.
- Nashua has installed a minimum of one structural BMP(s) as a demonstration project within the drainage area of the water quality limited water or its tributaries **by the end of this reporting period**. The type of structural BMP(s) that was installed was: N/A. Information regarding the installed BMP(s) can be found in *Section 2: Potential Structural BMPs Report (Year 5) in Part 1.1.c.iii* of the Nitrogen Source Identification Report.
- Structural BMP(s) listed in Attachment 3 to Appendix F already existing or installed in the regulated area by Nashua or its agents was tracked and the nitrogen removal by the BMP(s) was estimated consistent with Attachment 3 to Appendix F. The BMP(s) type, total area treated by the BMP(s), the design storage volume of the BMP(s), and the estimated nitrogen removed in mass per year by the BMP(s) were documented in: N/A. The total estimated nitrogen removed from the installed BMP(s) is: N/A.

Nashua is utilizing the Pollutant Tracking and Account Project, better known as PTAP, to track nutrient reductions associated with stormwater structural and non-structural best management practices. PTAP was developed by the University of New Hampshire Stormwater Center and New Hampshire Department of Environmental Services utilizing the EPA Region 1 approved performance curves, to provide New Hampshire communities with a way to track their nutrient reductions. PTAP allows Nashua the benefit of utilizing a uniform, defensible and consistent method for tracking reductions so that a common, weight of evidence based approach can be shared with other entities including EPA, NHDES, and other MS4 communities and interest groups. The consistent and systematic tracking and accounting framework also allows for routine updates when improved science becomes available.

- Structural BMP(s) listed in Attachment 3 to Appendix F already existing or installed in the regulated area by Nashua or its agents was tracked and the nitrogen removal by the BMP(s) was estimated consistent with Attachment 3 to Appendix F. The BMP(s) type, total area treated by the BMP(s), the design storage volume of the BMP(s), and the estimated nitrogen removed in mass per year by the BMP(s) were documented in: N/A. The total estimated nitrogen removed from the installed BMP(s) is: N/A.
- No BMPs were installed **during this reporting period**. The implementation schedule is outlined in *Section 2: Potential Structural BMPs Report (Year 5) in Part 1.1.c.i* of the Nitrogen Source Identification Report. The total estimated nitrogen removed from the installed BMP(s) is 0 lbs/year.

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

Not Applicable.

Phosphorus Impairment (Appendix H)

- Permittee **does not** have a phosphorus impairment.
- Permittee **has** a phosphorus impairment.
 - Distributed an annual message that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers **during this reporting period.**
 - Distributed an annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate **during this reporting period.**
 - Distributed an annual message encouraging the proper disposal of leaf litter **during this reporting period.**
 - Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.d.iii to a minimum of two times per year (spring and fall) **during this reporting period.**
 - Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.d.iii to a minimum of one time per year (spring) and implemented a fall leaf litter collection program in lieu of post-drop street sweeping **during this reporting period.**

Phosphorus Source Identification Report- Update

Structural BMPs

- The Phosphorus Source Identification Report was reviewed and there were no updates required **during this reporting period** because there were no revisions. The Phosphorus Source Identification Report can be found in: N/A.
- The Phosphorus Source Identification Report was **updated during this reporting period** and can be found in: N/A. An updated list of the planned structural BMPs and a plan and schedule for implementation can be found in *Section 2: Potential Structural BMPs Report (Year 5) part II.1.c.ii* of the Phosphorus Source Identification Report.
- Nashua has **not** installed a minimum of one structural BMP(s) as a demonstration project within the drainage area of the water quality limited water or its tributaries **by the end of this reporting period.** Nashua plans to install a structural BMP(S) on: N/A.
- Nashua has installed a minimum of one structural BMP(s) as a demonstration project within the drainage area of the water quality limited water or its tributaries, **but the structural BMP was installed after the end of this reporting period.** The structural BMP(s) was installed on: N/A. The type of structural BMP(s) that was installed was: N/A. Information regarding the

installed BMP(s) can be found in *Section 2: Potential Structural BMPs Report (Year 5) in Part II.1.c.iii* of the Phosphorus Source Identification Report.

- Nashua has installed a minimum of one structural BMP(s) as a demonstration project within the drainage area of the water quality limited water or its tributaries **by the end of this reporting period**. The type of structural BMP(s) that was installed was: N/A. Information regarding the installed BMP(s) can be found in *Section 2: Potential Structural BMPs Report (Year 5) in Part II.1.c.iii* of the Phosphorus Source Identification Report.

- Structural BMP(s) listed in Attachment 3 to Appendix F already existing or installed in the regulated area by Nashua or its agents was tracked and the phosphorus removal by the BMP(s) was estimated consistent with Attachment 3 to Appendix F. The BMP(s) type, total area treated by the BMP(s), the design storage volume of the BMP(s), and the estimated phosphorus removed in mass per year by the BMP(s) were documented in: N/A. The total estimated phosphorus removed from the installed BMP(s) is: N/A.

Nashua is utilizing the Pollutant Tracking and Account Project, better known as PTAP, to track nutrient reductions associated with stormwater structural and non-structural best management practices. PTAP was developed by the University of New Hampshire Stormwater Center and New Hampshire Department of Environmental Services utilizing the EPA Region 1 approved performance curves, to provide New Hampshire communities with a way to track their nutrient reductions. PTAP allows Nashua the benefit of utilizing a uniform, defensible and consistent method for tracking reductions so that a common, weight of evidence-based approach can be shared with other entities including EPA, NHDES, and other MS4 communities and interest groups. The consistent and systematic tracking and accounting framework also allows for routine updates when improved science becomes available.

- Structural BMP(s) listed in Attachment 3 to Appendix F already existing or installed in the regulated area by Nashua or its agents was tracked and the phosphorus removal by the BMP(s) was estimated consistent with Attachment 3 to Appendix F. The BMP(s) type, total area treated by the BMP(s), the design storage volume of the BMP(s), and the estimated phosphorus removed in mass per year by the BMP(s) were documented in: N/A. The total estimated phosphorus removed from the installed BMP(s) is: N/A.

- No BMPs were installed **during this reporting period**. The implementation schedule is outlined in *Section 2: Potential Structural BMPs Report (Year 5) in Part II.1.c.i* of the Phosphorus Source Identification Report. The total estimated phosphorus removed from the installed BMP(s) is 0 lbs/year.

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

Not Applicable.

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**. Nashua street sweeping schedule can be found at <https://www.nashuanh.gov/1654/Street-Sweeping>.

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 in a continuous manner. There are 300 miles of public roadways that are swept multiple times in certain hotspots (e.g. inner city areas, arterial roadways) for a total of approximately 1,300 lane miles swept.

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 starting in Year 5 and has worked to implement an increased street sweeping frequency. However, private roadways are outside of the City's responsibility and are not swept as part of the public street sweeping programs.

At Bowers Pond and Harris Pond, the main metals source is the Everett Turnpike, which runs directly adjacent to and crosses these waterbodies, and which is maintained by the New Hampshire Department of Transportation (NHDOT). As stated in MCM 6 of NHDOT's Stormwater Management Plan, NHDOT is increasing the frequency of street sweeping in these two (iron-impaired) areas. Additionally, the latest NHDOT Annual Report posted by EPA as of this report's writing (i.e., the Year 3 NHDOT Annual Report) states that *"The Department is designing a project which discharges [to] HARRIS POND (NHLAK700061001-04-01) and BOWERS POND (NHLAK700061001-04-02) in Nashua. If appropriate, shut off gates will be added to the stormwater structure designs."*

Chloride TMDL (Appendix F)

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

Permittee **has** a chloride TMDL.

Fully implemented Chloride Reduction Plan which can be found: N/A.

The Municipal Green SnowPro Certification Program's (Program) rules and regulations were approved and adopted in 2024. The Program anticipates they will be ready to accept voluntary applications from municipalities in fall of 2024.

Reported amount of salt applied to all municipally-owned and maintained surfaces by completing the New Hampshire DES Annual Salt Usage reporting form, submitting it to NHDES, and can be found: N/A. The UNH Technology Transfer Center online tool is non-functional and has been for several years.

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

Not Applicable.

Lake and Pond Phosphorus TMDL (Appendix F)

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

Year 5 Lake Phosphorus Control Plan Reporting Requirements

- Nashua has **not fully completed the Year 5 requirements** of the written Lake Phosphorus Control Plan **during this reporting period**. The partially completed plan can be found: N/A. The plan is available to the public at: N/A. Nashua has completed the following sections of the written Lake Phosphorus Control Plan **during this reporting period**:
 - Description of Planned Non-structural Controls
 - Description of Planned Structural Controls
 - Description of Operation and Maintenance (O&M) Program
 - Implementation Schedule
 - Cost and Funding Source Assessment

Nashua plans to complete the outstanding items noted above by N/A.

- Nashua **completed** a written Lake Phosphorus Control Plan **during the Year 5 reporting period** and was reported in the Nashua Year 5 Annual Report. The completed plan can be found: N/A. The plan is available to the public at: N/A. The completed written Lake Phosphorus Control Plan contains the following information:
 - Description of Planned Non-structural Controls
 - Description of Planned Structural Controls
 - Description of Operation and Maintenance (O&M) Program
 - Implementation Schedule
 - Cost and Funding Source Assessment
- Nashua **completed** a written Lake Phosphorus Control Plan **during this reporting period**. Nashua utilized the resources developed by the New Hampshire Stormwater Coalition. Resources, including the written Lake Phosphorus Control Plan template, were not developed until after the Year 5 reporting period. The completed plan can be found: N/A. The plan is available to the public at: N/A. The completed written Lake Phosphorus Control Plan contains the following information:
 - Description of Planned Non-structural Controls
 - Description of Planned Structural Controls

- Description of Operation and Maintenance (O&M) Program
- Implementation Schedule
- Cost and Funding Source Assessment

Year 6 Lake Phosphorus Control Plan Reporting Requirements

Baseline phosphorus export rate required from LPCP Area (lbs/year)[**A**]: N/A.

Total phosphorus reduction from all implemented nonstructural controls **during this reporting period** (lbs/year) [**B**]: N/A.

Total phosphorus reduction from all structural controls installed **during this reporting period and all previous years** (lbs/year) [**C**]: N/A.

Phosphorus load increase due to development incurred since baseline loading was calculated in lbs/year [**D**]: N/A.

Phosphorus load increase due to development incurred since baseline loading was calculated in lbs/year [**D**]: N/A.

Current phosphorus export rate from the LPCP Area in lbs/year [**=A-(B+C)+D from above**]: N/A.

Non-Structural Controls

- Nashua has **not** implemented all selected Lake Phosphorus Control Plan **non-structural control measure(s) during this reporting period** and has **not** documented the measure(s) and their phosphorus reductions. The non-structural control measure(s) that have been implemented are recorded within the Nashua's written Lake Phosphorus Control Plan which can be found: N/A.
- Nashua has implemented all selected Lake Phosphorus Control Plan **non-structural control measure(s) during this reporting period** and documented the measure(s) and their phosphorus reductions. The **non-structural control measure(s)** are noted within the Nashua written Lake Phosphorus Control Plan which can be found: N/A.

Structural Controls

- Nashua has **not** installed any **structural control measure(s)** within the Lake Phosphorus Control Plan area **during this reporting period or during previous reporting periods.** Therefore Nashua has not documented the location, phosphorus reduction in mass/year, and date of last completed maintenance and inspection for each installed control within the written Lake Phosphorus Control Plan.

- Nashua has installed **structural control measure(s)** within the Lake Phosphorus Control Plan area **during this reporting period or during previous reporting periods.** Nashua has documented the location, phosphorus reduction in weight/year, and date of last completed maintenance and inspection for each installed structural control measure(s). The documented information for each of the installed structural control measure(s) are noted within the written Lake Phosphorus Control Plan which can be found: N/A.

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

Not Applicable.

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: [Mine Falls Hydro Project Relicensing | Nashua, NH \(nashuanh.gov\)](https://www.nashuanh.gov/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

Nashua will continue to implement activities in accordance with the permit and SWMP.