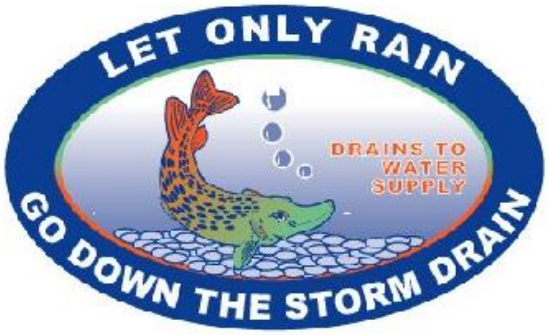
City of Nashua, NH

2017 NPDES Phase II Small MS4

General Permit No. NHR041021

Year 7 Annual Report

July 1, 2024 to June 30, 2025



Prepared for:

City of Nashua
Public Works Division
848 West Hollis Street
Nashua, NH 03062
(603) 589-3120

Prepared by:

Hazen

1750 Elm Street, Suite 402
Manchester, NH 03101
(603) 657-2581

Year 7 Annual Report

New Hampshire Small MS4 General Permit

EXISTING PERMITTEES

Reporting Period: July 1, 2024 - June 30, 2025

City of Nashua

EPA NPDES Permit Number NHR041021

Certification of Small MS4 Year 7 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: 9/29/2025

Authorized Representative:

The authorization letter is:

☒ Attached to this document (document name listed below):

"20230914 Designation of City Engineer as Authorized Person.pdf"

☐ Publicly available at the website:

N/A

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, 2024, through June 30, 2025,** in accordance with the Permit.

Please do not attach any documents to this form. Instead, attach all requested documents to an email when submitting the form. Also ensure that any websites included on this form are to publicly accessible sites and that links are correct and valid.

Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed. Please ONLY report on activities between July 1, 2024 and June 30, 2025 unless otherwise requested.

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 City of Nashua's Stormwater Management Program Plan (SWMP) and Illicit Discharge Detection and Elimination (IDDE) Plan. Those documents and other pertinent Year 7 information can be found in submission or at the following websites, and will be referred to throughout this report:

SWMP: https://www.nashuanh.gov/1456/Stormwater-Management
Date SWMP was Last Updated: September 2024
IDDE Program Plan: Reference appendices of SWMP, available here: https://www.nashuanh.gov/1456/Stormwater-Management
Updated System Map: https://www.nashuanh.gov/698/Maps
Updated SSO Inventory: 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 with System Vulnerability Factors: Reference IDDE section of SWMP, available here: https://www.nashuanh.gov/1456/Stormwater-Management
Dry Weather Screening Data: Reference appendices of SWMP, available here: https://www.nashuanh.gov/1456/Stormwater-Management
Wet Weather Screening Data: Reference appendices of SWMP, available here: https://www.nashuanh.gov/1456/Stormwater-Management
Catchment Investigation Data: Reference appendices of SWMP, available here: https://www.nashuanh.gov/1456/Stormwater-Management

Illicit Discharge Removal Report: Reference appendices of SWMP, available here: https://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 2025 Nutrient Reduction Report: N/A

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

Updated Nitrogen Source Identification Report: N/A
PTAP 2025 Nutrient Reduction Report: N/A
City of Nashua Nutrient Tracking Program Report: N/A

Updated Phosphorus Source Identification Report: N/A
PTAP 2025 Nutrient Reduction Report: N/A
City of 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 here: https://www.nashuanh.gov/1456/Stormwater-Management

Lake Phosphorus Control Plan: N/A
PTAP 2025 Nutrient Reduction Report: N/A
City of 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 7 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)		
☐ Bacteria/Pathogens	☒ Chloride	☐ Nitrogen
☐ Phosphorus	☒ Solids/Oil/Grease (Hydrocarbons)/Metals	
TMDL(s)		
☒ Bacteria and Pathogens	☐ Chloride	☐ 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. This has since been amended.

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

City of 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 most recent (2020/2022) 303d list.

Cycle	Assessment Unit ID (AUID)	Assessment Unit Name	Town(s) Primary Town is Listed First	AUID Intersects or is Adjacent to EPA's 2017 MS4 General Permit Area	Water Size	Size Unit	Designated Use	Parameter Name	Parameter Level - NHDES Category	TMDL Priority	Beach	Last Sample	Last Exceedence
2020/2022	NHIMP700040402-02	NASHUA RIVER - MINE FALLS DAM POND	NASHUA	Yes	60.000	ACRES	Aquatic Life Integrity	Dissolved oxygen saturation	5-P	LOW	N	2002	2000
2020/2022	NHIMP700040402-02	NASHUA RIVER - MINE FALLS DAM POND	NASHUA	Yes	60.000	ACRES	Aquatic Life Integrity	pH	5-M	LOW	N	2002	2002
2020/2022	NHIMP700040402-02	NASHUA RIVER - MINE FALLS DAM POND	NASHUA	Yes	60.000	ACRES	Primary Contact Recreation	Cyanobacteria hepatotoxic microcystins	5-M	LOW	N	2018	2018
2020/2022	NHIMP700040402-03	NASHUA RIVER - NASHUA CANAL DIKE	NASHUA	Yes	42.000	ACRES	Aquatic Life Integrity	Chloride	5-M	LOW	N	2019	1999
2020/2022	NHIMP700040402-03	NASHUA RIVER - NASHUA CANAL DIKE	NASHUA	Yes	42.000	ACRES	Aquatic Life Integrity	pH	5-M	LOW	N	2007	2007
2020/2022	NHIMP700040402-03	NASHUA RIVER - NASHUA CANAL DIKE	NASHUA	Yes	42.000	ACRES	Primary Contact Recreation	Chlorophyll-a	5-P	LOW	N	2002	2002
2020/2022	NHLAK700061001-04-01	HARRIS POND	NASHUA, MERRIMACK	Yes	72.079	ACRES	Aquatic Life Integrity	Iron	5-M	LOW	N	2005	2005
2020/2022	NHLAK700061001-04-01	HARRIS POND	NASHUA, MERRIMACK	Yes	72.079	ACRES	Primary Contact Recreation	Cyanobacteria hepatotoxic microcystins	5-M	LOW	N	2007	2007
2020/2022	NHRIV700061001-06	MUDDY BROOK - UNNAMED BROOK	NASHUA, HOLLIS		6.997	MILES	Aquatic Life Integrity	Oxygen, Dissolved	5-M	LOW	N	2006	2006
2020/2022	NHRIV700061001-06	MUDDY BROOK - UNNAMED BROOK	NASHUA, HOLLIS		6.997	MILES	Aquatic Life Integrity	pH	5-M	LOW	N	2006	2006
2020/2022	NHRIV700061001-09	BOIRE FIELD BROOK - TO PENNICHUCK BROOK	NASHUA	Yes	0.986	MILES	Aquatic Life Integrity	Oxygen, Dissolved	5-P	LOW	N	2006	2005
2020/2022	NHRIV700061001-09	BOIRE FIELD BROOK - TO PENNICHUCK BROOK	NASHUA	Yes	0.986	MILES	Aquatic Life Integrity	pH	5-M	LOW	N	2006	2006
2020/2022	NHRIV700061001-12	UNNAMED BROOK - ROUND POND TO HOLTS POND	NASHUA	Yes	0.286	MILES	Aquatic Life Integrity	Iron	5-M	LOW	N	2005	2005
2020/2022	NHRIV700061001-12	UNNAMED BROOK - ROUND POND TO HOLTS POND	NASHUA	Yes	0.286	MILES	Aquatic Life Integrity	Oxygen, Dissolved	5-P	LOW	N	2005	2005
2020/2022	NHRIV700061002-14	MERRIMACK RIVER	NASHUA, HUDSON, LITCHFIELD, MERRIMACK	Yes	3.714	MILES	Aquatic Life Integrity	pH	5-M	LOW	N	2016	2014
2020/2022	NHRIV700061002-14	MERRIMACK RIVER	NASHUA, HUDSON, LITCHFIELD, MERRIMACK	Yes	3.714	MILES	Primary Contact Recreation	Creosote	5-M	LOW	N	2013	2013
2020/2022	NHRIV700061206-24	MERRIMACK RIVER	NASHUA, HUDSON	Yes	5.151	MILES	Aquatic Life Integrity	Aluminum	5-M	LOW	N	2019	2018
2020/2022	NHRIV700061206-24	MERRIMACK RIVER	NASHUA, HUDSON	Yes	5.151	MILES	Aquatic Life Integrity	pH	5-M	LOW	N	2019	2019
2020/2022	NHRIV700061206-24	MERRIMACK RIVER	NASHUA, HUDSON	Yes	5.151	MILES	Primary Contact Recreation	Chlorophyll-a	5-M	LOW	N	2019	2018

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

Incomplete requirements: N/A

Additional relevant details:

Introduction

In 2014, 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. This 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. 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, 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 Vortechnics 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 sewered 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 all thirteen (13) 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.

- Completed 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.

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[1] 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 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

[1] https://www.nashuanh.gov/1243/Mine-Falls-Hydro-Project-Relicensing

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.

The Mine Falls Park Advisory Committee sponsored a total of three 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". Five 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 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 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 Enviroscape Watershed model continues to be used to discuss stormwater management in classrooms and other public gatherings. Over four days in the fall of 2024 at Pennichuck Middle School and Fairgrounds Middle School, the presentation was given sixteen times to approximately 395 seventh

grade students. On June 7, 2025, the presentation was given three times to about 175 people of all ages at "DPW Day" at Greeley Park.

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 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; Building Department; Department of Public Works; and Community Development 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 4 times per year, and agendas are publicly available at the link provided here: 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 design issues are 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 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 encroach on or 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 Dept., Health Dept., 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. The City's main fuel station was rebuilt in 2020. This services most gas and diesel 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 2024 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 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 is 3,960 tons, with an estimated additional 1,800 tons brought directly to Four Hills by residents. 1,641 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 OpenGov Asset Management (aka Cartegraph) System is used to track resident requests and City tasks which allows entering and tracking of work within the Division of Public Works, including items 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 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 32 outfalls during this reporting period. 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***: 20

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

☒ No.

☐ Yes. City of Nashua made changes due to N/A.

BMP: Grass and Fertilizer

Outreach Resources:

Grass and fertilizer related flyers, mailers, postcards, videos and social media posts found on the MCM #1 webpage of the NH MS4 website.

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):

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 7 = 10,500 packets handed or mailed out upon permit purchase or request

Year 7 = 3,960 tons soft yard waste collected curbside (residential)

Year 7 = 1,641 tons soft yard waste collected curbside (commercial)

Year 7 = 1,500 tons soft yard waste dropped off (residential)

Goal was achieved.

Message Date: 1/1/2025 (annual, rolling basis throughout the year)

BMP: Pet Waste Disposal

Outreach Resources:

Pet waste related flyers, mailers, postcards, and videos found on the MCM #1 webpage of the NH MS4 website. Specifically, the Every Drop post card, Dog Waste 7.25X5.25.

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. 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 4 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):

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.

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 as monitored throughout the year.

BMP: Disposal of Leaf and Grass Clippings

Outreach Resources:

Leaf and grass clippings related flyers, brochures, pledges, door hangers, and videos found on the MCM #1 webpage of the NH MS4 website.

Description:

Distribution and promotion of municipally created flyers and brochures.

And

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/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 number of flyers, brochures, and door hangers that were distributed ***during this reporting period*:**

Year 7 = 10,500 packets handed or mailed out upon permit purchase or request

Year 7 = 3,960 tons soft yard waste collected curbside (residential)

Year 7 = 1,439 tons soft yard waste collected curbside (commercial)

Year 7 = 1,800 tons soft yard waste dropped off (residential)

Goal was achieved.

Message Date: Soft waste collection

BMP: Septic System Maintenance

Outreach Resources:

Septic system related brochures, letters, videos found on the MCM #1 webpage of the NH MS4 website.

Description:

Distribution and promotion of Get Pumped NH, EPA, **and** municipally created brochures 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.

A link to septic management resources is also posted on the city's website: https://www.nashuanh.gov/1559/Stormwater-Outreach-and-Good-Practices

Targeted Audience:

Septic System Owners

Responsible Department/Parties:

Environmental Health 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 7 = 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.

BMP: Construction/Developers Outreach

Outreach Resources:

Construction/developers related letter and fact sheets found on the MCM #1 webpage of the NH MS4 website.

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 7 = 280 of letters

The City of Nashua held 48 pre-construction meetings, representing 100% of projects that received planning board approval and began construction ***during this reporting period*****.**

Goal was achieved.

Message Date: Rolling basis throughout Year 7.

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

N/A.

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 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:

The Stormwater Management Program (SWMP) was publicly reviewed at monthly meetings between the Board of Public Works, Planning Board, Conservation Commission, and the Animal and Dog Park Advisory Committee. 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. City of Nashua made the following changes: N/A

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*:**

Public involvement or participation opportunities are ancillary to daily operations.

And

City of Nashua has conducted the following public involvement or participation opportunities

- Enviroscape demonstrations (20 total presentations),

- Periodic 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 Days (2 total)
- Public Works Day (June 7th, 2025),
- Trail Days (3 total),
- Animal and Dog Park Advisory Committee (2 total)

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

N/A

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 in submission **and/or** at the following website: N/A.

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

Number of SSOs identified ***during this reporting period***: 0

Number of SSOs removed ***during this reporting period***: 0

MS4 System Mapping

☐ MS4 System Map was updated **during this reporting period**:

Percent of Phase 1 elements incorporated into MS4 System Map: N/A.

Percent of Phase 2 elements incorporated into MS4 System Map: N/A.

☐ MS4 System Map was updated in Year(s): N/A and there were no updates in Year 7.

☒ City of Nashua's MS4 System Map is continually updated to incorporate findings and changes from catchment investigations.

Describe any additional details regarding phase 1 and phase 2 MS4 System Mapping requirements, in the box below:

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 7)***: 100%

The inventory and ranking of outfalls/interconnections was not updated during Year 7 because outfalls/interconnections were not inspected.

Describe any additional details regarding dry weather screening requirements, in the box below:

City of Nashua has completed all of the dry weather screening for problem outfalls, completed dry weather screening for all outfalls where any information gathered on the outfall/interconnection identifies sewer input.

Wet Weather Screening

☐ No outfalls/interconnections were inspected for wet weather screening ***during this report period***.

☒ Wet weather outfall/interconnection screening data collected **during this reporting period** can be found in submission under the IDDE appendix to the SWMP.

Number of outfalls screened ***during this reporting period***: 32

Percent of total known Problem Outfalls and outfalls/interconnections that identify sewer input screened ***to date (Year 1 – Year 7)***: 100%

Percent of total known outfalls/interconnections screened ***to date (Year 1 – Year 7)***: 18%

Describe any additional details regarding wet weather screening requirements, in the box below:

Not applicable.

Catchment Investigations

☐ No catchment investigations were inspected for wet weather screening ***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 ***during this report period***, and data can be found in submission at the following website www.nashuanh.gov/1456/Stormwater-Management.

Number of catchment investigations ***during this reporting period***: 22

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.

Percent of total Problem Catchment and outfalls/interconnections that identify sewer input investigated ***to date (Year 1 – Year 7)***: 100%

Percent of total catchments investigated ***to date (Year 1 – Year 7)***: 29%

Describe any additional details regarding catchment investigations requirements, in the box below:

Not Applicable.

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***.

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, 2025)***: 20

Total number of illicit discharges removed ***since the effective date of the permit (July 1, 2018 – June 30, 2025)***: 20

Describe any additional details regarding illicit discharge requirements, in the box below:

N/A

Employee Training

☐ Provided training to employees involved in IDDE program ***during this reporting period***:

City of 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:

The City of Nashua Wastewater Department has one IDDE training session anticipated, to be held during the Year 8 reporting period. 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 and material 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 work to advance this maintenance has helped reduce SSO as evidenced by there being none this past Permit Year.

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. 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.

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***: 198

Number of inspections completed ***during this reporting period***: 72

Number of enforcement actions taken ***during this reporting period***: 7 through Planning and Conservation, and 0 taken outside of normal project review.

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 each 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 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 reduce site runoff from properties, often achieved with onsite infiltration. 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 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 that for cases not going to the Planning Board, a similar document be required for properties in close proximity to streams.

The City of Nashua has a program to monitor construction sites by the Planning Department, Building Department, and Public Works and any issues with sediment laden stormwater are addressed.

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

As-built Drawings

Number of as-built drawings received ***during this reporting period***: 53

Local Regulations Assessment Report

☒ The **Assessment Report** was evaluated and no updates were recommended ***during this reporting period***.

Previously recommended updates included: 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 Spring 2026 but may be implemented on a rolling basis as opportunities for redevelopment arise.

☐ The **Assessment Report** was evaluated and updates were recommended ***during this reporting period***. Following are the recommended updates: N/A

☐ 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**.

Street Design, Parking Lots, and Creation of Impervious Cover

☒ No updates were made or planned to be made to **Local Regulations and/or Guidelines** that affect the creation of imperious cover ***during this reporting period***.

☐ Updates were planned to be made to **Local Regulations and/or Guidelines** that affect the creation of imperious cover ***during this reporting period***. Following are the recommended updates: N/A

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

Green Infrastructure

☒ No updates were made or planned to be made to Local Regulations regarding green infrastructure practices ***during this reporting period***.

☐ Updates were recommended to be made to **Local Regulations** regarding green infrastructure practices ***during this reporting period***. Following are the recommended **and/or** planned updates: N/A.

☐ 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

☒ City of 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

☐ City of 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:

List of MS4 Properties: 0.

List of Non-MS4 Properties: 0.

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.

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***: 246

Number of catch basins cleaned ***during this reporting period***: 300

Total volume **or** mass of material removed from **all** catch basins ***during this reporting period***: 260 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.

All curbed roadways were swept at least once ***during this reporting period.***

Number of (lane) miles swept ***during this reporting period***: 1300

Mass of swept material ***during this reporting period***: 500 TONS

Stormwater Pollution Prevention Plan (SWPPP)

City of 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***: 2

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 7.

☒ 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:

N/A.

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:

N/A.

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*** which can be found as an attachment to the SWMP.

City of Nashua is utilizing some of the Voluntary Municipal Green SnowPro Certification Program resources and trainings as outlined in City of Nashua's Salt Reduction Plan to reduce their winter salt application and to prevent increased concentrations of chlorides in their community's surface and ground waters.

☒ Reported amount of salt applied to all municipally-owned and maintained surfaces by completing the NHDES Annual Salt Usage reporting form and submitting it to NHDES and can be found under the appendices of the SWMP, available at www.nashuanh.gov/1456/Stormwater-Management.

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.***

Nitrogen Source Identification Report- Update

- ☐ 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 I.1.c.ii* of the Nitrogen Source Identification Report.

Structural BMPs

- ☐ City of 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.*** City of Nashua plans to install a structural BMP(s) on: N/A.
- ☐ City of 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, ***during 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 I.1.c.iii* of the Nitrogen Source Identification Report.

☐ City of 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 ***during the Year 6 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 I.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 City of 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.

City of Nashua is utilizing the Pollutant Tracking and Account Project, better known a**s** 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 City of 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 City of 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 I.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:

N/A.

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: N/A.
- ☐ The Phosphorus 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 II.1.c.ii* of the Phosphorus Source Identification Report.
- ☐ City of 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.*** City of Nashua plans to install a structural BMP(S) on: N/A.

☐ City of 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 ***during 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.

☐ City of Nashua 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 ***during the Year 6 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.

☐Structural BMP(s) listed in Attachment 3 to Appendix F already existing or installed in the regulated area by City of 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.

City of Nashua is utilizing the Pollutant Tracking and Account Project, better known a**s** 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 City of 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 City of 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:

N/A.

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.*** City of 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 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.

☐ Permittee **has** a chloride TMDL.

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

City of Nashua is utilizing **some/all** of the Voluntary Municipal Green SnowPro Certification Program resources and trainings as outlined in City of Nashua's Salt Reduction Plan to reduce their winter salt application and to prevent increased concentrations of chlorides in their community's surface and ground waters.

City of Nashua is certified under the Voluntary Municipal Green SnowPro Certification Program with the goal to reduce their winter salt application and to prevent increased concentrations of chlorides in their community's surface and ground waters.

☐ Reported amount of salt applied to all municipally-owned and maintained surfaces by completing the NHDES 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:

N/A

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.

Lake Phosphorus Control Plan Reporting Requirements

☐ The LPCP was submitted in a previous annual report.

☐ The LPCP 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:

City of 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. City of 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

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

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**]: 0

City of Nashua is utilizing a scaled back approach to Pbase recalculations with assistance from the UNH Stormwater Center. Due to limited funding and available mapping resources, City of Nashua plans to update the Pbase calculations every 5 years or whenever meaningful and substantial updates are made to the critical impervious surface and land use/cover GIS layers that are used in Pbase characterization. Due to this new approach, **phosphorus load increases due to development incurred since baseline**

loading were not calculated **during this reporting period**. The New Hampshire Stormwater Coalition and the UNH Stormwater Center are in the process of calculating the **phosphorus load increases due to development incurred since baseline loading** and will be available in the future.

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

☐ City of 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 City of Nashua's written Lake Phosphorus Control Plan which can be found: N/A.

☐ City of 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 City of Nashua written Lake Phosphorus Control Plan which can be found: N/A.

City of Nashua is utilizing the Pollutant Tracking and Account Project, better known a**s** PTAP, to track nutrient reductions associated with 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 City of 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 Controls

☐ City of 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 City of 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.

☐ City of Nashua has installed **structural control measure(s)** within the Lake Phosphorus Control Plan area **during this reporting period or during previous reporting periods**. City of 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:

N/A.

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.

If such monitoring or studies were conducted on your behalf or if monitoring or studies conducted by other entities were reported to you, a brief description of the type of information gathered or received shall be described below:

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[2] 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 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.

Description of Any Changes in Identified BMPs or Measurable Goals

City of 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.

[2] https://www.nashuanh.gov/1243/Mine-Falls-Hydro-Project-Relicensing

Activities Planned for Next Reporting Period

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