

Year 4 Annual Report

Massachusetts Small MS4 General Permit

Reporting Period: July 1, 2021-June 30, 2022

****Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form****

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, 2021 and June 30, 2022 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization: Town of Hudson

EPA NPDES Permit Number: MAR041198

Primary MS4 Program Manager Contact Information

Name: Eric Ryder

Title: Public Works Director

Street Address Line 1: 1 Municipal Drive

Street Address Line 2: na

City: Hudson

State: MA

Zip Code: 01749

Email: erylde@townofhudson.org

Phone Number: (978) 568-9612

Stormwater Management Program (SWMP) Information

SWMP Location (web address): https://www.townofhudson.org/sites/g/files/vyhli3281/f/pages/2021.06.28_hudson_py3_swmp_update.pdf

Date SWMP was Last Updated: Jun 28, 2021

If the SWMP is not available on the web please provide the physical address:

Part II: Self-Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4. Make sure you are referring to the most recent EPA approved Section 303(d) Impaired Waters List which can be found here: <https://www.epa.gov/tmdl/region-1-impaired-waters-and-303d-lists-state>

Impairment(s)

- ☒ Bacteria/Pathogens ☐ Chloride ☐ Nitrogen ☒ Phosphorus
☐ Solids/ Oil/ Grease (Hydrocarbons)/ Metals

TMDL(s)

- In State:** ☒ Assabet River Phosphorus ☐ Bacteria and Pathogen ☐ Cape Cod Nitrogen
☐ Charles River Watershed Phosphorus ☒ Lake and Pond Phosphorus
- Out of State:** ☐ Bacteria/Pathogens ☐ Metals ☐ Nitrogen ☐ Phosphorus

Clear Impairments and TMDLs

Next, check off all requirements below that have been completed. By checking each box you are certifying that you have completed that permit requirement fully. If you have not completed a requirement leave the box unchecked. Additional information will be requested in later sections.

Year 4 Requirements

- ☐ Developed a report assessing current street design and parking lot guidelines and other local requirements within the municipality that affect the creation of impervious cover, made it available as part of the SWMP, and:

- ☐ No updates were recommended
☐ Updates were recommended. The anticipated date or date of completion for updates is/was:

- ☐ Developed a report assessing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist, made it available as part of the SWMP, and:

- ☐ No updates were recommended
☐ Updates were recommended. The anticipated date or date of completion for updates is/was:

- ☐ Identified a minimum of 5 permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious cover

Optional: If you would like to describe progress made on any incomplete requirements listed above, provide an update on previous incomplete milestones, or provide any additional details, please use the box below:

The of Hudson Planning, Conservation and Public Works staff held several meetings to discuss the creation and modification of impervious cover and changes to local regulations to meet MS4 General Permit conditions. Funding was limited in FY22. The Town of Hudson plans to address these items above in FY23 as

a dedicated funding source is expected.

Annual Requirements

- ☒ Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements
- ☒ Kept records relating to the permit available for 5 years and made available to the public
- ☒ The SSO inventory has been updated, including the status of mitigation and corrective measures implemented
 - ☐ This is not applicable because we do not have sanitary sewer
 - ☒ This is not applicable because we did not find any new SSOs
 - ☐ The updated SSO inventory is attached to the email submission
 - ☐ The updated SSO inventory can be found at the following website:

SSO Inventory was completed in September 2020.

- ☒ Updated system map due in year 2 as necessary
- ☒ Provided training to employees involved in IDDE program within the reporting period
- ☒ Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- ☒ All curbed roadways were swept at least once within the reporting period
- ☒ Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- ☒ Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- ☒ Updated inventory of all permittee owned facilities as necessary
- ☒ O&M programs for all permittee owned facilities have been completed and updated as necessary
- ☒ Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs
- ☒ Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- ☒ Inspected all permittee owned treatment structures (excluding catch basins)

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

*Public Education and Outreach**

- ☒ Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate

- ☐ Permittee or its agents disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
 - ☒ Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria
- * Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Town of Hudson does post a graphic addressing pet waste management on the Town's website, but was unable to advance a standard approach to distribute educational materials to dog owners during the renewal of dog licensing. It is anticipated that brochures will be disseminated to dog license holders starting in FY23.

Phosphorus (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

*Public Education and Outreach**

- ☒ Distributed an annual message in the spring (April/May) encouraging the proper use and disposal of grass clippings and encouraging the proper use of slow-release and phosphorus-free fertilizers
- ☒ Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- ☒ Distributed an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

** Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

- ☒ Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

Phosphorus Source Identification Report

- ☐ Completed the Phosphorus Source Identification Report
 - ☐ The Phosphorus Source Identification Report is attached to the email submission
 - ☐ The Phosphorus Source Identification Report can be found at the following website:

Limited funding in PY4. To be completed for Fort Meadow Reservoir in Permit Year 5.

Potential structural BMPs

- ☐ Any structural BMPs already existing or installed in the regulated area by the permittee or its agents was tracked and the phosphorus removal by the BMP was estimated consistent with Attachment 3 to Appendix F. The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus removed in mass per year by the BMP were documented.

- ☐ The BMP information is attached to the email submission
- ☐ The BMP information can be found at the following website:

To be considered during stormwater retrofit inventory and phosphorus control planning in Permit Year 5.

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Lake and Pond Phosphorus TMDL

☒ Defined the scope of the Lake Phosphorus Control Plan (LPCP). *Please select one of the following:*

- ☐ The PCP scope is the entire area within our jurisdiction discharging to the impaired waterbody
- ☒ The PCP scope is the urbanized area portion of our jurisdiction discharging to the impaired waterbody

☐ Calculated baseline phosphorus, allowable phosphorus load, and phosphorus reduction requirement

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

In Permit Year 4, Hudson is working to identify, source, and approve by-laws and funding mechanisms available to the Town of Hudson in order to effectively implement the entire LPCP in Permit Year 5.

Optional: Use the box below to provide any additional information you would like to share as part of your self-assessment:

Part III: Receiving Waters/Impaired Waters/TMDL

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

☐ Yes

☒ No

If yes, describe below, including any relevant impairments or TMDLs:

The Town evaluated the "Final Massachusetts Integrated List of Waters from the Clean Water Act 2018/2020 Reporting Cycle" and noted no changes have been made to the Town's waterbody impairments.

Part IV: Minimum Control Measures

Please fill out all of the metrics below. If applicable, include in the description who completed the task if completed by a third party.

MCM1: Public Education

Number of educational messages completed during this reporting period: 6

Below, report on the educational messages completed during this reporting period. For the measurable goal(s) please describe the method/measures used to assess the overall effectiveness of the educational program.

BMP: [Targeted Message - Clean Water Commitment]

Message Description and Distribution Method:

The Town of Hudson posted their clean water commitment handout to their website. The handout discusses the Town's ongoing sewer and drainage system investigations to improve waterways. The handout includes information on how drainage systems function and gives an overview of the Town's system. The second page of the handout includes a section on what residents can do to prevent stormwater runoff pollution. It also includes a summary of the work the Town has done over the last 12 months to improve water quality in streams, ponds, and rivers.

Targeted Audience: Residents, Industrial Facilities, Developers, and Businesses

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

General awareness for target audiences: Educate residents on work being done to improve water quality connected to storm drains and educate residents on what they can do to help.

Message Date(s): On-going

Message Completed for: Appendix F Requirements ☒ Appendix H Requirements ☒

Was this message different than what was proposed in your NOI? Yes ☒ No ☐

If yes, describe why the change was made:

Additional educational content has been posted as needed to address outreach priorities in any given year. This is an additional outreach effort beyond that described in the SWMP.

BMP: [Supplemental Message - Clean Water or Green Grass]

Message Description and Distribution Method:

The Town of Hudson posted an educational graphic about how to properly manage grass clippings to their website. The graphic includes three images with messages relaying that if not disposed of correctly, grass clippings can end up in storm drains leading to rivers and other waterways. The graphic also states how grass clippings can have negative effects on waterways such as increasing nitrogen leading to algae blooms.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Supplemental message for water quality impaired waterways.

Message Date(s): On-going

Message Completed for: Appendix F Requirements ☒ Appendix H Requirements ☒

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

BMP: [Supplemental Message - Septic Systems]

Message Description and Distribution Method:

Posted on the Town of Hudson's website is a graphic demonstrating how the septic system works. Included on the graphic are tips on how to best use your septic system and 5 signs your tank needs maintenance.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Supplemental message for water quality impaired waterways.

Message Date(s): On-going

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☒

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

BMP: [Supplemental Message - Pet Waste Cleaning]

Message Description and Distribution Method:

Posted on the Town's website is a graphic calling for people to clean up after their pets. The graphic explains the impact pet waste can have when it wastes into storm drains and eventually waterways, polluting them.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Supplemental message for water quality impaired waterways.

Message Date(s): On-going

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☒

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

BMP: [Supplemental Message - Proper Fertilizer Use]

Message Description and Distribution Method:

The Town posted a graphic about fertilizer on their website. The post explains that fertilizer doesn't just go to your lawn and that it gets washed into storm drains and into local waterways. It informs readers that fertilizers can harm fish and wildlife in river, ponds, and streams.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Supplemental message for water quality impaired waterways.

Message Date(s): On-going

Message Completed for: Appendix F Requirements ☒ Appendix H Requirements ☒

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

BMP: [Additional Educational Messaging - DPW Facebook Page + Website]

Message Description and Distribution Method:

The Town's DPW Facebook and website page frequently posts various educational messages and reminders regarding stormwater pollution sources, town construction updates/closures, and weather events, street sweeping.

Facebook:

- 3/30/2022 "Downtown Business Area Street Sweeping" (1 share, 3 likes)
- 3/18/2022: "Chestnut Street Culvert Repairs" (8 shares, 1 like, 3 comments)

Website:

- Street Sweeping Schedule 2022: <https://www.townofhudson.org/departments-public-works/pages/street-sweeping-schedule-2022>

sweeping-schedule-2022

Targeted Audience: Residents, Industrial Facilities, Developers, and Businesses

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Maintain educational content throughout the Permit term.

Message Date(s): On-going

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐

Was this message different than what was proposed in your NOI? Yes ☐ No ☒

If yes, describe why the change was made:

Add an Educational Message

MCM2: Public Participation

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

The Town of Hudson had their SWMP available at the Department of Public Works and on their website for public viewing. If the public had questions or concerns regarding the SWMP, the public could contact the Department of Public Works. The Town of Hudson also gave opportunities for public participation at Select Board Meetings regarding repair and rehabilitation of culverts and bridges.

Was this opportunity different than what was proposed in your NOI? Yes ☐ No ☒

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

MCM3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

Check off the box below if the statement is true.

- ☐ This SSO section is NOT applicable because we DO NOT have sanitary sewer

Below, report on the number of SSOs identified in the MS4 system and removed during this reporting period.

Number of SSOs identified:

Number of SSOs removed:

MS4 System Mapping

Optional: Provide additional status information regarding your map:

The Town of Hudson did not complete any significant updates to MS4 mapping in FY22. Hudson continues to refine and revise their storm sewer system infrastructure attributes/map consistent with the Town's operations programs.

Screening of Outfalls/Interconnections

If conducted, please submit any outfall monitoring results from this reporting period. Outfall monitoring results should include the date, outfall/interconnection identifier, location, weather conditions at time of sampling, precipitation in previous 48 hours, field screening parameter results, and results from all analyses. Please also include the updated inventory and ranking of outfalls/interconnections based on monitoring results.

- ☒ No outfalls were inspected
☐ The outfall screening data is attached to the email submission
☐ The outfall screening data can be found at the following website:

Below, report on the number of outfalls/interconnections screened during this reporting period.

Number of outfalls screened:

Below, report on the percent of outfalls/interconnections screened to date.

Percent of outfalls screened:

Optional: Provide additional information regarding your outfall/interconnection screening:

The remaining 119 outfalls were inspected in January/February of 2020.

Catchment Investigations

If conducted, please submit all data collected during this reporting period as part of the dry and wet weather investigations. Also include the presence or absence of System Vulnerability Factors for each catchment.

- ☒ No catchment investigations were conducted
☐ The catchment investigation data is attached to the email submission
☐ The catchment investigation data can be found at the following website:

Below, report on the number of catchment investigations completed during this reporting period.

Number of catchment investigations completed this reporting period:

Below, report on the percent of catchments investigated to date.

Percent of total catchments investigated:

Optional: Provide any additional information for clarity regarding the catchment investigations below:

Catchment investigation procedures have been initiated in Permit Year 3 in Hudson with reporting to be completed in Permit Year 5 (FY23/FY24). Updates to IDDE priorities were addressed and are being incorporated into catchment investigation planning.

IDDE Progress

If illicit discharges were found, please submit a document describing work conducted over this reporting period, and cumulative to date, including location source; description of the discharge; method of discovery; date of discovery; and date of elimination, mitigation, or enforcement OR planned corrective measures and schedule of removal.

- ☒ No illicit discharges were found
☐ The illicit discharge removal report is attached to the email submission
☐ The illicit discharge removal report can be found at the following website:

Below, report on the number of illicit discharges identified and removed, along with the volume of sewage removed during this reporting period.

Number of illicit discharges identified:

Number of illicit discharges removed:

Estimated volume of sewage removed: gallons/day

Below, report on the total number of illicit discharges identified and removed to date. At a minimum, report on the number of illicit discharges identified and removed since the effective date of the permit (July 1, 2018).

Total number of illicit discharges identified:

Total number of illicit discharges removed:

Optional: Provide any additional information for clarity regarding illicit discharges identified, removed, or planned to be removed below:

Employee Training

Describe the frequency and type of employee training conducted **during this reporting period**:

Due to COVID-19 stormwater training was postponed to Permit Year 5. However, the Town conducted winter operations and internal meetings/trainings prior to the winter season.

MCM4: Construction Site Stormwater Runoff Control

*Below, report on the construction site plan reviews, inspections, and enforcement actions completed **during this reporting period**.*

Number of site plan reviews completed: 4

Number of inspections completed: 4

Number of enforcement actions taken: 1

Optional: Enter any additional information relevant to construction site plan reviews, inspections, and enforcement actions:

The one enforcement action taken was by the Conservation Commission.

MCM5: Post-Construction Stormwater Management in New Development and Redevelopment**Ordinance or Regulatory Mechanism**

Date update was completed (due in year 3): November 2022 Town Meeting

As-built Drawings

*Below, report on the number of as-built drawings received **during this reporting period**.*

Number of as-built drawings received: 0

Optional: Enter any additional information relevant to the submission of as-built drawings:

Retrofit Properties Inventory

Below, list the permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas (at least 5):

The Town of Hudson constructed new stormwater control/treatment facilities at Green/Florance Road which included drain infrastructure updates in order to channel all stormwater from that neighborhood (road right of way). In FY23, the Town plans the removal of the impervious roadway at Cox Street Intersection and installation of previous island, which is currently under construction. Hudson, additionally, plans to identify other properties that could qualify for modification and improvement in Permit Year 5.

MCM6: Good Housekeeping

Catch Basin Cleaning

Below, report on the number of catch basins inspected and cleaned, along with the total volume of material removed from the catch basins during this reporting period.

Number of catch basins inspected: 2,009

Number of catch basins cleaned: 2,009

Total volume or mass of material removed from all catch basins: 980 tons

Below, report on the total number of catch basins in the MS4 system.

Total number of catch basins: 3,400

If applicable:

Report on the actions taken if a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events:

If necessary, schedule adjustments will be made to prioritize catch basins located at known problem areas (low spots) and near construction activities. If inspections and maintenance activities indicate excessive sediment and debris loading (i.e., the sump is more than 50% full during two consecutive routine inspections/cleanings), these catch basins will be marked for more frequent cleaning.

Street Sweeping

Report on street sweeping completed during this reporting period using one of the three metrics below.

☐ Number of miles cleaned: 94

☐ Volume of material removed: [Select Units]

☐ Weight of material removed: [Select Units]

Stormwater Pollution Prevention Plan (SWPPP)

Below, report on the number of site inspections for facilities that require a SWPPP completed during this reporting period.

Number of site inspections completed: 0

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

Site review is undertaken on a continuous basis during operations. Facility personnel have been trained on the SWPPP and help to reduce exposure of potential stormwater pollutants.

Additional Information

Monitoring or Study Results

Results from any other stormwater or receiving water quality monitoring or studies conducted during the reporting period not otherwise mentioned above, where the data is being used to inform permit compliance or permit effectiveness must be attached.

- ☒ Not applicable
- ☐ The results from additional reports or studies are attached to the email submission
- ☐ The results from additional reports or studies can be found at the following website(s):

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:

Additional Information

Optional: Enter any additional information relevant to your stormwater management program implementation during the reporting period. Include any BMP modifications made by the MS4 if not already discussed above:

The Town of Hudson continues to complete catch basin cleaning per the MS4 permit, however, it is more operationally and contractually manageable to do 50% of the Town's catch basins every year. CM6 Clean Basin Cleaning was reported using FY21. In addition, in CM6, the total quantity of material removed for street sweepings could not be calculated as FY22 disposal takes place in November/December 2022.

COVID-19 Impacts

Optional: If any of the above year 4 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

Stormwater training for Hudson staff was postponed to Permit Year 5 due to the impacts of COVID-19. The Town of Hudson plans to provide all applicable staff (stormwater team) with trainings on various aspects of the compliance program.

Activities Planned for Next Reporting Period

Please confirm that your SWMP has been, or will be, updated to comply with all applicable permit requirements including but not limited to the year 5 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree ☒

Annual Requirements

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspection of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all curbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- Review inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; update if necessary
- Review O&M programs for all permittee owned facilities; update if necessary
- Implement all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implement program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Enclose all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt

- Review as-built drawings for new and redevelopment to ensure compliance with post construction bylaws, regulations, or regulatory mechanism consistent with permit requirements
- Inspect all permittee owned treatment structures (excluding catch basins)
- Identify additional permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious areas so that the permittee maintains a minimum of 5 sites in their inventory, until such a time when the permittee has less than 5 sites remaining

Provide any additional details on activities planned for permit year 5 below:

The Town of Hudson is planning a stormwater enterprise fund in order to set up and conduct all MS4 regulatory activities going forward.

Part V: Certification of Small MS4 Annual Report 2021

40 CFR 144.32(d) Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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, I certify that 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.

Name:

ERIC M. RYDER

Title:

DIRECTOR OF PUBLIC WORKS

Signature:



Date:

9/27/22

[Signatory may be a duly authorized representative]